2023 Periodic Review Report for the Reynolds Metals Company, LLC

Massena East
New York
NYSDEC Site Code #645009

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Acronyms

µg/L	micrograms per liter
bgs	below ground surface
BMP	Black Mud Pond
BODR	Basis of Design Report
cm/sec	centimeters per second
COC	constituent of concern
CY	cubic yard
FCR	Field Change Request
ft	feet
HCSM	Hydrogeologic Conceptual Site Model
HTM	heat transfer medium
ILF	Industrial Landfill
MCL	maximum contaminant level
mg/L	milligrams per liter
NGVD 29	National Geodetic Vertical Datum of 1929
NYSDEC	New York State Department of Environmental Conservation
NYSWQS	New York State Water Quality Standards
O&M	operations and maintenance
OU	operable unit
PCB	polychlorinated biphenyl
ppm	parts per million
PRR	Periodic Review Report
PSP	Potliner Storage Pad
ROD	Record of Decision
SPDES	State Pollutant Discharge Elimination System
USEPA	United States Environmental Protection Agency
WAD	weak acid dissociable

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1 Introduction

1.1 Intent of Document

This *2023 Periodic Review Report* (PRR) was prepared by EHS Support LLC ("EHS Support") for Alcoa Corporation ("Alcoa") and presents the results of the post-closure monitoring program conducted in 2023 at the Reynolds Metals Company, LLC facility, New York State Department of Environmental Conservation (NYSDEC) Site #645009 ("Site" or "Facility") in Massena, New York.

The following remediated operable units (OUs) are addressed in this report:

- Closed Industrial Landfill (ILF) (OU-1)
- Black Mud Pond (BMP) (OU-2)
- North Yard (OU-3)
- Wetlands (OU-4)
- Former Potliner Storage Pad (PSP) (OU-5)
- Miscellaneous areas, including the Rectifier Yard (OU-6)

This report provides an overview of the hydrogeology and groundwater constituent concentrations, documents the post-closure monitoring activities and ongoing implementation of institutional and engineering controls for the Facility, and summarizes supplemental investigation/assessment activities conducted at the Site throughout the year. The supplemental activities included:

- Installation of groundwater monitoring wells and completion of soil borings in accordance with the 2022 Investigation Work Plan (insert reference citation).
- Continuation of Site-wide polychlorinated biphenyl (PCB) concrete and soil investigations to address data gaps and uncertainties from historical investigations.

A detailed discussion of these supplemental activities will be provided in forthcoming reports; only information pertinent to this Annual PRR report are summarized in **Section 1.4**.

This Annual PRR provides the following:

- Brief background summary for each remediated OU
- Summary of PRR monitoring and operations and maintenance (O&M) activities that occurred at each OU during the year
- Overall Site plan showing all monitoring wells associated with post-closure monitoring efforts
- Groundwater contour map for the spring and fall
- Summary of analytical data collected during the year, including the supplemental investigations referenced above
- Statistical analysis of collected groundwater samples
- Review of the institutional and engineering control plan
- Certification of the institutional and engineering controls
- Findings and recommendations for future activities

1.2 General Information

The Site was formally owned and operated by Reynolds Metals Company as the St. Lawrence Reduction Plant ("Plant"). The Plant was built in 1958 and ceased production in 2014. In the mid-1980s, Reynolds Metals Company entered into an Order of Consent with NYSDEC to develop a remedial investigation and action plan to address contamination at the Facility. In 1992, NYSDEC issued a Record of Decision (ROD) that summarized the selected remediation activities for each of the hazardous waste sites (NYSDEC, 1992), which are presently described as OUs. In 2001, Alcoa purchased Reynolds Metals Company and took responsibility for post-closure activities. Reynolds Metals Company has remained a wholly owned subsidiary company.

Based on closure documents submitted to NYSDEC, the Site's timeline was as follows:

- Miscellaneous areas were closed in 1994.
- Remedial construction for the former PSP was completed in 1995.
- The BMP was closed in 1996.
- Remedial construction for the North Yard was completed in 1997.
- The ILF cap was completed in 2003.
- Production ceased in 2014.

During the Site closures, a series of monitoring wells were installed throughout the Plant. These wells now serve as the monitoring well network for post-closure activities. The OUs are shown in **Figure 1**. Construction details for monitoring wells at the Facility are shown in **Table 1**. The locations of outfalls regulated by the State Pollutant Discharge Elimination System (SPDES) are shown in **Figure 2**, and a Facility watershed map is provided in **Figure 3**.

1.3 Organization of Report

The remaining sections of this report provide the following information.

Section 2 summarizes the operation and maintenance (O&M) activities performed and the monitoring requirements. **Section 3** summarizes the Hydrogeologic Conceptual Site Model (HCSM). **Section 4** through **Section 8** discusses the six OUs. **Section 9** provides the findings and recommendations from the post-closure monitoring program and **Section 10** lists the references cited in this report.

Appendix A presents the schedule of required O&M activities. **Appendix B** contains field sampling forms, notes, and chain of custodies. **Appendix C** contains historical analytical data. **Appendix D** contains a statistical analysis of analytical results. **Appendix E** contains data quality assessments for the annual sampling data. **Appendix F** contains the Institutional and Engineering Controls Certification Form. **Appendix G** consists of daily precipitation data for the year.

1.4 Non-Routine Report Sections

1.4.1 Integrated Water Management Planning

The design basis for Site remediation and operations and maintenance activities previously performed assumed that the Site will continue operations as an active production facility. Since the cessation of production in 2015, a number of changes have been made to support an evolving use of the Site to include leasing the former potlines and ancillary buildings as well as the demolition of obsolete buildings and infrastructure.

The facility design basis is being evaluated as a result of these Site changes with the intent to develop a Site Management Plan to include a Site-wide integrated water management plan. This Site-wide plan will address the management of Site stormwater and groundwater in an adaptive, sustainable, and protective manner.

The 2021 and 2022 PRRs included foundational information that supports the integrated water management planning process in the form of:

- an updated HCSM,
- the results of a sequential filtration study,
- foundational information for groundwater flux at the ILF, and
- a discussion of toxicity modifying factors for fluoride in the St. Lawrence River.

Additional supplemental investigations were completed in 2023 as part of the long-term objectives for the Site but will be documented in separate reports, given the breadth of additional activities. Only information pertinent to the 2*023 Annual PRR Report* is provided in **Section 1.4.2**.The integrated water management process will continue through 2024 and will ultimately result in a comprehensive Site Water Management Plan for NYSDEC review.

1.4.2 Summary of Additional Activities

Additional activities completed this year included the installation of groundwater monitoring wells at multiple locations between the North Yard French Drain and St. Lawrence River to determine if impacts to groundwater attenuate to acceptable levels in this area; a soil investigation in the PSP area to determine if any potential soil impacts remain in areas not historically excavated; and soil and groundwater sampling from temporary borings upgradient of the ILF to evaluate the plausibility of a collection trench as an alternative to existing extraction wells. Details of these additional works are provided in the Investigation Work Plan (EHS Support, 2022a) and in the Response to NYSDEC Comments on Investigation Work Plan letter dated November 3, 2022. December 2023 groundwater sampling results from newly installed wells are provided in this report. Results of the remainder of the works will be included in forthcoming investigation summary reports.

Details of newly installed monitoring wells are included below to provide necessary context for discussion of the groundwater sampling data provided in this report.

- Six monitoring wells were installed downgradient of the North Yard French Drain (MW-48 through MW-52, and MW-54). Four attempts were made to install MW-53 downgradient of MW-49 adjacent to the St. Lawrence River; however, refusal was consistently met and the well was not installed.

- One monitoring well was installed between the settling pond located north of Haverstock Road and the St. Lawrence River (MW-55).
- One monitoring well was installed between the BMP and PSP (MW-56).

MW-48 and MW-51 were installed in April 2023. The remaining wells were installed in November 2023; therefore, water level and concentration data for the new wells are only available for December 2023.

2 Operations, Maintenance, and Monitoring Requirements

Following closure of the six OUs listed in **Section 1.1**, the Site has complied with the post-closure requirements found in Title 6 of the New York Codes, Rules, and Regulations Part 373-2.14(g) (2), including maintenance and monitoring throughout the post-closure care period. Applicable regulations include the following:

- Maintain the integrity and effectiveness of the final cover, which includes making necessary repairs to correct the effects of settling, subsidence, erosion, and/or other similar events
- Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements
- Prevent run-on and run-off from eroding, or otherwise damaging, the final cover systems
- Protect and maintain surveyed benchmarks

A summary of the O&M schedule is provided in **Appendix A**. Details on the post-closure requirements specific to each OU are provided in **Section 4** through **Section 8**.

2.1 Post-Closure Monitoring

Details of the post-closure monitoring program are provided in **Section 2.1.1** through **Section 2.1.5**. The post-closure groundwater monitoring schedule is provided in **Table 2**. The quarterly gauging and sampling events were conducted in April, June, August, and December. Comprehensive spring and fall events were conducted in April and August, respectively.

2.1.1 Water Level Measurements

Groundwater elevations were measured at designated monitoring wells and piezometers near each of the relevant OUs (ILF, BMP, PSP, North Yard, and Rectifier Yard) during post-closure sampling events. Site-wide groundwater elevations for spring and fall are shown in **Figure 4** and **Figure 5**, respectively. Field sampling forms are provided in **Appendix B**.

2.1.2 Groundwater Sampling and Analysis

The post-closure groundwater monitoring program was performed in accordance with the schedule presented in **Table 2**. The current schedule includes modifications approved by NYSDEC by an email dated March 15, 2023.

These modifications were requested as there are no Groundwater Class GA standards established for total aluminum, dissolved aluminum, and weak acid dissociable (WAD) cyanide; and supported by additional groundwater analyses documented in the *2021 Annual PRR* (EHS Support, 2022b). Specifically, total and dissolved aluminum analyses were removed from the sampling program, and WAD and total cyanide analyses were replaced with free cyanide analyzed by USEPA method OIA-1677. WAD cyanide and total cyanide were collected from wells MW-03S, MW-12S, MW-18S, and MW-39S during the second quarter sampling event (June 2023) to provide overlapping data between analytical methods. A comparison of results from the different methods is provided in **Table 10**.

Analytical analysis for the monitoring locations was performed by Alpha Analytical in Westborough, Massachusetts (PCBs and total cyanide), Alpha Analytical in Mansfield, Massachusetts (fluoride and sulfate), Eurofins in Pittsburgh, Pennsylvania (free cyanide), ALS Environmental in Rochester, New York (WAD cyanide).

Well gauging, purging, and groundwater sampling activities to include the collection of field parameters (e.g., pH, temperature, specific conductance, turbidity, and redox potential) were completed by CDM Smith Inc.

2.1.3 Data Evaluation and Assessment

Historical analytical data collected at the wells monitored during the semiannual monitoring program are presented in **Appendix C** and an evaluation of the statistical trends is provided in **Appendix D**.

The groundwater monitoring data provided in the sections for each OU (**Section 4** through **Section 8**) are evaluated relative to post-closure monitoring requirements; remedial action objectives; available standards, criteria, and guidelines; and historical trends. In the sections of this report that discuss individual, remediated OUs, reference is made to the NYSDEC Class GA Groundwater Standards outlined in **Table 2-1**.

Table 2-1 New York State Class GA Groundwater Standards

Chemical	Concentration
Cyanide	0.2 mg/L
Fluoride	1.5 mg/L
Sulfate	250 mg/L
Total PCBs	0.09 µg/L

Notes:
µg/L = micrograms per liter
mg/L = milligrams per liter
PCB = polychlorinated biphenyl

Note that cyanide was analyzed as *free* cyanide, the form most likely to exhibit toxicological effects. The NYSDEC groundwater standard for cyanide, promulgated in 1998, is based on the United States Environmental Protection Agency (USEPA) maximum contaminant level (MCL) goal of 0.2 milligrams per liter (mg/L) (USEPA, 1998), as there is no specific MCL for cyanide in New York State. As noted in the Clarification of Free and Total Cyanide Analysis for Safe Drinking Water Act (SWDA) Compliance documentation (USEPA, 2020), the MCL limit of 0.2 mg/L applies only to *free* cyanide.

2.1.4 Precipitation Data

To support the assessment of groundwater elevations and concentration trends, precipitation and other weather data are collected daily at the Massena International Airport weather station. The recommended citation for data obtained from this station is Menne et al. (2012). The daily and cumulative precipitation data for the year are included in **Appendix G.**

2.1.5 Data Quality Review

Data quality assessments using the analytical results provided by the laboratory are conducted by CDM Smith Inc. Complete data quality assessments for April, June, August, and December sampling events are included in **Appendix E**.

Project-generated quality control samples (i.e., field duplicates and field blanks) were reviewed and included in the data quality assessment. The following quality control methods or data were reviewed for each sample event:

- Laboratory method blank results
- Matrix spike/matrix spike duplicate samples
- Surrogate spike recoveries
- Laboratory control sample
- Sample holding time summaries
- Sample receipt conditions

2.1.6 Monitoring Data

PRRs prior to 2022 had been evaluated using the Sen's Slope Estimator method, which was applied to the entire monitoring record. This approach did not account for major remediation actions or operational changes (i.e., plant closure) that occurred over the course of the monitoring record. As recommended in the *2021 Annual PRR* (EHS Support, 2022b) and discussed with NYSDEC in an August 30, 2022 meeting at the Site, the statistical analysis method was revised to assess groundwater concentration trends following cessation of the potlines operation in the first quarter of 2014. Beginning with the *2022 Annual PRR* (EHS Support, 2023), statistical analysis is applied to the time period following the second quarter of 2014 (starting in July 2014). All trends discussed below apply to this time frame. The revised statistical significance of concentration trends is being evaluated using the Mann-Kendall analysis.

The statistical summary of the 2023 groundwater monitoring results, including the post-Plant closure statistical trend analysis, is provided in **Table 10**. The Mann-Kendall designations were revised in this report to align with standard methods described by Aziz et al. (2003). This revised method includes the designations of 'probably increasing' or 'probably decreasing' in place of 'stable' for wells with marginal statistical trends. This method will allow more effective analysis of trend changes between years in future PRR reports.

The sulfate concentration trend at 16 out of 36 locations was decreasing or probably decreasing. The fluoride concentration trend at ten wells (SLPWETW, MW-03S, MW-10S, MW-12S, MW-18S, MW-19S, MW-26S, MW-27S, MW-36, and MW-45) was decreasing or probably decreasing. Four wells were sampled for total and WAD cyanide in 2023 The total cyanide concentration trend was decreasing in two samples (MW-39S and MW-03S) and was stable in two samples (MW-12S and MW-18S). AD cyanide has insufficient detections at three wells for trend analysis, while the trend in MW-03S is decreasing.

Concentration trends for wells with sufficient data for trend analysis were stable or had no trend in 24 monitoring locations for fluoride, 2 monitoring locations for total cyanide, and 17 monitoring locations for sulfate.

The fluoride concentration trends at MW-15S-87 and MW-39S are increasing. MW-15S-87 is located on the southern edge of the BMP. Downgradient of MW-15S-87 at PZ-44, PZ-45, and PZ-46, the fluoride concentration is above criteria and stable. Further downgradient at MW-20-85S, the fluoride concentration is below criteria and is stable, indicating attenuation is occurring. MW-39S is located in the wetland south of the ILF. At MW-39S, the groundwater gradient is toward the ILF perimeter trench, indicating the fluoride is likely from residual sources prior to remedy implementation and capping of the ILF; this is consistent with decreasing fluoride concentration trends that are below criteria further downgradient in the wetland at MW-45.

There were no fluoride trends classified as probably increasing. The sulfate concentration trends at MW-45 and MW-23-85-S were increasing, and the sulfate concentration trend at MW-20-85-S was probably increasing. Given that fluoride concentrations are below criteria and stable at MW-45, the sulfate may be sourced from sulfide oxidation processes occurring in the wetland rather than the ILF. Since fluoride is below criteria and stable to decreasing at all locations where fluoride concentrations were initially above criteria, sulfate may be sourced from groundwater interactions with marine sediments or wetland sulfide oxidation processes at locations where the concentrations are increasing.

3 Hydrogeologic Conceptual Site Model

An updated HCSM for the Site was provided in the *2021 Annual PRR* (EHS Support, 2022b) and is summarized below. Investigations completed in 2023 (as described above) have not indicated any data which requires modification to the HCSM. Further assessment will be included in future reports.

3.1.1 Geology

Soils at the Site include:

- Fill – primarily in the PSP and North Yard
- Alluvium – primarily in the North Yard adjacent to the St. Lawrence River
- Marine/Lacustrine Orange-Brown Sand – on the northern edge of the BMP, beneath the PSP, and portions of the North Yard
- Marine/Lacustrine Clay – primarily beneath the ILF and BMP
- Winnowed Till – between the BMP and ILF
- Grey Glacial Till – Site-wide

The general stratigraphic relationship of these deposits is provided in **Figure 3-1**, and the approximate distribution is shown in **Figure 3-2**. The following summarizes pertinent features of the soil units identified at the Site.

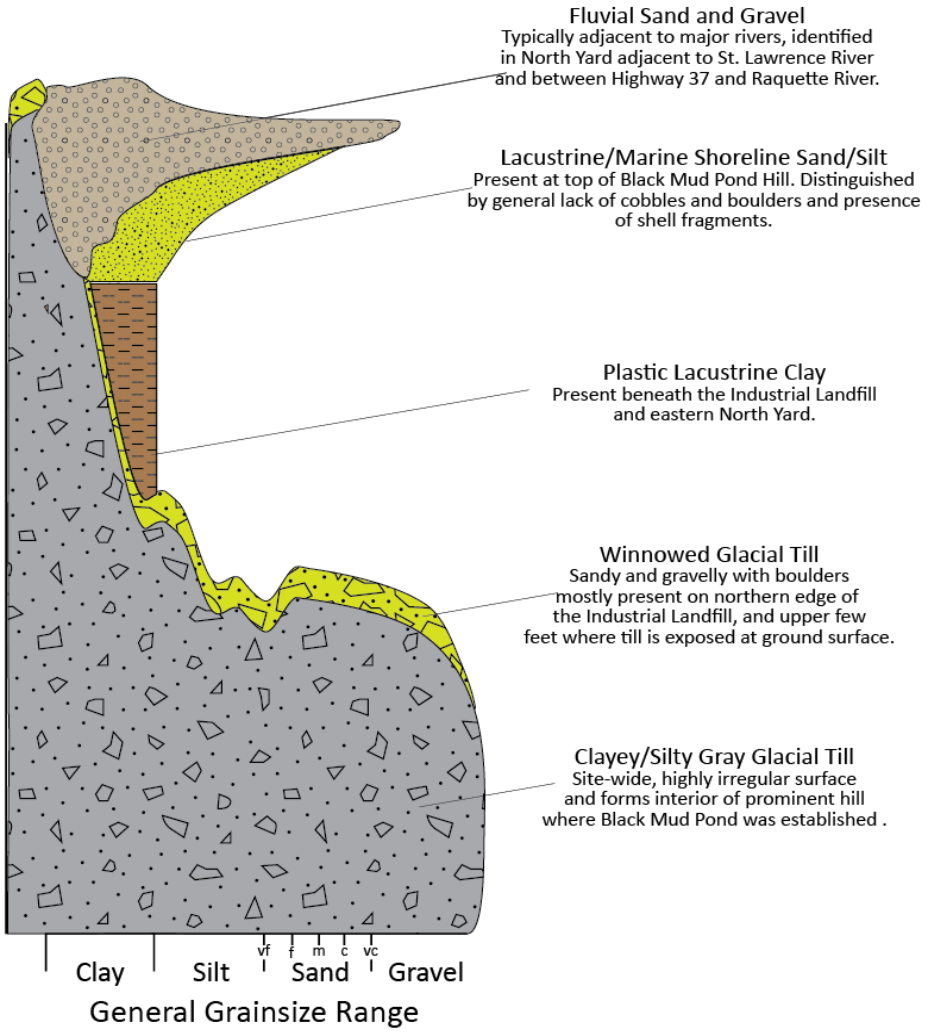


Figure 3-1 Schematic Stratigraphic Section Showing Relationships and Generalized Grain Sizes of Deposits Identified at the Site

3.1.1.1 Gray Glacial Till

Grey glacial till has overall low permeability (1.1×10^{-4} to 4.86×10^{-9} centimeters per second [cm/sec]), precludes lateral migration of groundwater through this unit, and coupled with lacustrine clay, forms the base of the shallow groundwater flow system at the Site. Gray glacial till is stratigraphically the lowest unit encountered at the Site and has variable surface topography. The prominent ridge at the BMP is a ribbed moraine primarily consisting of grey glacial till encountered at elevations of 225-235 feet (ft) relative to the National Geodetic Vertical Datum of 1929 (NGVD 29) during drilling.

At the northernmost extent of the facility (the western edge of the North Yard), grey glacial till is encountered at about 10 ft below ground surface (bgs) (at approximately 200 ft NGVD 29) beneath MW-43 and MW-44, which is based on the occurrence of boulders and the density and color of the material. The grey glacial till dips eastward below lacustrine/marine clay and has not been encountered south of the ILF.

3.1.1.2 Lacustrine/Marine Clay

Lacustrine clay is encountered regionally at low points surrounding ridges and drumlins of glacial till. At the Site, lacustrine clay is identified at the base of the BMP ridge beneath the ILF, beneath the North Yard, and at the PSP. The unit has permeability as low as 10^{-10} cm/sec and provides a barrier to vertical groundwater migration where present.

At the ILF, lacustrine clay is described beneath refuse on the logs for borings LFB-1 through LFB-5, LFBB-1 through LFBB-4, and TB-4 (Woodward Clyde, 1990). Lacustrine clay is also identified at the southern edge of the ILF in the logs for wells MW-39S, MW-40S, PZ-7, and PZ-11. The lacustrine clay is distinctive from glacial till clay intervals in that they are typically brown rather than gray in color, distinctively plastic, contain organic matter and shells, and intervals of gravel, cobbles, and/or boulders are rare or absent[1]. The permeability is typically much lower than glacial till (as low as 1.0×10^{-10} cm/sec). The presence of this clay unit beneath the ILF prevents downward percolation of landfill-impacted groundwater, but also provides a surface over which groundwater may flow to the lowest point. The lowest point is the southwest corner of the ILF, an area that was excavated as part of the Wetland OU-4 remediation before closure and capping of the ILF.

At the BMP, plastic lacustrine clay is also identified in the logs for borings MPOF1403D and MPOG1603D in a thin interval directly underlying the refuse and overlying gray glacial till. The implication is that hydraulic conductivity beneath the BMP is lower than the lateral hydraulic conductivity to the west at MW-13S and north at MW-12S, favoring lateral groundwater flow in these locations and restricting vertical groundwater flow.

3.1.1.3 Winnowed Till

Winnowed till is formed from glacial till through winnowing by lake/marine wave action. The process washes away fine particles from till and leaves coarser grains behind. The resulting soils are more permeable than undisturbed glacial till and provide a pathway for lateral groundwater flow where present. Indeed, some of the higher permeability values reported for glacial till at the Site are from areas of winnowed till. At the Site, winnowed till is present between the BMP and the northern edge of the ILF. The unit is described as sandy and there is a higher incidence of cobbles and boulders as reported on the 2010 to 2012 logs for extraction wells EW-01 through EW-06.

3.1.1.4 Lacustrine/Marine Silt and Silty Sand

The permeability of this unit is high with values of 10^{-3} cm/sec, providing a key control on lateral groundwater flow at the Site. This unconfined unit also facilitates substantial concentration reductions (attenuation) through infiltration of precipitation and snowmelt over the intervening space between the OUs.

The log for boring MW-12D[2] shows at least the uppermost 8 ft of sediment on the BMP ridge consists of silt and silty sand with varying proportions of sand and gravel that contain shell fragments. The permeability of the unit (1.0×10^{-3} cm/sec at MW-13S; Woodward-Clyde, 1990) is higher than the

[1] Note, ice-rafted gravel and boulders are periodically encountered in lacustrine/shallow marine deposits in this area, so the occurrence is not a definitive indicator of glacial till.
[2] Boring logs available upon request.

measured permeability on samples of the underlying till (average of 1.0×10^{-6} cm/sec). Similar deposits without shell fragments on the BMP ridge are described in the logs for PZ-32 through PZ-35, PZ-37, PZ-38, PZ-41 through PZ-43, MW-12S, MW-13S, MW-13D, MW-14S, MW-15D, and MW-15S.

At the PSP, the log for PZ-28 identifies an interval from 8 to 10 ft bgs of coarse sand with shells. A similar sand interval without shells is identified at 12 to 16 ft bgs in PZ-23, 5 to 10 ft bgs in PZ-24, 8 to 12 ft bgs in PZ-25, 8 to 9 ft bgs in PZ-27, 8 to 9.5 ft bgs in PZ-29, 8 to 9.1 ft bgs in PZ-30, and 6 to 8 ft bgs in PZ-31

3.1.1.5 Fluvial Deposits

North of the Pitch Pump House and adjacent to the St. Lawrence River, specifically borings MW-36S, MW-37S, and MW-38S, the area is underlain by an estimated 4 ft of fill, and an interval of cobbles and boulders to 12 ft bgs. This fill is interpreted as fluvial in origin due to the stratigraphic position overlying plastic clay that is interpreted as lacustrine or marine in origin. Fluvial deposits have also been identified through drilling investigations between Highway 37 and the Raquette River (ATL, 1972).

3.1.1.6 Fill

Excavation and fill activities occurred at the Site during construction of the facility and during remediation activities. Exclusive of refuse placed in the BMP and ILF, fill was typically obtained locally from borrow pits at the Site. The largest area of grading occurred at the main facility where pot rooms were operating. Primary areas of excavation for remediation occurred at the PSP and North Yard areas. Fill material in these locations typically has a high permeability of 1.4×10^{-1} to 4.6×10^{-2} cm/sec (Woodward Clyde, 1990). The West Ditch Outfall lies between the PSP and the St. Lawrence River and was remediated with the additional OU-6 areas.

Key elements of the updated geologic model are shown in **Figure 3-2**.

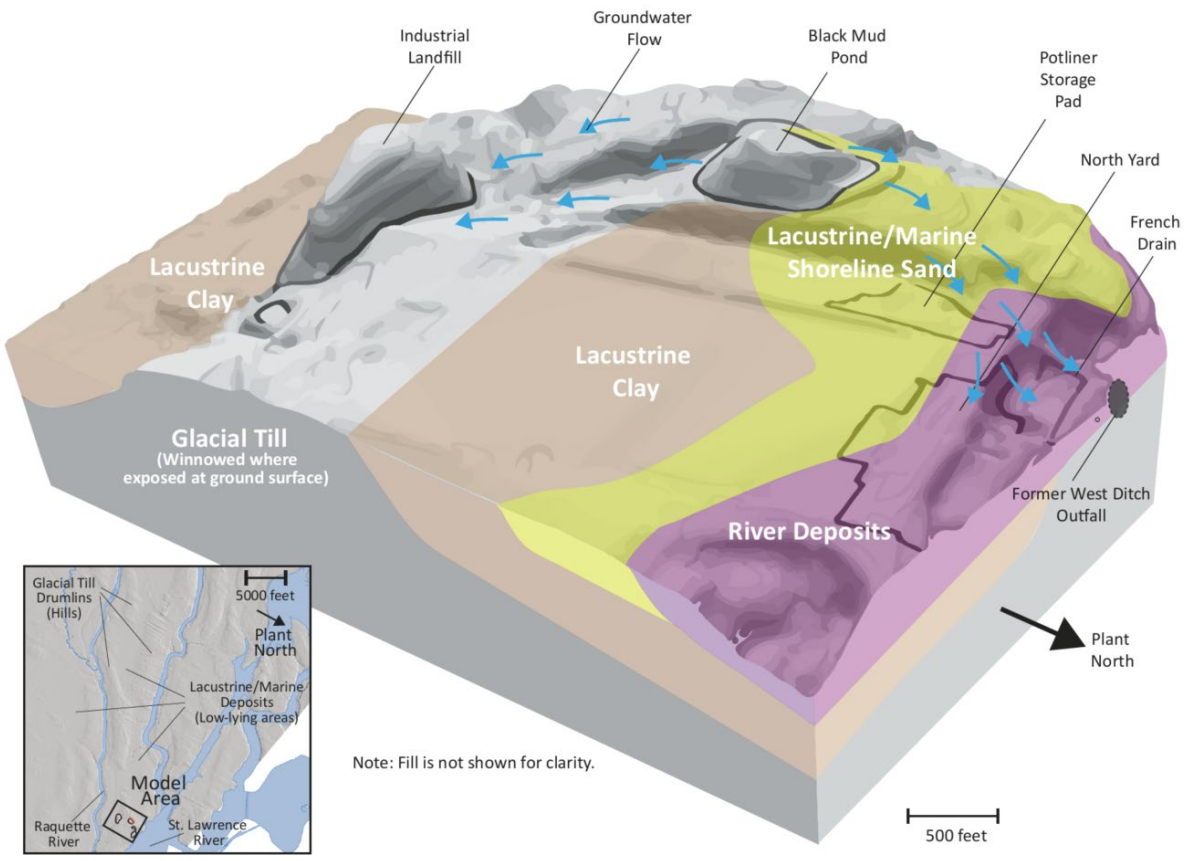


Figure 3-2 Revised Conceptualization of Site Geology

Note: The areas of construction and remediation fill are not shown to provide clarity for the geologic relationships. Figure 3-2 is not to scale and is vertically exaggerated. Spatial locations of **units are highly generalized and for illustrative/conceptualization purposes only**.

3.1.2 Hydrogeology

Groundwater at the Site is recharged by precipitation, as is apparent in the seasonal variations of groundwater elevations. Conceptually, precipitation and snowmelt infiltrate into more permeable surficial deposits (winnowed till, lacustrine/marine silt and silty sand, fluvial deposits, and fill). This recharge results in some lateral flow from the areas of residual contamination, but also provides for reductions in concentration from infiltration downgradient of source areas.

Two primary groundwater flow pathways are present at the Site; both originate at the BMP. One flow pathway is south toward the ILF, and the other flow pathway is northward toward the St. Lawrence River. Shallow groundwater also flows westward from the BMP toward the wetland located west of the BMP. The revised understanding of the groundwater flow system implies that downward vertical groundwater infiltration into glacial till is limited, and that lateral groundwater flow within the glacial till is minimal. This is critical in terms of the contaminant transport as only vertical migration of groundwater and/or diffusion can account for contaminants detected in the glacial till.

3.1.2.1 Lateral Groundwater Flow

Surficial deposits that blanket grey glacial till are the primary pathways for lateral groundwater flow based on hydraulic conductivity values. Consistent with surficial deposits controlling lateral groundwater flow, the water table is observed to mimic surface topography (**Figure 4** and **Figure 5**). These lines of evidence reinforce that downward vertical groundwater infiltration into glacial till is limited, and that lateral groundwater flow within the glacial till is minimal.

3.1.2.2 Vertical Groundwater Flow

Vertical groundwater gradients have been historically assessed at eight shallow/deep well pairs in the vicinity of the BMP.

In the interior of the BMP, the shallow and deep MPOF well pair screens are separated by several feet of clay that prevents vertical groundwater flow; therefore, apparent upward vertical gradients that have been historically reported reflect the efficacy of the BMP underdrain system for dewatering the interior of the BMP, as well as the efficacy of isolating the interior of the BMP (near the clay layer) from confined groundwater beneath the BMP.

Variations in vertical gradients are a function of more rapid, lateral groundwater discharge through the shallow permeable units, rather than a function of appreciable vertical seepage. This concept was demonstrated in the 2021 Annual PRR, where the time for 10 ft of vertical seepage was calculated to range from hundreds of years to tens of thousands of years. This result is consistent with the hydrogeologic conceptualization whereby impacts in till are diffusion driven and primary groundwater flow is lateral and within more permeable surficial units. Consequently, numeric calculation of vertical groundwater gradients is of little value; therefore, as documented in the *2022 Annual PRR* (EHS Support, 2023), vertical gradients will no longer be calculated.

3.2 Precipitation

Annual precipitation data are included in **Appendix G.** The annual precipitation rate from 1990 to 2022 averaged 31.53 inches per year. In 2023, the East Massena area received 31.47 inches of precipitation, 1.63 inches less than the average annual amount. Monthly precipitation during 2023 ranged from 1.32 inches (February) to 6.08 inches (July). Variation in the amount and timing of precipitation affects the amount of groundwater recharged; therefore, changes in water level elevations, particularly in the shallowest and most permeable units, will occur. The largest monthly precipitation measurements in 2023 were recorded during the months of April, July, and August.

3.3 Groundwater Elevations

During the post-closure sampling events, groundwater elevations were measured at select monitoring wells and piezometers throughout the Facility. Groundwater elevation contours were constructed using data from the shallow wells and piezometers collected in spring (April) and fall (August), and are presented in **Figure 4** and **Figure 5**, respectively. These figures were developed from the measured groundwater elevations presented in **Table 3, Table 4**, **Table 5**, and **Table 6.**

In general, groundwater elevations are highest on the north side of the BMP and decrease outward toward the St. Lawrence River to the north, the wetlands south of the ILF, east to the Plant, and to the west. The hydraulic heads in the BMP are affected by a low permeability barrier that was constructed around the unit which resulted in mounding. Further discussion on the groundwater elevations and hydraulic gradients for each OU are discussed in **Section 4** through **Section 8**.

Groundwater elevation contours, **Figure 4** and **Figure 5**, indicate a groundwater divide is present near the northwest corner of the BMP. The groundwater divide in this area is partially associated with the low permeability barrier wall that was constructed on the northern and western sides of the BMP as well as the Site surface topography (Calocerinos & Spina, 1985).

3.4 Fluoride Concentration Distributions

Fluoride concentration contours are provided as **Figure 6** and **Figure 7**. Fluoride is specifically discussed as it has the broadest distribution in groundwater at the Site. The highest fluoride concentrations occur at the BMP and PSP. At the BMP, detections around the periphery reflect diffusion throughout the low-permeability perimeter wall and seepage of groundwater to the south. At the PSP, soil removal was conducted to remove PCB impacted soils, but residual wastes containing fluoride may be located outside/below the limits of previous investigation. The extent of elevated soil fluoride concentrations at the PSP was determined from soil samples collected from soil borings that were completed in 2023, and the results will be communicated in a separate report.

As indicated on **Figure 6** and **Figure 7**, fluoride concentrations rapidly attenuate to below the standard of 1.5 mg/L over short horizontal distances. In the context of the HCSM, fluoride is transported from source areas through the shallow advective groundwater flow system where concentrations attenuate over short horizontal distances. The primary mechanism for attenuation is precipitation and snowmelt infiltration into the shallow advective groundwater flow system in unpaved areas. In November 2023, monitoring well MW-56 was installed between the BMP and PSP to verify if fluoride sourced from the BMP could be affecting conditions at the PSP. Between April 2023 and November 2023, monitoring wells MW-48 through MW-52 and MW-54 were installed downgradient of the PSP and North Yard to verify constituents were not migrating further downgradient. As indicated in **Table 10** and consistent with the HCSM, fluoride was below the standard of 1.5 mg/L in groundwater samples from all new monitoring wells in December 2023, except at MW-49 (1.67 mg/L). This result indicates that constituents leaving the BMP are attenuated prior to reaching the PSP, and that constituents sourced from residual soil impacts at the PSP are not migrating significantly downgradient.

4 Industrial Landfill (OU-1)

The 11.5-acre ILF is located south of the former production area of the Plant and immediately north of a wetlands area. The ILF historically received Plant garbage and process waste, construction debris, spent potliner, and sewage sludge. Waste management activities were permanently terminated at the ILF on June 30, 1990.

As documented in the *Area-Specific Completion Report for the Remediation of the Landfill/Former Potliner Storage Area* (Bechtel, 1997a) and *Overall Completion Report for the Alcoa Massena East Smelter Plant Site Remediation Project* (Bechtel, 2003b), ILF closure activities were conducted in accordance with the Order on Consent dated September 9, 1987, and associated ROD. These activities included construction of an upgraded groundwater leachate recovery system keyed into highly impermeable material below the ILF in 1997 and placement of a hazardous waste landfill cap over the ILF in 2003.

The leachate collection system included the construction of a perimeter leachate collection trench with a portion of the ILF perimeter also having a cutoff wall keyed into the low-permeability subsoils. A double-walled leachate transfer line from the ILF to the now former Outfall 01A treatment system was also installed. Groundwater currently collected by the leachate collection system is monitored weekly for flow at Outfall 01C and water quality is monitored monthly per the SPDES permit requirements. All water collected through Outfall 01C is currently treated at the on-site SPDES-regulated Outfall 003 treatment system.

The landfill cap constructed over the full extent of the ILF comprises a geosynthetic clay layer, a 40-mil very low-density polyethylene geomembrane, and drainage geocomposite. In addition, surface water controls were installed to reduce the amount of surface water run-on entering the Site and to control erosional effects of surface water running off the Site.

Before placing the cap, impacted soils and sediment from the Wetlands, PSP, and Miscellaneous Areas were consolidated in the ILF. As documented in the *Overall Completion Report for the Alcoa. Massena East Smelter Plant Site Remediation Project* (Bechtel, 2003b), a ROD amendment was issued by NYSDEC in 1995, allowing Reynolds Metals Company to increase the PCB limit from 25 parts per million (ppm) to 50 ppm on low-level contaminated soils that could be placed in the ILF before capping (NYSDEC, 1995).

Materials consolidated in the ILF included the following:

- Two ft of potliner-impacted soils immediately north of the ILF and within the New York Power Authority easement were placed in the ILF. This action, performed under Field Change Request (FCR)-190, reduced the size of the ILF management area by more than two acres. Some potlining material was inaccessible and remained in-place following the remedial effort.
- Impacted soils from the wetlands, the area north of Haverstock Road, the Rectifier Yard and associated ditch, the North Yard, the PSP, the 002 Diversion Area, and other various on-site remedial efforts were placed in the ILF.
- An area identified in 1998 as a former short-term storage area for potliner and other process material known as the “Former Material Stockpile Area” was managed and remediated under the ILF area of concern. This ¼-acre area was sampled under FCR-199 and remediated under FCR-200. The work was documented and reported in the *Post-Remedial Report for Second*

Quarter 1998[3] and in the *Landfill Cap Installation Addendum to the Area-Specific Completion Report for the Remediation of the Landfill/Former Potliner Storage Area* (Bechtel, 2003a). The available FCR information has been provided as an appendix in previous annual monitoring reports (e.g., CDM Smith, 2020).

- In 2001 and 2002, dredging spoils with less than 50 ppm PCBs from the St. Lawrence River were disposed of in the ILF and the ILF was closed with a hazardous waste closure cap to reduce stormwater/surface runoff infiltration and resultant leachate generation. Disposal of river dredging spoils in the ILF, and installation of the closure cap, are documented in the *Landfill Cap Installation Addendum to the Area-Specific Completion Report for the Remediation of the Landfill/Former Potliner Storage Area* (Bechtel, 2003a). Construction quality assurance associated with this work is documented in the *Construction Quality Assurance Certification Report for the Landfill/Former Potliner Storage Area Closure Cap* (Bechtel, 2003c).

The total quantity of remediation spoils disposed of in the ILF is approximately 220,000 cubic yards (CY). Table 1 from the *Landfill Cap Installation Addendum to the Area-Specific Completion Report for the Remediation of the Landfill/Former Potliner Storage Area Closure Cap* (Bechtel, 2003a) summarizes the quantities of material from on-site remedial actions that are disposed of in the ILF. Additional details can be found in the Site-specific remediation completion reports.[4]

Between November 2010 and May 2012, a series of upgradient groundwater extraction wells (EW-01 through EW-06) were installed north of the ILF to lower shallow groundwater elevations beneath the ILF and are referred to as the Outfall 010 groundwater extraction system (**Figure 8**). Extraction well EW-03 was never operational and was abandoned due to poor water production (CDM Smith, 2012). In addition to the extraction wells, piezometers (PZ-71 through PZ-79) were installed to monitor groundwater elevations. Extracted groundwater from this system is discharged through SPDES-regulated Outfall 001. In October 2018, a new building was erected for the extraction well lines, performing needed updates and repairs. The extraction wells continue to pump and discharge to the same location.

Key post-remediation activities include maintaining the cap, leachate collection and treatment, inspections, and groundwater monitoring. Inspections, maintenance, and groundwater monitoring are also required (per the Basis of Design Report [BODR], submitted to NYSDEC on January 27, 2012)[5] for the Outfall 010 groundwater extraction system. The groundwater extraction system became operational in Summer 2012. **Figure 8** shows a plan of the ILF and the associated groundwater wells and piezometers used for monitoring. The following items require periodic inspections:

- ILF cap
- Leachate collection system
- Upgradient extraction wells

4.1 Operational Monitoring Data

Annual operations consisted of the collection of 5,570,308 gallons of groundwater by the leachate collection system. The monthly quantities tabulated in **Table 7** reflect the ILF (Outfall 01C) flowmeter readings. A plot of the cumulative flow recovered and treated from the ILF, starting with the 32,130,235

[3] Reference information is not available; this is legacy text pulled from an earlier, non-EHS Support report.
[4] These Site-specific remediation completion reports are in the reference list under Bechtel (1992, 1995a-c, 1996, 1997a-c, 1998a and b, 1999, 2003a-c).
[5] Reference information for the BODR is not available; this is legacy text pulled from an earlier, non-EHS Support report.

gallons on record in January 1999, is presented in **Figure 9** and monthly flow totals for January 1999 through the end of this reporting period are presented in **Figure 10**. All water collected from the ILF was treated at the on-site Outfall 003 wastewater treatment system.

Approximately 1,634,530 gallons of groundwater were collected by the upgradient extraction well system (EW-01, EW-02, EW-04, EW-05, and EW-06) in 2023, compared to 1,564,200 gallons in 2022. As indicated, all water collected from upgradient of the ILF was conveyed to and discharged at Outfall 001.

Monthly groundwater quantities for each extraction well are provided in **Table 8**, and cumulative flow is presented graphically in **Figure 11**. The five extraction wells remained operational throughout the entire year. Analytical data collected at the extraction wells is presented in **Table 9**.

Inspections were performed on the final cap at the ILF twice this year (April and October). This included inspection of the cover system for evidence of vegetative deterioration, erosion, siltation, ponding, uplift, washouts, leachate breakout, and rodent holes. The culverts, swales, check dams, and riprap were included in the biannual inspections. The functionality of these systems was inspected and showed no evidence of scouring, overland flooding, or erosion. The inspection showed that inlets and outlets remained unobstructed and positive drainage has been maintained. No problems were noted.

4.2 Maintenance, Repairs, and Modifications

The following non-routine repairs were performed on the groundwater extraction systems and ILF in 2023:

- The EW-02 flowmeter was showing minimal flow the week of January 30, 2023, after which the flowmeter was replaced on February 20. The pump continued to show minimal flow and was replaced on March 28.

4.3 Groundwater Monitoring

4.3.1 Groundwater Elevations and Hydraulic Gradients

Groundwater elevation contours that are based on measurements collected during April and September (wet and dry weather) are presented in **Figure 4** and **Figure 5**, respectively. Groundwater flows under the ILF in a general southward direction. Shallow groundwater is collected in the perimeter drain leachate collection system. Five transects of piezometers are installed across the perimeter drain:

- Transect 1 consists of PZ-1 through PZ-5.
- Transect 2 consists of PZ-6 through PZ-9.
- Transect 3 consists of PZ-10 through PZ-13.
- Transect 4 consists of PZ-14 through PZ-17.
- Transect 5 consists of PZ-18 through PZ-22.

Tabulated groundwater elevation data for the piezometers, including the invert elevations of the perimeter drains, are presented in **Table 4**. **Figure 12** shows plots of groundwater elevations in downgradient wells MW-39S and MW-40S compared to elevations in the nearby piezometer clusters located at the landfill boundary.

Groundwater elevations at the piezometers were measured monthly. The groundwater elevation data shows that in 2023, the perimeter drain inverts were consistently lower than the groundwater elevations of all piezometers in Transects 1, 2 and 3 indicating the capture in these transects was effective. As indicated in **Figure 4** and **Figure 5**, piezometers in Transect 5 are within the radius of influence of extraction well EW-1, indicating hydraulic containment and remedy effectiveness in this location. The inverts of the perimeter drains were higher than groundwater elevations in the Transect 4 piezometers during the end of 2023, indicating that groundwater may not have been completely captured in the southwest corner of the ILF (**Figure 12**); however, there was a consistently inward gradient throughout 2023 from the wetland toward the perimeter trench as recorded in decreasing groundwater elevations from MW-39S to PZ-17 to PZ-16 (**Figure 12**). These observations for the current year are generally consistent with historical observations in this area.

4.3.2 Groundwater Quality

Groundwater samples were collected and analyzed from monitoring well MW-10S, located upgradient of the ILF, and from monitoring wells MW-39S, MW-40S, and MW-45, located downgradient of the ILF. Analytical results are provided in **Appendix C** . Surface water samples were also collected to monitor the water quality south of the ILF. Using the methods detailed in **Section 2.1.3**, the statistical summary of the 2023 groundwater monitoring results, including the post-Plant closure statistical trend analysis, is provided in **Table 10** and summarized in the sections below. A summary of the full timeseries trend results compared to post-Plant closure results is provided in **Appendix D**. A review of the post-Plant closure data indicates that the following statistically significant increasing concentration trends are observed:

- Fluoride at MW-39S
- Sulfate at MW-45

The 2023 groundwater monitoring results for fluoride were above the New York State Water Quality Standards (NYSWQS) of 1.5 mg/L in each of the four sampling events at MW-39S. This coincides with a statistically significant increasing trend in fluoride concentrations during the post-Plant closure timeline. Fluoride concentrations at MW-39S have notably decreased since the pump located upgradient in the perimeter drain was lowered in late 2021 and, as of late 2023, are near the NYSWQS of 1.5 mg/L (1.54 mg/L in December 2023). Also, groundwater gradients at MW-39S are toward the ILF perimeter trench, and MW-45 to the south does not have fluoride exceedances, indicating concentrations are not migrating toward the wetland. Sulfate concentrations have been consistently above the NYSWQS of 250 mg/L since 2015 in MW-45; however, a notable change in the sulfate at this location is apparent on the time series chart (**Appendix D**) shortly after the extraction well system upgradient of the ILF started functioning. One possibility is that a change in hydrology following implementation of the extraction well system modified redox conditions in the wetland, and the sulfate may be sourced from sulfide oxidation occurring in the wetland. There is currently an inward groundwater gradient from this location toward the ILF perimeter trench that will continue to be monitored.

Statistically significant decreasing concentration trends were observed for sulfate in MW-10S and for fluoride in MW-45 and SLPWETW. In addition, the concentration trend of fluoride in MW-10S and MW-45 is probably decreasing.

The 2023 groundwater monitoring results for free cyanide were below the NYSWQS of 0.2 mg/L in the collected ILF groundwater samples.

Details of analytical results from ILF monitoring points are provided in **Section 4.4.2.1** through **Section 4.4.2.5**.

4.3.2.1 Upgradient Well MW-10S

- PCB Aroclor 1260 and 1254 were detected in MW-10S at cumulative concentrations below the NYSWQ of 0.09 micrograms per liter (µg/L) in September at concentrations of 0.036 and 0.041 µg/L, respectively; concentrations were subsequently below detection in December, and have not historically been detected at MW-10S. PCBs have not historically been detected in this location and are attributed to a sampling anomaly.
- Free cyanide was detected in two sampling events below the NYSWQS of 0.2 mg/L.
- Fluoride and sulfate were detected in each of the four sampling events. All detections of fluoride and sulfate were below their NYSWQS of 1.5 mg/L and 250 mg/L, respectively. The concentration trend of sulfate has been decreasing since July 2014. The concentration trend of fluoride since July 2014 is probably decreasing.

4.3.2.2 Downgradient Well MW-39S

- No PCBs were detected in MW-39S.
- Free cyanide was detected in two sampling events below the NYSWQS of 0.2 mg/L.
- Total cyanide was sampled in June and was detected at 0.031 mg/L, less than the NYSWQS of 0.2 mg/L. The concentration trend has been decreasing since July 2014.
- WAD cyanide was sampled in June. The concentration was non-detect. There have been insufficient detections since July 2014 for trend analysis.
- Fluoride was detected above the NYSWQS of 1.5 mg/L in each of the four sampling events with concentrations ranging from 1.45 to 2.45 mg/L. The concentrations are consistent with those observed in 2022 and historically. The trend for fluoride since July 2014 is increasing; however, since 2003, the concentrations have been stable.
- Sulfate was detected in each of the four monitoring events with concentrations ranging from 137 to 330 mg/L. Concentrations were below the NYSWQS of 250 mg/L during the March and June 2023 sampling events and above the NYSWQS during the September and December 2023 sampling events. The concentration trend of sulfate has been stable since July 2014.

4.3.2.3 Downgradient Well MW-40S

- No PCBs were detected in MW-40S.
- Free cyanide was detected in one sampling event below the NYSWQS of 0.2 mg/L.
- Fluoride was detected during each of the four sampling events below the NYSWQS. The trend in fluoride concentrations has been stable since July 2014.
- Sulfate was detected during each of the four sampling events below the NYSWQS. The trend in sulfate concentrations has been stable since July 2014.

4.3.2.4 Downgradient Well MW-45

- No PCBs were detected in MW-45.
- Free cyanide was detected in three sampling events below the NYSWQS of 0.2 mg/L.
- Fluoride was detected in each of the four sampling events at concentrations below the NYSWQS. The trend in fluoride has been decreasing since July 2014.

- Sulfate was detected in each of the four sampling events at concentrations above the NYSWQS of 250 mg/L (531 mg/L to 722 mg/L). Sulfate increased from low, consistent levels in MW-45 to above the NYSWQS in September 2015. The absence of high fluoride in this well indicates that the sulfate concentrations are not associated with ongoing flux from the landfill. The trend in sulfate has been increasing since July 2014.

4.3.2.5 Wetlands Water Samples

An attempt was made to collect samples on a quarterly basis from the western ILF perimeter trench (SLPWETW) and ILF perimeter trench (SLPWETE) downgradient of the ILF. SLPWETW was frozen during Q1; therefore, no samples were collected during this period. A summary of wetland water samples is provided below:

- No PCBs were detected.
- Free cyanide was detected in two sampling events at SLPWETE below the NYSWQS of 0.2 mg/L, and was non-detect at SLPWETW during all events.
- Fluoride was detected in SLPWETE above the NYSWQS during three sampling rounds (2.72 to 4.08 mg/L). The concentration trend since July 2014 has been stable.
- Fluoride was detected in SLPWETW below the NYSWQS during all three sampling rounds. The concentration trend since July 2014 has been decreasing.
- Sulfate was detected below the NYSWQS in both locations for each sampling event. The concentration trend since July 2014 has been 'no trend' in both locations.

4.3.3 Outfall 010 Groundwater Extraction System

Groundwater level measurements are collected at EW-01 through EW-06 and PZ-76 through PZ-79. Groundwater levels were recorded monthly at all locations, except when frozen conditions or access issues were present. Groundwater levels are presented in **Table 4** and shown on **Figure 13**.

The five extraction wells remained operational throughout the year (**Section 4.2** and **Table 4-1**).

Groundwater levels presented in **Figure 13** show that the extraction wells have consistently maintained the groundwater elevation to the north of the ILF. **Figure 4** and **Figure 5** show groundwater elevations are lowered north of the ILF by the extraction well system.

In 2023, the average groundwater level in PZ-76 through PZ-79 ranged from 203.5 ft to 206.49 ft (**Table 4**). The largest fluctuations were observed in PZ-76, where levels ranged from 199.31 ft to 205.97 ft and in PZ-79 where levels ranged from 203.97 ft to 209.09 ft. These fluctuations are due to the operational status of proximal EW-2. The average groundwater elevation observed while extraction wells were functioning ranged from approximately 183.84 ft in EW-01 to approximately 199.25 ft in EW-02.

In addition to groundwater level measurements, quarterly groundwater samples are collected at each extraction well and analyzed for total cyanide and fluoride. The analytical data for all completed testing (i.e., from when the system started to the end of 2023) are reported in **Appendix C**. Analytical results for 2023 data are provided in **Table 9**. Fluoride concentrations were below the NYSWQS of 1.5 mg/L in each of the extraction wells, with the exception of EW-02 (1.61 mg/L) in February. Total cyanide concentrations were below 0.2 mg/L in each of the extraction wells, with the exception of EW-06 during

all four sampling events (0.59 to 0.867 mg/L). As discussed in **Section 2.1.3**, the 0.2 mg/L standard applies to free cyanide and not total cyanide.

4.3.4 Post-Closure Assessment

Within the physical and hydraulic restrictions of the Site setting, the existing monitoring well network is well located to assess post-Plant closure conditions at the ILF.

Groundwater quality downgradient of the ILF at MW-39S and wetland surface water monitoring location SLPWETE may be affected by historical transport of contaminants from the ILF that occurred prior to construction of the perimeter trench and capping of the landfill. At MW-39S, the groundwater gradient is toward the ILF perimeter trench, suggesting that the ILF is not the fluoride source. Further south into the wetland, fluoride at MW-45 is below criteria.

Sulfate increased from low, consistent levels in MW-45 to above the NYSWQS standard in September 2015. Concentrations have remained above the NYSWQS since then and have displayed a statistically significant increasing trend (**Appendix D**). The notable increase in sulfate concentrations and the shift to increasing trends in 2015 follows initiation of the extraction well system in late 2012. As described in the *2022 Annual Report* (EHS Support, 2023), the sulfate increase corresponds to historical data for total cyanide decreases, suggesting that the sulfate source may not be the ILF and may reflect oxidation of naturally occurring sulfide sourced from the wetland surrounding MW-45.

Downgradient groundwater will continue to be monitored in MW-39S, MW-40S, and MW-45 and will be used to evaluate the effectiveness of the upgradient groundwater extraction system. Surface water will continue to be monitored in the eastern and western wetlands (east-wetland and west-wetland).

5 Black Mud Pond (OU-2)

The BMP was built in 1973 to store residue from the process that recovered cryolite from spent potliner. Slurry from the cryolite recovery process was pumped to the pond, allowed to settle, and the supernatant was then pumped to the cryolite recovery plant. It is approximately 6 acres in area and located on a ridge west of the former production area of the Plant. In 1985, seepage was observed from the northwest corner of the BMP through deposits overlying gray till at approximately 10 ft bgs. An 8-ft-wide trench was excavated along the entire north and west sides of the BMP extending into the underlying lower-permeability till. A containment wall was constructed in the trench from sorted (silt and clay fractions) of glacial till taken from a borrow pit west of the BMP that was compacted to 95% (Calocerinos & Spina, 1985). Active use of the pond ended in 1990. The primary objective of remediating the BMP was to eliminate migration of the constituents of concern (COCs), specifically cyanide and fluoride.

After NYSDEC approval in May 1995, soils from the PSP with PCB levels greater than 10 ppm, the area south of the Digging Building (Facility 85), and the overburden by the southwest corner of the BMP were placed in the BMP to provide initial soil cover for construction equipment. In January 1996, 7,700 CY of wetlands soil with residual fluoride and cyanide were excavated and hauled to the BMP. The area was capped with a hazardous waste closure cap to isolate the waste and prevent surface water infiltration. The cap consists of a geonet composite for gas collection, a geosynthetic clay layer, a geomembrane liner of 40-mil linear low-density polyethylene, a geonet composite for drainage, and 30 inches of topsoil and grass cover. Additional remediation activities are detailed in the *Area Specific Completion Report for the Remediation of the Black Mud Pond* (Bechtel, 1997b).

A network of over 2,200 linear ft of sand-filled French drains was installed in the BMP to extract groundwater and reduce a principal mechanism of contaminant transport from the area (Bechtel, 1997b). This French drain system consists of four horizontal drains that were installed in the north-south direction with a gradual slope to the south end. Two lateral drains were installed in the east-west direction to improve the collection capability of the system. A polyvinyl chloride riser was installed at the south end of each north-south drain. This work was completed in September 1995. A dewatering sump was installed at the low point of the BMP, near the southwest corner, following construction. The riser at the westernmost north-south drain line was replaced with a pipe that connected the line to the sump. A sand-filled trench was built along the bottom of the BMP between the sump and the risers to provide a hydraulic connection with the other three north-south drain lines.

The BMP cap was completed in 1997 and the transfer line was operational from 1997 to 2004. Upgrades to the leachate transfer line occurred in 2004. The upgraded pumping system transfers groundwater from the dewatering sump to the Outfall 01B equalization tank. Beginning in 2003, groundwater pumped to the Outfall 01B tank was transferred by tanker truck to the Arconic Massena West Plant Outfall 01F for treatment and discharge as the cyanide destruction treatment system was decommissioned and removed with NYSDEC approval. Beginning in September 2017, BMP groundwater is collected and transferred via railcar to an off-site treatment and disposal facility and is no longer treated at the Arconic Massena West Plant.

Key post-remediation activities include maintaining the cap, collecting, and treating groundwater from the French drain system, as well as conducting inspections and groundwater monitoring.

Figure 14 is a Site plan of the BMP and the associated groundwater wells used for monitoring. The following items require periodic inspections:

- Groundwater transfer line from the BMP dewatering sump to the storage tanks
- BMP cap
- Groundwater collection system

5.1 Maintenance, Repairs, and Modifications

No maintenance, repair, or modification activities were completed in this reporting period. The final cover system was inspected twice a year for evidence of vegetative deterioration, erosion, siltation, ponding, uplift, washouts, leachate breakout, and rodent holes. The passive gas vents were checked for obstructions. Culverts, swales, check dams, and riprap were included in the biannual inspections. The functionality of these systems was inspected and showed no evidence of scouring, overland flooding, or erosion. The inspection showed that inlets and outlets remained unobstructed and positive drainage has been maintained. No problems were noted for this reporting period.

5.2 Operational Monitoring

O&M monitoring was conducted for this reporting period. The quantities of groundwater removed from the BMP are recorded in **Table 11** and are shown graphically in **Figure 15** and **Figure 16**. No other maintenance items were performed in this reporting period.

5.3 Groundwater Monitoring

5.3.1 Groundwater Elevations and Hydraulic Gradients

Vertical hydraulic gradients are no longer being calculated per the recommendations of the *2022 Annual PRR* (EHS Support, 2023). The MPOF and MPOG well clusters are located within the capped area of the BMP and have historically been used to assess hydraulic heads and gradients within the BMP. Historical groundwater elevations are provided in **Figure 17**. The MPOF cluster is located on the western side of the waste zone, and the directions of the hydraulic gradients are consistent with the observation that there is often no water collected in the eastern drains under the BMP, whereas the westernmost drain is constantly pumped. The groundwater elevations were recorded monthly in the MPOF clusters.

Groundwater elevation contours for spring and fall 2023 (**Figure 4** and **Figure 5**, respectively) indicate that there is a hydraulic divide along the north and west sides of the capped BMP, consistent with the presence of the low-permeability barrier in this area. Horizontal hydraulic gradients are radial from the high points near MW-12S and MW-14S, but due to the presence of the barrier wall, there is negligible to no flow out of the BMP to the north and west. As discussed in **Section 3**, it is likely that groundwater on the periphery of the BMP is recharged by precipitation and snowmelt that infiltrates into an upper, shallow, and permeable interval that is the locus of groundwater advection. Groundwater in less permeable underlying till is comparatively stagnant.

The horizontal hydraulic gradient of the BMP is to the north and groundwater eventually discharges to the North Yard French Drain and the St. Lawrence River. Hydraulic gradients to the south of the BMP are such that groundwater discharges to groundwater collection systems associated with the ILF and the wetland south of the Facility. Hydraulic gradients west of the BMP are to the southwest and the

groundwater discharges to the wetland south of the Plant. This wetland eventually discharges to the Raquette River and is monitored as SPDES-regulated Outfall 010. The steepest hydraulic gradients are eastward between the BMP and the Plant area.

Groundwater monitoring wells beneath the BMP (MPOF1403D and MPOG1603D) indicate hydraulic gradients are to the south and east in the glacial till stratum. Groundwater is removed from beneath the BMP cap by a system of underdrains. Based on the BMP completion report, these drains are located at the base of the black mud and on top of the underlying high-plasticity and low-permeability clay. Groundwater elevations in the two shallow wells screened across the black mud/clay interface (MPOF-1402S and MPOG-1601S) are lower than the deep counterparts throughout most of the year, although each typically have a slightly higher elevation than the deep counterparts in winter (**Table 12**). Lower elevations in the shallow wells' interior to the BMP reflect the efficacy of the underdrain system for dewatering the BMP. The occurrence of a high plasticity clay unit beneath the black mud precludes dewatering below the level of black mud, but also precludes vertical groundwater advection beneath the BMP. The drainage system is expected to facilitate groundwater flow within the mud toward the drains.

5.3.2 Groundwater Quality

Using the methods detailed in **Section 2.1.3**, the statistical summary of the 2023 groundwater monitoring results, including the post-Plant closure statistical trend analysis, is provided in **Table 10** and is summarized in the sections below. Historical analytical results are provided in **Appendix C** and a summary of the historical trend results compared to post-Plant closure results are provided in **Appendix D**.

A review of the post-Plant closure data indicates that the following increasing or probably increasing concentration trends were observed:

- Fluoride at MW-15S-87
- Sulfate at MW-20-85-S
- Sulfate at MW-23-85-S

Fluoride concentrations decrease downgradient of MW-15S-87 at PZ-44, PZ-45, and PZ-46 where the trend is stable in all piezometers. Further downgradient at MW-20-85S, fluoride is below criteria and the trend is decreasing, indicating that attenuation is occurring via mechanism described in the HCSM. Increasing sulfate trends at MW-20-85-S and MW-23-85-S are not accompanied with increasing fluoride or other process COC concentration trends; therefore, sulfate may be from another source (e.g., marine sediments or back diffusion from historical impacts).

A review of post-Plant closure data indicates that the following decreasing or probably decreasing concentration trends were observed:

- Fluoride at MW-12S
- Sulfate at MW-13S, MW-15S-87, and MW-22-85S

The 2023 groundwater monitoring results for sulfate were above the NYSWQS of 250 mg/L in both sampling events at MW-22-85-S. This coincides with a statistically significant decreasing trend in sulfate concentrations.

In the context of the updated CSM, detections around the periphery of the BMP reflect diffusion through the low-permeability perimeter wall or seepage to the south. Concentrations are diluted by snowmelt and precipitation infiltration into shallow, more permeable units as groundwater radiates outward from around the BMP to the south, as documented by low to non-detect COC concentrations at MW-10S and lower concentrations to the north in the PSP at MW-27S. In 2023, monitoring well MW-56 was installed between the BMP and PSP, and all groundwater constituents were below criteria, further confirming that attenuation is occurring through precipitation and snowmelt infiltration in the intervening space.

In more detail, the following findings are made regarding groundwater around the BMP based on analytical results from MW-11SR, MW-12S, MW-13S, MW-14S, MW-15S-87, MW-20-85-S, MW-22-85-S, MW-23-85-S, MW-30S, MW-31SR, PZ-44, and PZ-45:

- Free cyanide was detected below the NYSWQS of 0.2 mg/L in one sampling event at MW-20-85-S and was non-detect at all other wells during all events.
- Total and WAD cyanide were measured only in MW-12S. Total cyanide was detected but was below 0.2 mg/L. WAD cyanide was not detected.
- Fluoride was detected in each of the 12 monitoring locations sampled, with concentrations in 6 monitoring locations (MW-12S, MW-13S, MW-15S-87, MW-30S, PZ-44, and PZ-45) above the NYSWQS of 1.5 mg/L. Concentration trends are stable or have no trend except in MW-12S, where concentrations are probably decreasing, and in MW-15S-87, where concentrations are increasing; however, the fluoride concentrations attenuate to concentrations below the NYSWQS before reaching downgradient well MW-20-85-S (fluoride concentrations of 0.128 mg/L and 0.157 mg/L in 2023).
- Sulfate was detected above the NYSWQS of 250 mg/L in 10 of the 12 monitoring locations and below the NYSWQS in MW-15S-87 and MW-31SR. Of the locations with concentrations above the NYSWQS, concentrations are stable or have no trend in seven locations, are decreasing or probably decreasing in MW-13S and MW-22-85-S, and are increasing or probably increasing in MW-20-85S and MW-23-85S. MW-15S-87 displayed a decreasing trend in sulfate concentration, while MW-31SR had a stable concentration trend.
- PCBs were not detected at any monitoring locations at the BMP.

5.4 Operations

Operations consisted of the extraction, transfer, storage, and treatment of groundwater. The BMP groundwater collection system is operated automatically; the pumps convey water to Tanks 208, 211, and 216 (located in building 763D, the old water treatment building just west of the North Yard). Tank water levels are monitored routinely and, when close to full capacity, the water is pumped into a railcar for transport to an off-site treatment and disposal facility.

The groundwater collection system includes four horizontal drains (A-1 through A-4) which empty into a sand-filled trench. The groundwater then drains by gravity to the southernmost lateral drain, which also drains by gravity to the sump labeled “dewatering sump.” From this point, a submersible pump within the dewatering sump pumps groundwater to the collection point for shipment off-site.

The annual quantities of groundwater pumped in previous years and the current monitoring period are provided in **Table 11**. In 2023, 52,549 gallons, or an average of approximately 144 gallons per day of

groundwater, were extracted from the BMP. Accumulated water was transported off-site in railcar shipments in April, August, and December.

5.4.1 Post-Closure Monitoring Assessment

Review of the *Area-Specific Completion Report for the Remediation of the Black Mud Pond* (Bechtel, 1997b) indicated that seepage from the BMP through a winnowed till layer was addressed in 1985 with the construction of an 8-ft-wide clay barrier wall. In addition, post-consolidation samples collected north of the capped portion of the BMP indicated some elevated residual fluoride concentrations. Historical releases may be responsible for the detections of cyanide, fluoride, and sulfate north and west of the closed BMP as these are areas from which BMP materials were consolidated upon closure.

Attenuation of residual COCs occurs progressively in the downgradient direction by snowmelt and precipitation infiltration through the shallow permeable units, as indicated by concentration decreases in wells downgradient of the northerly and southerly BMP groundwater flow paths. This conceptualization was confirmed following installation of monitoring well MW-56 along the northerly flow path in November 2023, and acquisition of fluoride results below criteria in December 2023.COC flux is limited in underlying lower permeability units where groundwater advection is minimal. These lower permeability units are present at shallower elevations along the southern edge of the BMP where COC migration is primarily driven by diffusion.

MW-11SR and MW-15S-87 are directly downgradient of the BMP along the eastern and southern edges, respectively. Sulfate was the only COC in MW-11SR that was above the NYSWQS in both samples in 2023 but did not display a statistically significant trend. Given that there are no other COC exceedances in this location, sulfate may be sourced from back diffusion from sediments. Fluoride was the only COC above the NYSWQS in MW-15S-87 during both sampling events and displayed a statistically significant increasing trend using post-Plant closure data. Downgradient of MW-15S-87, there were exceedances of fluoride and sulfate at PZ-44, PZ-45, and PZ-46 that are likely due to residual impacts from conditions prior to consolidation of the BMP as these wells are screened in low permeability till. The low hydraulic conductivity of these materials makes recent migration of impacts unlikely. Concentrations at these sampling locations, as well as MW-20-85-S located south of the piezometers, will continue to be monitored.

6 North Yard (OU-3)

The North Yard is located north of the main Plant buildings. It was the center for receiving, storing, and distributing raw materials for the Plant's operation. The North Yard was the location of the heat transfer medium (HTM) system that maintained the fluidity and temperature of the coal tar pitch for anode and cathode manufacturing. The HTM system equipment was located within the Pitch Pumphouse in the central portion of the North Yard; the HTM piping extends northward to the Pitch Pumphouse tanks and southward to the Carbon Plant. Before a replacement program was initiated in the 1970s, the HTM fluid contained PCBs. Soil analysis conducted by Bechtel shows that prior to remediation the highest concentrations of PCBs at the Facility were near the HTM system (Bechtel, 1998a).

To conduct remediation while minimizing disruption of Plant operation, two distinct remedial construction plans were developed and described in the *Declaration for Amendment to the Record of Decision for Reynolds Metals Company St. Lawrence Reduction Plant* (NYSDEC, 1995). These plans divided the North Yard into the following critical and non-critical work areas:

- Area 1 was the south-central portion of the North Yard and was defined as the critical area where essential Plant operations took place. The design required excavating to established limits (i.e., horizontally within the greater than or equal to 100 ppm PCB footprint and vertically to less than 25 ppm PCBs) and installing a low permeability cap over all areas with residual PCB levels greater than or equal to 10 ppm. Area 1 covered three acres.
- Area 2 was defined as the contaminated, but non-critical, portion of the North Yard. The design for this area was similar to other on-site remediation areas, which is excavation of soils exceeding the ROD cleanup goal of less than or equal to 10 ppm PCBs followed by surface restoration. Area 2 covered seven acres.

Remediation construction met all design objectives. Although the ROD amendment allowed for higher residual concentrations of PCBs in Area 1, remedial excavations in 98 percent of that area met the more stringent cleanup goal established for Area 2 (129,900 out of 132,500 ft^2 in Area 1 met the Area 2 cleanup standards).

As stated in Volume 1 of the *Area-Specific Completion Report for the Remediation of the North Yard* (Bechtel, 1998a), various remedial measures were performed to reduce the possibility of erosion and transport of PCBs. In 1991, a drain, consisting of a 12-inch diameter perforated polyethylene pipe and a trench filled with crushed stone, was installed along the Plant fence located at the western side of the North Yard (North Yard French Drain). The underdrain system, intended to control groundwater near the ground surface, also influences the groundwater flow field in this area which is downgradient of the former PSP. This underdrain system discharges to the West Sump, which was installed in 1988. Water collected in the sump was historically pumped to the Outfall 01A wastewater treatment facility for treatment and discharged through the Plant's SPDES outfall system. In January 2016, Reynolds Metals Company submitted an SPDES modification request to decommission the treatment plant and divert flows from Outfall 01A to Outfall 003 for treatment and discharge. On February 5, 2016, the NYSDEC approved the modification request.

The following additional remedial efforts have been conducted in this area since approval of the *Area-Specific Completion Report for the Remediation of the North Yard* (Bechtel, 1998a):

- In March 2000, an underground water main was repaired in North Yard grid H32 (south of Facility 25A, the Unloading Shed). The excavation spoils (approximately 25 CY of soil at 8 ppm

PCB concentration) were disposed of in the ILF in May 2000. Details are presented in the *Post-Remedial Report for Second Quarter 2000.*[6]

- In July 2000, PCBs were identified in the excavation spoils from the repair of concrete pavement covering North Yard grid G41. The area was investigated under FCR-204 and remediated under FCR-206. The broken concrete pavement (approximately 115 CY) and the soil from grids G42 and J44 (69 CY) were disposed of in the ILF. Additional spoils (92 CY) were disposed of off-site. This remedial effort was completed in August 2001 and reported in the *Post-Remedial Report for Third Quarter 2001*.[6]
- In the summer of 2001, sampling was conducted at the proposed Site for the new tank, located immediately east of the existing tank (Facility 65A) near the west end of the North Yard. Soil samples collected from beneath the concrete over the proposed excavation footprint showed PCB concentrations less than 4 ppm in the upper 6 inches and non-detections in the 24 to 30-inch depth interval. An excavation and disposal plan was approved by NYSDEC on October 30, 2001. The concrete layer and upper 2 ft of soil was excavated by the remediation contractor, after which the area was turned over to the Plant's general contractor for tank construction. The excavated soil (46 CY) was disposed of in the ILF. To formally record the work, FCN-209 was submitted to NYSDEC and approved on November 30, 2001. Details of the work are reported in the *Post-Remedial Report for Fourth Quarter 2001*.[6]
- The North Yard underdrain water was diverted from Outfall 01A to Outfall 003 for treatment and discharge in 2016.
- The North Yard French drain pump was repaired in August 2019.

Key post-remedial activities include limited groundwater collection and treatment (West Sump), inspections, and groundwater monitoring. Periodic inspections of west and east sumps are required in this area. Plant personnel maintain the integrity of the secondary containment around the tanks in this area.

6.1 Operations

Operations consisted of collection, transfer, storage, and treatment of groundwater from French drains, along with surface water from secondary containments around the pitch tank, fuel oil tanks, and other tanks in the area.

6.2 Maintenance, Repairs, and Modifications

The French drain pump was functional and no maintenance, repair, or modification activities were completed in this reporting period.

6.3 Groundwater Monitoring

Groundwater monitoring wells were installed downgradient of the North French Drain and North Yard in 2023 to support an assessment of the fate and transport of constituents, such as fluoride downgradient of the Site. All new wells installed north of Haverstock Road had COC concentrations below criteria in December 2023, except fluoride at MW-49 (1.67 mg/L) and sulfate in MW-50, MW-51, and MW-52 (362,

[6] Reference information for the quarterly post-remedial reports is not available; this is legacy text pulled from earlier, non-EHS Support reports.

278, and 278 mg/L, respectively). Given that fluoride is not associated with the sulfate exceedances, these values are attributed to natural sources from marine sediments, and this will be assessed more fully following review of the 2023 investigation data. Several attempts were made to install a well downgradient of MW-49; however, efforts were consistently met with refusal before groundwater was encountered. Given results are marginally above the fluoride criteria of 1.5 mg/L in MW-49, significant attenuation is occurring in this area, indicating that significant COC concentrations are not migrating from the PSP area toward the North French Drain. The new wells provide monitoring infrastructure to inform future assessments and decisions as to the continued need for operation of the North French Drain.

Concentrations will continue to be monitored and details of the well installation effort will be documented in a separate report.

6.3.1 Groundwater Elevations and Hydraulic Gradients

Groundwater flow under the western side of the North Yard is northerly and is influenced by the French drain system located around the former pitch tanks. This groundwater collection system also recovers groundwater that moves downgradient from the PSP (**Figure 4** and **Figure 5**).

On the eastern side of the North Yard, there appears to be a groundwater divide near the former ore offloading building, which is defined by wells MW-19S and MW-17S. South of the divide, groundwater flows toward the former Plant. This groundwater is monitored by MW-16S and MW-18S. North of the divide, groundwater flows to MW-36, MW-37, MW-38, and to the St. Lawrence River. A portion of the northerly flow appears to trend northeast toward MW-38 and MW-41. MW-48, MW-49, MW-50, MW-51, MW-52, and MW-54 monitor groundwater north of Haverstock Road. where it migrates from the North Yard and PSP area toward the St Lawrence River, downgradient of the North Yard French Drain.

6.3.2 Groundwater Quality

Using the methods detailed in **Section 2.1.3**, the statistical summary of the 2023 groundwater monitoring results, including the post-Plant closure statistical trend analysis, is provided in **Table 10** and discussed in the following subsections. Analytical data are provided in **Appendix C**, and a summary of the full timeseries trend results compared to post-Plant closure results is provided in **Appendix D**. A review of the post-Plant closure data indicates that there are no increasing or probably increasing concentration trends in the North Yard monitoring wells. Several of the monitoring wells have had decreasing trends for fluoride, sulfate, or cyanide, including:

- Sulfate at FDRAIN1, MW-16S, MW-18S, MW-19S, MW-36, and MW-41
- Fluoride at MW-18S, MW-19S, and MW-36

Concentrations at the other locations have been stable or have had no trend.

The 2023 groundwater monitoring results for sulfate were above the NYSWQS of 250 mg/L in at least one sampling event at MW-18S, MW-36, MW-37, and MW-41.

The 2023 groundwater monitoring results for fluoride were above the NYSWQS of 1.5 mg/L in both sampling events at FDRAIN1, MW-16S, MW-18S, MW-19S, and MW-36, and in one event at MW-17S.

Details of analytical results from North Yard monitoring points are provided in **Section 6.3.2.1** through **Section 6.3.2.3**.

6.3.2.1 Wells On or Near the Groundwater Divide – MW-16S, MW-17S, and MW-19S

- No PCBs were detected in MW-16S, MW-17S or MW-19S.
- Free cyanide was detected below the NYSWQS of 0.2 mg/L in one sampling event at MW-16S and was non-detect at all other wells during all events.
- Fluoride was detected in each of the three wells and was above the NYSWQS of 1.5 mg/L at MW-16S (7.88 to 8.47 mg/L) and MW-19S (3.13 to 3.29 mg/L) in both semiannual samples, and at MW-17S in December (2.77 mg/L). Concentrations of fluoride have been decreasing in MW-16S and MW-19S, and stable at MW-17S.
- Sulfate was detected in each of the three wells; however, concentrations were below the NYSWQS of 250 mg/L. Sulfate concentrations have decreased in MW-16S and MW-19S, while sulfate concentrations in MW-17S have been stable.

6.3.2.2 Well Downgradient – Southward Gradient; MW-18S

MW-18S monitors groundwater that flows southward beneath the Plant:

- PCBs were not detected.
- Total cyanide was detected below the NYSWQS of 0.2 mg/L in June.
- WAD cyanide was not detected.
- Free cyanide was not detected.
- Fluoride was detected above the NYSWQS at concentrations ranging from 15.4 to 25.7 mg/L. Fluoride concentrations have a decreasing trend. The *2021 Annual PRR* (EHS Support, 2022b) highlights that historical fluoride results at this location are biased high.
- Sulfate was detected in both sampling events near or above the NYSWQS (240 mg/L and 283 mg/L). Sulfate concentrations have a decreased trend.

6.3.2.3 Wells Downgradient – Northward Gradient; MW-36, MW-37, MW-38 and MW-41

- PCBs were not detected.
- Free cyanide was detected below the NYSWQS of 0.2 mg/L in one sampling event at MW-36 and was non-detect at the other wells during the events.
- Fluoride was detected in each of the four monitoring wells; however, only MW-36 had concentrations above the NYSWQS of 1.5 mg/L (1.75 mg/L and 2.03 mg/L). Fluoride concentrations in MW-36 have a decreasing trend.
- Sulfate was detected in each of the four monitoring wells and was above the NYSWQS of 250 mg/L at MW-36, MW-37, MW-38, and MW-41. Sulfate concentrations have a decreasing trend in MW-36 and MW-41. Concentrations in MW-37 and MW-38 have remained stable.

6.3.2.4 North Yard French Drain Collection System – FDRAIN1

As **Figure 4** and **Figure 5** show, groundwater below the former PSP area flows in a northeasterly direction. The western part of the flow field discharges to the St. Lawrence River. The eastern part of the flow field is influenced by the North Yard French Drain system, which recovers some of this groundwater.

The groundwater recovered by the North Yard French Drain system is treated at an on-site water treatment system and is discharged through the plant SPDES outfall system at Outfall 003.

Samples were obtained from groundwater collected in the French drain system and were analyzed for free cyanide, fluoride, and sulfate.

- Free cyanide was detected below the NYSWQS of 0.2 mg/L in one sampling event.
- Fluoride was detected above the NYSWQS of 1.5 mg/L in both sampling events (19.5 mg/L and 21.2 mg/L) and indicates that mass (potentially from the PCP area – see discussion below) continues to be removed by the French Drain system. There is not a statistically significant trend in fluoride concentrations for the post-Plant closure data.
- Sulfate was detected in both sampling events below the NYSWQS of 250 mg/L.

6.3.2.5 Wells Downgradient of the North Yard French Drain (MW-48, MW-49, MW-50, MW-51, MW-52, and MW-54

Groundwater monitoring wells were installed downgradient of the North French Drain and North Yard in 2023 to support an assessment of the fate and transport of constituents, such as fluoride downgradient of the Site. Groundwater monitoring was commenced in December 2023 and there is insufficient data to establish concentration trends.

- PCBs were not detected.
- Free cyanide was detected below the NYSWQS of 0.2 mg/L in MW-48, MW-49, MW-50, MW-51, and MW-52. Free cyanide was non-detect at MW-54.
- Fluoride was detected below the NYSWQS of 1.5 mg/L in each well, except MW-49 (1.67 mg/L).
- Sulfate was detected above the NYSWQS of 250 mg/L at MW-50 (362 mg/L), MW-51 (278 mg/L), and MW-52 (278 mg/L).

6.3.2.6 Well MW-55 Downgradient of The Haverstock Road Settling Pond

A groundwater monitoring well was installed between the settling pond on Haverstock Road and the St. Lawrence River to assess the potential for groundwater impacts. Groundwater monitoring was commenced in December 2023 and there is insufficient data to establish concentration trends.

- PCBs were not detected.
- Free cyanide was not detected.
- Fluoride was detected below the NYSWQS of 1.5 mg/L.
- Sulfate was detected below the NYSWQS of 250 mg/L.

6.3.3 Post-Closure Assessment

Based on the groundwater contours, the groundwater monitoring well network is adequately configured to assess post-closure conditions at the North Yard.

MW-18S is located to assess groundwater flowing toward the Plant. Groundwater from MW-18S flows beneath the East Plant pot rooms, where the storm sewer lines may serve as points of discharge. Other wells show improving concentration trends, and most constituents are either below the respective groundwater criteria or only marginally above. Wells installed downgradient of the North Yard French Drain indicate that constituent flux to the St. Lawrence River is negligible under current conditions given that concentrations are below or only slightly above NYSWQS, and the magnitude of attenuation overserved between the North French Drain and the well locations.

The North Yard French Drain intercepts and captures shallow groundwater flowing from the North Yard to the north before it migrates further north to the hydraulically downgradient St. Lawrence River. The Plant's layout, including the groundwater contours developed from spring and fall groundwater elevations, is shown in **Figure 4** and **Figure 5**. The original purpose of capturing PCB contaminants within the shallow groundwater system is no longer necessary. No PCBs were detected in groundwater samples collected from the North Yard (hydraulically upgradient of the North Yard French Drain) or to the east of the North Yard French Drain. This indicates that the North Yard PCB removal actions have successfully removed PCB sources and that leaching of PCBs to groundwater from residual soil impacts is no longer a concern.

While the North Yard French Drain is no longer required to collect PCB impacted groundwater, it is potentially serving a secondary purpose to capture fluoride impacted groundwater migrating from the PSP. A NYSDEC letter dated April 1, 2016 noted the Remedial Action Objective for the PSP groundwater may necessitate the continued maintenance of the North Yard French Drain and downgradient components as residual contaminant migration mitigation control. However, as documented in the HCSM, included in the *2021 Annual PPR,* groundwater impacts are limited in the area of the North Yard French Drain with impacts above criteria constrained to low permeability units where matrix diffusion has sequestered contaminant mass. The flux of contaminants, including fluoride, towards the St. Lawrence River (under current and non-pumping conditions) is anticipated to be minimal with on-site groundwater monitoring data showing low fluoride concentrations in the more transmissive units. A combination of dilution, dispersion and geochemical complexation support further attenuation in groundwater concentrations. Further, major reductions in other COCs have been observed over time with recent groundwater data from the North Yard French Drain indicating Site COCs have reached an asymptote (EHS Support, 2022c).

7 Former Potliner Storage Pad (OU-5)

The former PSP is a concrete slab immediately north of the former Crusher Building on the northwestern side of the production area. The pad was used in the past to store spent potliner materials. The remediation area encompasses the concrete pad and includes the area of former Buildings 82 (Crusher Building) and 85 (Cathode Digging Building) and the former West Ditch outfall that ran through the area toward the St. Lawrence River. The PSP remediation area was increased to include an additional area designated south of the former Digging Building, resulting in a total remediation area of 5 acres.

As discussed in the *Area-Specific Completion Report for Remediation of the Potliner Storage Pad Area* (Bechtel, 1996), PCBs were detected in samples from the PSP area, and fluoride, cyanide, sulfate, and polynuclear aromatic hydrocarbons were also considered COCs. The 10 ppm PCB cleanup goal for the PSP was established in the ROD (NYSDEC, 1992). Residual concentrations of cyanide, sulfate, and fluoride were evaluated and compared with the New York State effluent standards. When the PSP boundaries were expanded to the area south of the Digging Building (which drains towards the Wetlands), Reynolds Metals Company and the NYSDEC agreed that a lower cleanup target of 1 ppm PCBs was appropriate for the added area. Remedial work included excavating soils containing PCBs and other COCs, backfilling with clean materials, improving drainage, and extensive paving to direct surface water runoff and prevent surface water infiltration. In areas where fluoride and cyanide levels were elevated, but PCBs were not, the action was to remove most of the elevated concentrations and isolate the residual constituents by covering with clean backfill and paving the surface with reinforced concrete. Some soils with PCB concentrations less than 10 ppm were disposed of in the BMP. The remaining soils with PCB concentrations less than 10 ppm and soils with PCB concentrations greater than or equal to 10 ppm but less than 50 ppm PCBs were disposed of in the on-site ILF. Soil with greater than or equal to 50 ppm PCBs was disposed of off-site.

One significant additional remedial effort has been performed in this area following publication of the 1996 Completion Report. In September 1999, excavation was performed near Building 85 (Cathode Digging Building) as part of a plant modernization effort. The resulting excavation spoils (approximately 120 CY) were disposed of in the ILF. The work was documented in the *Post-Remedial Report for Third Quarter 1999*.[6] More recent activity in the area includes demolition of the former crusher building.

Historical excavations were completed between 8 and 16 ft deep east of the former crusher building up to the road, up to 5 ft deep south of the former Digging Building, and in the area north and west of the paved area up to the edge of the rail tracks. Fluoride and cyanide were removed to cleanup goals in most locations; however, areas of residual contamination remained. Due to active plant operations at the time of past remedial activities, excavation was not completed beneath buildings, surrounding concrete pads, or the adjacent roads and rail tracks. At six locations, fluoride was not removed to the cleanup standard – 3.0 mg/L at that time, based on Toxicity Characteristic Leaching Procedure soil results.

June 2006 groundwater results from temporary piezometers (PZ-23 through PZ-31) installed in the shallow advective groundwater system, around and within the former PSP concrete pad and remediation excavations, provide an additional line of evidence that a residual fluoride or cyanide source is present in soil that was not excavated. The 2023 groundwater monitoring data are consistent with these results indicating a local fluoride source to groundwater in the PSP area.

The location of the former PSP and the groundwater wells in the vicinity are shown in **Figure 18**. Key post-remedial activities include inspections and groundwater monitoring.

7.1 Maintenance, Repairs and Modifications

The stormwater collection system functioned normally in the monitoring period. No other maintenance items or problems were reported.

7.2 Groundwater Monitoring

7.2.1 Groundwater Elevations and Hydraulic Gradients

Groundwater elevation contours based on measurements collected during April and August 2023 are presented in **Figure 4** and **Figure 5**.

Groundwater under the former PSP flows in a north and northeast direction toward the North Yard French Drain. MW-27S and MW-56 are upgradient of the area and MW-03S is directly adjacent to the area. The closest downgradient wells are MW-26S and MW-28S. Further downgradient are MW-33S and MW-34S, both of which are also upgradient of the North Yard, and MW-35SR, which is downgradient of the North Yard. MW-42, MW-43, and MW-44, which were installed in spring 2006, are located downgradient of both the PSP area and the North Yard. Also, downgradient of both are monitoring wells MW-48, MW-49, MW-50, MW-51, MW-52, and MW-54, which were installed in 2023 and described in the North Yard section of this report.

The North Yard French Drain system, located beneath the western side of the North Yard and at an elevation of approximately 201 ft, influences the direction of groundwater flow from the PSP. The French Drain system and the sewer system network located at the north end of the potrooms draw groundwater to the east.

7.2.2 Groundwater Quality

Using the methods detailed in **Section 2.1.3**, the statistical summary of the 2023 groundwater monitoring results, including the post-Plant closure statistical trend analysis, is provided in **Table 10** and is summarized in the following sections. A review of the post-Plant closure data indicates that there are no increasing or probably increasing concentration trends in the PSP area monitoring wells. The following locations have had decreasing or probably decreasing trends for fluoride or sulfate:

- Sulfate in MW-03S, MW-26S, MW-28S, MW-42, MW-43, and MW-44
- Fluoride in MW-03S, MW-26S, and MW-27S

7.2.2.1 Wells Near the Site

Upgradient Well – MW-27S

- No PCBs were detected.
- Total and WAD cyanide were not sampled.
- Free cyanide was non-detect during each event.

- Fluoride was detected above the NYSWQS of 1.5 mg/L in both monitoring events at a concentration of 2.32 and 2.87 mg/L, respectively. The fluoride concentrations trend is probably decreasing.
- Sulfate was detected above the NYSWQS of 250 mg/L in both sampling rounds (287 to 320 mg/L); no statistically significant trend currently exists for sulfate concentrations.

Upgradient Well – MW-56

- No PCBs were detected.
- Free cyanide was non-detect.
- Fluoride was detected below the NYSWQS of 1.5 mg/L.
- Sulfate was detected above the NYSWQS of 250 mg/L at a concentration of 340 mg/L in December. Stalled in 2023 and there is currently insufficient data to establish concentration trends.

Adjacent to and under the Site – MW-03S

- No PCBs were detected.
- Free cyanide was non-detect during each event.
- Total cyanide was detected below 0.2 mg/L in June 2023 (0.008 mg/L); concentrations display a statistically significant decreasing trend.
- WAD cyanide was not detected; concentrations have a decreasing trend.
- Fluoride was detected above the NYSWQS of 1.5 mg/L in both events (5.94 mg/L and 8.77 mg/L, respectively). Fluoride concentrations show a decreasing trend.
- Sulfate was detected in both sampling events at concentrations of 10.4 mg/L and 59.8 mg/L, respectively; concentrations show a decreasing trend.

7.2.2.2 Downgradient Wells – MW-26S and MW-28S

Western Side – MW-26S

- No PCBs were detected.
- Free cyanide was non-detect.
- Fluoride was detected above the NYSWQS of 1.5 mg/L in both sampling events at concentrations of 5.25 mg/L and 5.61 mg/L, respectively. Fluoride concentrations have a decreasing trend.
- Sulfate samples were detected below the NYSWQS of 250 mg/L. Sulfate concentrations have a decreasing trend.

Eastern Side – MW-28S

- No PCBs were detected in MW-28S.
- Free cyanide was detected below the NYSWQS of 0.2 mg/L. in both sampling events.
- Fluoride was detected in both sampling events above the NYSWQS at concentrations of 11.9 and 13.8 mg/L, respectively. Fluoride concentration trend is stable.
- Sulfate samples were detected below the NYSWQS of 250 mg/L. Sulfate concentrations have a decreasing trend.

7.2.2.3 Wells Further Downgradient – MW-33S and MW-34S

MW-33S and MW-34S are located approximately 80 ft north and downgradient of wells MW-26S and MW-28S, and are only tested for free cyanide.

- Free cyanide was non-detect.

7.2.2.4 Wells Most Downgradient – MW-35SR, MW-42, MW-43, and MW-44

MW-35SR, MW-42, MW-43, and MW-44 are the most downgradient wells of the PSP and the North Yard, and extend west of MW-35SR. These monitoring wells are located approximately 200 ft north of MW-33S and MW-34S.

- No PCBs were detected.
- Free cyanide was detected in one monitoring event at MW-42 below the NYSWQS of 0.2 mg/L.
- Fluoride was detected during both sampling events at MW-35SR, MW-43, and MW-44 below the NYSWQS of 1.5 mg/L (0.252 to 0.911 mg/L). Fluoride was detected above the NYWQS at MW-42 in both sampling events, with concentrations of 25.5 and 39.3 mg/L, respectively. Concentrations have been stable since July 2014. Fluoride concentrations trends for each monitoring well is stable.
- Sulfate was detected in MW-43 and MW-44 at concentrations below the NYSWQS during both sampling events; concentration trends are decreasing for both wells. Sulfate was detected in MW-35SR above the NYSWQS of 250 mg/L during both sampling events at concentrations of 612 mg/L and 766 mg/L, respectively. Concentrations trends are stable. Sulfate was also detected in MW-42 above the NYSWQS during both sampling events at concentrations of 1,140 mg/L and 1,170 mg/L, respectively but the concentration trend is decreasing.

7.2.3 Post-Closure Assessment

With the addition of the monitoring wells installed in 2006 and confirmation of contaminant recovery in the North Yard French Drain system, the groundwater monitoring well network is located to assess post-Plant closure conditions in the vicinity and downgradient of the former PSP area.

As documented in the *2021 Annual PRR* (EHS Support, 2022b), it is possible that low-permeability lacustrine/marine clay identified between the North Yard/PSP and St Lawrence River, which is proximal to the MW-35SR and MW-42 screened intervals, contributes sulfate to these locations. A marine sulfate source is supported by elevated sulfate in other locations where wells are screened in lacustrine/marine clay, including MW-36S, MW-37, and MW-41. Given these downgradient wells typically go dry during sampling and provide very low groundwater yields and high entrained suspended sediment, there is ample opportunity for sediment contributions to groundwater quality. Wells that were installed north of Haverstock Road in 2023 indicate that sulfate did exceed the NYSWQS of 250 mg/L at MW-50, MW-51 and MW-52, and also had low fluoride concentrations below criteria consistent with a lacustrine/marine clay source.

Semiannual groundwater fluoride concentrations at MW-03S, MW-26S, and MW-28S downgradient of the PSP had elevated fluoride concentrations in 2023, whereas groundwater results from monitoring wells MW-36S, MW-43S, and MW-19S that are located side and downgradient of the PSP have substantially lower fluoride concentrations, indicating the source of residual soil impact is locally present and laterally confined to the PSP area. An investigation was completed in April and November 2023 to

determine if potential fluoride-impacted soils remain in the areas that were not historically excavated. This investigation was completed in accordance with the approved Work Plan, which was finalized on November 3, 2022 (NYSDEQ comments were addressed in a letter dated October 12, 2022). Results of the 2023 soil investigation will be provided in a separate report. An additional monitoring well (MW-56) was installed in November 2023 to verify that fluoride was not migrating to the PSP area from the BMP. Sulfate exceeded the NYWQS at MW-56, but fluoride did not. Given the absence of fluoride, sulfate is not attributed to seepage from the BMP. And indicates that groundwater migrating from the BMP is not a source of groundwater impacts to the PSP area. The lateral extent of the elevated COC concentrations is delineated by MW-26S to the west and MW-34S to the east. The downgradient extent of elevated COC concentrations in shallow groundwater associated with the PSP area appears to be captured by the French Drain in the North Yard. Operation of the North Yard French Drain system influences the direction of the groundwater flow from the PSP area. Concentrations of COCs in samples collected from the North Yard French Drain are above the NYSWQS, and all captured groundwater is treated prior to discharge. Given that fluoride and sulfate concentrations are decreasing in the North Yard French Drain and that the magnitude of concentration decreases downgradient in newly installed monitoring wells, continued operation may be providing limited benefits.

No PCB Aroclors were detected in the PSP area, indicating the function of the downgradient North Yard French Drain has served its original purpose of mitigating PCB migration and impact. Free cyanide was only detected in MW-28S and MW-42 and was below the NYSWQS in both instances. There were no other detections of free cyanide in the PSP area. Total cyanide concentrations have been historically elevated at MW-28S and MW-03S. The persistent COC detections associated with potliner material indicate that some residual source remains near the former PSP or former Crusher Building. Review of the final excavation surfaces and post-excavation sampling results indicate that limitations on excavation imposed by the buildings and roadways, along with the cleanup goals specific to PCBs, may have resulted in some residual PSP-impacted material being left in place.

8 Wetlands and Miscellaneous Areas (OU-4 and OU-6)

Remedial measures were historically implemented for the Wetlands (OU-4) and Miscellaneous Areas (OU-6) identified in the 1992 ROD (NYSDEC, 1992). There are no O&M requirements associated with these areas; therefore, they are not discussed in further detail.

8.1 Wetlands

A 172-acre area located south and west of the ILF was mapped by NYSDEC as a Regulated Wetland RR-6 Class II Wetlands Area (**Figure 1**). Portions of the wetlands were identified in the 1992 ROD as remediation areas due to the presence of COCs, including PCBs, fluoride, and sulfate. The remediation area was approximately 7.8 acres and was designated as Wetlands OU-4. The remedial scope of work included temporary dewatering of impacted areas, excavation of sediment and soils, restoration of excavated areas, and the creation of replacement wetlands. This work is documented in the *Area-Specific Completion Report for Remediation, Restoration, and Mitigation of Wetlands RR-6* (Bechtel, 1998b).

No ongoing operations, maintenance, and/or monitoring is conducted in the wetlands area.

8.2 Rectifier Yard

The Rectifier Yard is on the southern end of the production area of the Plant within the perimeter road. Its principal use is as a high-voltage electrical substation. Surface water is drained from the Rectifier Yard by two networks of catch basins. The northern network collects transformer cooling water and stormwater runoff and discharges to a drainage system beneath the pot rooms which is connected to the Plant's SPDES outfall system. Stormwater runoff from the southern half of the Rectifier Yard collects in the southern network of catch basins and drains to the Rectifier Yard Pond.

Rectifier Yard remediation consisted of soil excavation in a ½-acre area. The excavated area was backfilled, graded, and surfaced with crushed stone. Remediation work also included extending and rerouting storm drains, excavating oil transfer piping, cleaning storm drains, and providing a sampling station/retention pond for surface water runoff immediately upstream of the wetlands. Remediation work is documented in the *Area-Specific Completion Report for the Remediation of the Rectifier Yard* (Bechtel, 1995a).

The Rectifier Yard Plan to include the drainage network that leads to the Rectifier Yard Pond is illustrated on **Figure 19**. O&M activities are limited to inspections and replacement of the Rectifier Yard Pond oil absorbent boom (as needed, but no less than annually). Monitoring of the surface water chemistry of the retention pond is no longer required per NYSDEC approval in January 2013.

8.3 Former Soil Stockpile

The Former Soil Stockpile was an area located southwest of the BMP where soil spoils containing less than 10 ppm total PCBs from various remedial efforts performed at the Site were stored. Remedial activities performed in 1994 included excavation and removal of this material to below the cleanup goal of 1 ppm total PCBs. Excavated material was placed in the ILF. Details of the remediation action are provided in the *Area-Specific Completion Report for Remediation of the Soil Stockpile* (Bechtel, 1995b).

No ongoing operations, maintenance, and/or monitoring is conducted in this area.

8.4 West Ditch Outfall

Remediation of the downstream portion of the West Ditch located north of Haverstock Road is detailed in the *Project Completion Report for the Remediation of the 002 Outfall/West Ditch System and Remediation of the 007 Outfall* (Bechtel, 1992). Remediation objectives included the removal of PCB-impacted soil and sediment from Outfall 008 and Outfall 007 drainage systems to meet the cleanup goal of 10 ppm total PCBs. Excavated material was placed in the ILF.

No ongoing operations, maintenance, and/or monitoring is conducted in this area.

8.5 002 Diversion Area (Outfall 005)

The 002 Diversion Area was located in the northeast corner of the Plant. The 002 Diversion project was an interim remedial measure completed in 1989 that consisted of diverting surface water flow to a piped system to capture waters that formerly discharged to Outfall 002 and the majority of surface water runoff from the east side of the Facility. As part of the diversion project, confirmatory soil samples collected in excavated areas identified elevated PCB concentrations; therefore, these areas were identified as miscellaneous areas in the 1992 ROD (NYSDEC, 1992). Remedial activities performed are documented in the *Area-Specific Completion Report of the 002 Diversion Area* (Bechtel, 1997c) and included excavation of soils to meet the cleanup goal of 10 ppm total PCBs.

Excavated material containing less than 50 ppm total PCBs was disposed of in the ILF while material with a total PCB concentration greater than 50 ppm was disposed of off-site.

The Outfall 005 drainage basin is located in the eastern portion of the 002 Diversion Area. PCB detections in stormwater discharge from Outfall 005 in 1998 prompted additional remedial efforts in 1999. This remediation is documented in the *Completion Report for Remediation of the 005 Drainage Basin 002 Diversion Area* (Bechtel, 1999). Excavated material was disposed of in the ILF.

No ongoing operations, maintenance, and/or monitoring is conducted in this area.

8.6 Area North of Haverstock Road and Outfall 004

The area north of Haverstock Road was a narrow strip of land approximately 1,200 ft long by 200 to 300 ft wide located between Haverstock Road and the St. Lawrence River. Remediation completed in 1994 is documented in the *Area-Specific Completion Report for Remediation of the Area North of Haverstock Road* (Bechtel, 1995c). The remedial action included excavation of sediment and soils to meet a cleanup goal of 1 ppm total PCBs. Outfall 004 (later designated as Outfall 006) was located within this area and was remediated during installation of a new storm sewer and outfall. This work is also documented in the *Area-Specific Completion Report for Remediation of the Area North of Haverstock Road* (Bechtel, 1995c). Excavated material containing less than 50 ppm total PCBs was disposed of in the ILF while material with a total PCB concentration greater than 50 ppm was disposed of off-site.

No ongoing operations, maintenance, and/or monitoring is conducted in this area.

9 Finding and Recommendations

9.1 General

This section provides the general findings regarding the post-Plant closure conditions and post-closure monitoring programs at the various locations of the Facility and provides recommendations for modifications to the post-closure monitoring program.

9.2 Black Mud Pond Findings

The existing drainage system, installed to the bottom of the waste, was estimated from boring logs and cross sections on remediation record drawings to have an approximate elevation of 224 ft. Historical operation of the underdrain system produced water level elevations of approximately 228 ft in monitoring well MPOF-1402S and approximately 232 ft in MPOG-1601S. Dewatering of the BMP has resulted in an apparent primarily upward gradient from deep to shallow overburden groundwater at MPOF-1402S and MPOF-1403D and an apparent primarily slight downward gradient from shallow to deep overburden groundwater at MPOG-1601S and MPOG-1603D. However, the presence of low permeability and high plasticity clay beneath the BMP precludes vertical groundwater movement and historically calculated vertical groundwater gradients do not reflect a groundwater advection pathway.

The efficacy of the BMP underdrain system is demonstrated by water levels in piezometers installed adjacent to the BMP that are higher than the invert elevations of the underdrain and higher than water levels in MPOF-1402S and MPOG-1601S that are screened in the interior of the BMP. This observation demonstrates an inward gradient is created by dewatering the BMP.

A summary of 2023 COCs in the groundwater at the BMP is listed below:

- PCBs were not detected in BMP monitoring wells.
- Free cyanide was detected at MW-20-85-S and the concentration was below the NYSWQS.
- Fluoride concentrations at 6 of the 12 sampled BMP locations (MW-12S, MW-13S, MW-15S-87, MW-30S, PZ-44, and PZ-45) were above the NYSWQS. Evaluation using the post-Plant closure data indicates all locations show stable concentration trends, and only MW-15S-87 has an increasing trend. Fluoride concentrations are below the NYSWQS downgradient of MW-15S-87 at MW-20-85S and MW-10S, indicating fluoride attenuates downgradient. MW-20-85-S, PZ-44, and MW-30S, are also located side-gradient and downgradient of MW-15S-87 and did not display statistically significant trends, further supporting that fluoride is generally stable in groundwater to the south of the BMP.
- Sulfate was detected above the NYSWQS in 11 of the 13 monitoring locations sampled at the BMP. MW-13S and MW-22-85-S displayed a statistically significant decreasing trend, while MW-20-85-S and MW-23-85-S displayed a statistically increasing trend. The remaining monitoring locations did not exhibit a statistically significant trend. Consistent with the observations in other areas and given the absence of elevated fluoride concentrations or increasing trends (given that fluoride is more mobile than sulfate), the detections are considered potentially attributable to background sources (e.g., lacustrine clay/marine sediments)
- Due to the presence of the barrier wall on the northern and western sides of the BMP, fluoride and sulfate detections at MW-12S and MW-13S are not considered to be associated with flux from the BMP. Further concentrations and increasing trends in wells to the south of the BMP are localized, with more distal downgradient wells showing no trends.

The capping system meets the ROD remediation action objectives for protecting Facility workers and surface water. The dewatering system was not designed to lower water levels below the bottom of the waste; however, consistent operation of the underdrain and sump system has created an inward horizontal gradient that is effective at dewatering the interior of the BMP to the elevation of the underdrain inverts.

Regular post-closure monitoring and recent sampling of PZ-44, PZ-45, and PZ-46 demonstrate the presence of elevated concentrations of fluoride and sulfate outside of the BMP, which are related to residual impacts from conditions prior to consolidation of the BMP. As described in the updated HCSM (**Section 3**), precipitation and snowmelt infiltrate into shallow soils downgradient of the BMP, where groundwater advection occurs, and effectively dilute COCs. In deeper and less permeable soils, groundwater advection and contaminant mass flux are limited. BMP controls are performing as designed and continued monitoring will be performed.

9.3 Industrial Landfill Findings

Based on groundwater contour maps, the existing monitoring well network is effective for assessing post-closure conditions at the former ILF. Consistent operation of the leachate collection system provides significant hydraulic control of shallow groundwater. A summary of results and findings obtained at the ILF are as follows:

- PCBs aroclor-1260 and aroclor-1254 were detected below the NYWQS in MW-10S but were subsequently below detection in December. PCBs have not historically been detected in this location and are attributed to a sampling anomaly. PCBs were not detected at any other location.
- Free cyanide was detected below the NYSWQS at upgradient well MW-10S, and downgradient wells MW-39S, MW-40S, and MW-45. Concentration trends will be assessed when sufficient data is available.
- Sulfate was detected at each of the sampled ILF locations at concentrations below the NYSWQS, except for MW-39S and MW-45. Three out of four samples collected from MW-39S were above the NYSWQS of 250 mg/L (285 mg/L to 340 mg/L). At MW-45, all four of the collected samples were above the NYSWQS of 250 mg/L (from 531 mg/L to 722 mg/L). Sulfate increased from low, stable levels in MW-45 to above the NYSWQS standard in September 2015. Concentrations have remained above the NYSWQS and display a statistically significant increasing concentration trend. The absence of high fluoride in this monitoring well indicates that the sulfate concentrations are not likely associated with ongoing flux from the landfill. The source is more likely oxidation of natural sulfide from the surrounding wetland.
- Fluoride was detected above the NYSWQS of 1.5 mg/L in each of the four sampling events at MW-39S; fluoride concentrations from the post-Plant closure time period show a statistically significant increasing trend; however, since 2003, the concentrations have been stable. Groundwater gradients at MW-39S are toward the ILD perimeter trench and fluoride is below criteria to the south at MW-45, indicating concentrations are more likely attributable to residual sources prior to remedy implementation at the ILF. Fluoride was also detected above the NYSWQS in each of the surface water samples collected at SLPWETE; no statistically significant concentration trend exists. Fluoride was detected below the NYSWQS in SLPWETW and displayed a significantly decreasing trend. Fluoride was detected below the NYSWQS at MW-10S, MW-40S, and MW-45S. Geochemical data for receiving water bodies provided in the 2022 annual monitoring report indicate toxicity modifying factors (chloride, alkalinity, and hardness;

based on the methods of Parker et al. [2022]) will be favorable for ameliorating low-level fluoride impacts (EHS Support, 2023).

- Quarterly samples were collected from the extraction wells for total cyanide and fluoride (**Table 9**). Fluoride was detected below the NYSWQS of 1.5 mg/L in each of the extraction wells, except for EW-02, where fluoride was detected at 1.61 mg/L during the February event. Total cyanide was only detected above the NYSWQS of 0.2 mg/L in EW-06 (0.59 to 0.867 mg/L).

The groundwater extraction system remained operational in 2023 with a total of 1,634,530 gallons extracted. The ILF is operating as designed and continued monitoring will be performed. Mass balance data confirms the substantial 80-86 percent mixing of a wetland surface water component with a 15-20 percent leachate component in the perimeter trench in order for containment to be effective.

9.4 Former Potliner Storage Pad Findings

Based on the groundwater contour plans, the groundwater monitoring well network is effective to assess post-closure conditions near the former PSP.

- PCBs were not detected in PSP monitoring wells.
- Free cyanide was detected below the NYSWQS in well MW-28S and was non-detect in all other PSP wells.
- Sulfate was detected above the NYSWQS in MW-27S, MW-42 and upgradient well MW-56. The concentrations trends are stable and decreasing, respectively. There is insufficient data currently available from new well MW-56 to assess concentration trends. The absence of fluoride and presence of lacustrine/marine deposits in these locations suggests a natural source.
- Fluoride was detected above the NYSWQS in MW-03S, MW-26S, MW-27S, MW-28S, and MW-42. Concentration trends are decreasing in MW-03S, MW-26S, MW-27S, and MW-42; and are stable in MW-28S.

The persistent detections of COCs associated with potliner material indicate that some residual source remains near the former PSP or the former Crusher Building. Review of the final excavation surfaces and post-excavation sampling results indicate that limitations on excavation imposed by the active buildings and roadways may have resulted in some residual PSP-impacted material being left in-place. However, the detections of free cyanide, fluoride and sulfate above their respective NYSWQS in the North Yard French Drain and lower concentrations in downgradient, shallow monitoring wells indicate that the French Drain is possibly recovering contaminants for treatment from the shallow groundwater originating from the vicinity of the former PSP.

9.5 North Yard Findings

Based on the groundwater contour plans, the groundwater monitoring well network is effective to assess post-closure conditions at the North Yard. A summary of the observations related to the North Yard are as follows:

- PCBs were not detected in the North Yard monitoring locations.
- Free cyanide was detected below the NYSWQS in MW-36, MW-48, MW-49, MW-50, MW-51, and MW-52 and was non-detect in the other North Yard wells.
- Fluoride was detected above the NYSWQS at MW-16S, MW-17S, MW-18S, MW-19S, MW-36, and the French Drain. Concentrations of fluoride have been decreasing in MW-16S, MW-19S, MW-36 and stable at MW-17S.

- Sulfate was above the NYSWQS at five wells (MW-18S, MW-35SR, MW-36, MW-37, and MW-41). Sulfate was also above criteria in new monitoring wells MW-50, MW-51, and MW-52 in December. Trend analysis indicates statistically significant decreasing sulfate concentration trends in MW-18S, MW-36, and MW-41. Sulfate in MW-35SR and MW-37 does not display a statistically significant trend. Sulfate levels may be partially attributed to proximity of well screens to marine clay in the MW-35SR area, which is supported by the sulfate present in the new wells installed in April and November and the absence of fluoride.

9.6 Rectifier Yard Findings

The Rectifier Yard Pond was not sampled per a letter from the NYSDEC dated January 3, 2013.

9.7 Institutional Control and Engineering Control Plan Review

The following sections discuss review of the Institutional Control and Engineering Control Plan for the closed remediation sites. The Institutional and Engineering Controls Certification Form is included as **Appendix F**.

9.7.1 Black Mud Pond

The engineering controls associated with the closed BMP include a cap with a vegetated cover and an underdrain system. The underdrain system is used to extract groundwater beneath the in-place waste pile. The purpose of this system is to limit infiltration and prevent potentially affected groundwater from migrating from the BMP. This underdrain system was actively pumped throughout the monitoring period. As mentioned in **Section 5.1**, an inward horizontal gradient was observed in response to pumping and vertical flux is minimized by the presence of a high plasticity and low permeability clay at the base of the BMP waste. In addition, the entire BMP is surrounded by a fence to control access; therefore, the institutional and engineering controls are in place, adequate, and functioning as designed.

9.7.2 Industrial Landfill

The engineering controls associated with the closed ILF include a cap with a vegetated cover along with a downgradient perimeter underdrain system. This underdrain system is used to extract groundwater beneath the in-place waste pile. The purpose of this system is to limit infiltration and prevent potentially affected groundwater from migrating from the ILF. This system has functioned as designed and has remained unchanged since it was approved by NYSDEC.

The upgradient groundwater extraction system was constructed during summer 2012 and began full operation in October 2012. Five extraction wells located upgradient of the ILF are pumped continuously with the intended purpose of lowering the shallow groundwater beneath the ILF and reducing the impact on the surrounding groundwater regime; a total of approximately 1,634,530 gallons were extracted throughout the monitoring period. Based on the operational experience to date, it is anticipated that continual maintenance of the system will be required and that weekly inspections will be necessary for the near future. The institutional and engineering controls are adequate and functioning as designed.

9.7.3 Former Potliner Storage Pad

Part of the remedial work at the former PSP included excavation and extensive paving to prevent surface water infiltration. Furthermore, contaminant concentrations observed in the French Drain relative to the surrounding monitoring locations suggest that it is effectively capturing contaminated groundwater originating at the former PSP. Concentrations above the NYSWQS are currently being conveyed and treated through the Outfall 003 system.

At this time, no other controls are proposed for this area except continued monitoring. The institutional and engineering controls are adequate and functioning as designed.

9.7.4 North Yard

Groundwater in the North Yard is controlled by two underdrain systems. The first system drains into pump station MH-B. Groundwater from this pump station is sampled and the operation and inspection of this pump station is routinely completed. No problems were reported during the reporting period.

The second groundwater collection system, located near the former PSP, conveys groundwater directly to the east into the west sump where it is conveyed to Outfall 003. At the time of the closure, no performance criteria were established for this system.

9.7.5 Wetlands and Facility-Wide

Facility-wide and wetlands institutional and engineering controls include groundwater monitoring, SPDES surface water and process water monitoring, and fencing for access control. These controls remain in-place and are effective at this time.

9.8 Sampling Schedule

Proposed changes to the post-closure monitoring schedule were approved in March 2024 and will be implemented in 2024.

9.9 Investigation Schedule

Investigations detailed in the September 2022 Work Plan were conducted in April and November 2023. This work included the North Yard groundwater investigation, the former pot liner storage pad investigation, the ILF groundwater recovery investigation, and PCB supplemental investigations. The results of these investigations will be provided in separate reports.

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Tables

Table 1
Monitoring Well and Piezometer Construction
2023 Periodic Review Report
Reynolds Metals Company (NYSDEC Site Code 645009)
Massena East, New York

Facility Location and ID														
Monitoring Well ID	Site	Alcoa Coordinates[1]		Ground Elevation (feet)	Date Installed	Company	Material Type and Size	Depth of Well (feet)	Bottom of Hole Elevation (feet)	Top of Inner Casing (feet)	Screen			
											Depth		Elevation	
		Northing	Easting								Top (feet)	Bottom (feet)	Top (feet)	Bottom (feet)
MW-1S	NYD	5,453.40	-8,700.70	224.30	9/16/87	WCC	2-inch diameter PVC	16.00	208.30	226.56	6.00	16.00	218.30	208.30
MW-03S	PSP	5,286.24	-9,353.56	224.7	10/17/08	ATL	2-inch diameter PVC	23.00	201.7	227.2	13.00	23.00	211.68	201.68
MW-10S	ILF	3,455.20	-9,730.10	214.50	9/1/87	WCC	2-inch diameter PVC	20.50	194.00	217.62	10.50	20.50	204.00	194.00
MW-11SR	BMP	4,516.60	-9,682.60	240.20	9/11/87	WCC	2-inch diameter PVC	27.00	213.20	242.71	17.00	27.00	223.20	213.20
MW-12S	BMP	4,830.10	-9,907.20	245.10	9/16/87	WCC	2-inch diameter PVC	16.00	229.10	248.18	6.00	16.00	239.10	229.10
MW-13D	BMP	4,648.40	-10,125.30	243.70	9/9/87	WCC	2-inch diameter PVC	49.00	194.70	245.16	39.00	49.00	204.70	194.70
MW-13S	BMP	4,659.50	-10,126.00	243.70	9/14/87	WCC	2-inch diameter PVC	16.50	227.20	245.19	6.50	16.50	237.20	227.20
MW-14S	BMP	4,392.90	-10,174.50	246.60	9/4/87	WCC	2-inch diameter PVC	18.00	228.60	248.16	8.00	18.00	238.60	228.60
MW-15S-91	BMP	4,085.40	-9,954.10	239.60	8/12/91	ATL	2-inch diameter PVC	31.00	208.60	242.10	21.00	31.00	218.60	208.60
MW-15D	BMP	4,085.90	-9,962.70	239.70	9/3/87	WCC	2-inch diameter PVC	57.00	182.70	242.30	47.00	57.00	192.70	182.70
MW-15S-87	BMP	4,085.80	-9,973.70	239.60	9/10/87	WCC	2-inch diameter PVC	31.00	208.60	242.38	21.00	31.00	218.60	208.60
MW-16S	NYD	5,268.20	-8,578.60	225.90	8/7/91	WCC	2-inch diameter PVC	23.00	202.90	228.70	13.00	23.00	212.90	202.90
MW-17S	NYD	5,327.20	-8,684.60	223.40	8/24/89	WCC	2-inch diameter PVC	18.00	205.40	227.12	8.00	18.00	215.40	205.40
MW-18S	NYD	5,269.20	-8,827.70	224.70	8/30/89	WCC	2-inch diameter PVC	22.00	202.70	226.87	12.00	22.00	212.70	202.70
MW-19S	NYD	5,455.00	-8,978.00	223.50	8/28/89	WCC	2-inch diameter PVC	16.50	207.00	226.76	6.50	16.50	217.00	207.00
MW-20-85-S	BMP	3,928.20	-9,860.30	222.70	8/15/85	ATL	2-inch diameter PVC	30.50	192.20	225.95	20.50	30.50	202.20	192.20
MW-20-85-D	BMP	3,917.80	-9,856.00	223.00	8/20/85	ATL	2-inch diameter PVC	61.20	161.80	226.70	51.20	61.20	171.80	161.80
MW-21-85S	BMP	4,411.00	-9,516.90	227.20	8/22/85	ATL	2-inch diameter PVC	31.00	196.20	228.88	21.00	31.00	206.20	196.20
MW-21-85D	BMP	4,426.30	-9,518.40	227.20	8/22/85	ATL	2-inch diameter PVC	58.00	169.20	228.87	48.00	58.00	179.20	169.20
MW-22-85-D	BMP	4,891.40	-10,040.30	244.20	8/15/85	ATL	2-inch diameter PVC	60.60	183.60	246.48	50.60	60.60	193.60	183.60
MW-22-85-S	BMP	4,891.40	-10,025.50	244.50	8/7/85	ATL	2-inch diameter PVC	30.30	214.20	246.94	20.30	30.30	224.20	214.20
MW-23-85-D	BMP	4,468.90	-10,245.10	242.10	8/5/85	ATL	2-inch diameter PVC	58.00	184.10	246.14	48.00	58.00	194.10	184.10
MW-23-85-S	BMP	4,487.00	-10,241.00	241.9	10/17/08	ATL	2-inch diameter PVC	30.5	211.4	245.01	20.5	30.5	221.40	211.40
MW-24-85-S	BMP	---	---	228.30	8/7/85	ATL	2-inch diameter PVC	30.30	198.00	---[2]	20.30	30.30	208.00	198.00
MW-25-85-S	BMP	4,935.00	-10,392.60	228.30	8/8/85	ATL	2-inch diameter PVC	30.20	198.10	---[3]	20.20	30.20	208.10	198.10
MW-26S	PSP	5,390.70	-9,410.30	224.00	8/23/89	WCC	2-inch diameter PVC	27.50	196.50	225.36	17.50	27.50	206.50	196.50
MW-27S	PSP	5,014.80	-9,371.92	227.49	8/23/89	WCC	2-inch diameter PVC	22.50	204.99	230.50	12.50	22.50	214.99	204.99
MW-28S	PSP	5,394.40	-9,329.10	224.30	---	WCC	2-inch diameter PVC	26.00	198.30	226.54	16.00	26.00	208.30	198.30
MW-29S[a]	BMP	5,185.20	-9,898.90	237.60	8/14/89	WCC	2-inch diameter PVC	17.00	220.60	241.62	7.00	17.00	230.60	220.60
MW-30S	BMP	3,966.90	-10,131.60	231.70	8/14/89	WCC	2-inch diameter PVC	17.00	214.70	234.54	7.00	17.00	224.70	214.70
MW-31SR	BMP	4,124.60	-10,770.60	233.20	8/9/89	WCC	2-inch diameter PVC	19.50	213.70	234.83	9.50	19.50	223.70	213.70
MW-32S	EAST P-LOT	4,089.10	-7,406.10	224.20	8/9/89	WCC	2-inch diameter PVC	37.00	187.20	227.28	27.00	37.00	197.20	187.20
MW-33S	PSP	5,476.80	-9,466.90	223.20	8/16/95	ATL	2-inch diameter PVC	26.00	197.20	225.72	16.00	26.00	207.20	197.20
MW-34S	PSP	5,466.90	-9,241.60	215.60	8/21/95	ATL	2-inch diameter PVC	24.50	191.10	218.56	14.50	24.50	201.10	191.10
MW-35SR	PSP	5,695.50	-9,332.20	211.10	10/27/97	ATL	2-inch diameter PVC	26.80	184.30	213.54	16.80	26.80	194.30	184.30
MW-36	NYD	5,672.60	-8,883.30	207.00	9/3/96	ATL	2-inch diameter PVC	31.50	175.50	209.40	21.50	31.50	185.50	175.50
MW-37	NYD	5,650.50	-8,708.00	204.90	9/5/96	ATL	2-inch diameter PVC	32.00	172.90	207.68	22.00	32.00	182.90	172.90
MW-38	NYD	5,604.50	-8,469.60	198.20	9/6/96	ATL	2-inch diameter PVC	32.00	166.20	202.71	22.00	32.00	176.20	166.20
MW-39S	ILF	2,575.50	-9,630.60	193.30	10/29/97	ATL	2-inch diameter PVC	18.50	174.80	196.16	8.50	18.50	184.80	174.80
MW-40S	ILF	2,729.30	-9,245.10	192.00	10/30/97	ATL	2-inch diameter PVC	17.50	174.50	194.32	7.50	17.50	184.50	174.50
MW-41	NYD	5,501.70	-8,370.20	221.50	4/11/06	ATL	2-inch diameter PVC	47.00	174.50	224.25	35.00	45.00	186.50	176.50
MW-42	NYD	5,698.30	-9,347.80	209.10	4/12/06	ATL	2-inch diameter PVC	47.00	162.10	211.40	34.00	44.00	175.10	165.10

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Facility Location and ID														
Monitoring Well ID	Site	Alcoa Coordinates[1]		Ground Elevation (feet)	Date Installed	Company	Material Type and Size	Depth of Well (feet)	Bottom of Hole Elevation (feet)	Top of Inner Casing (feet)	Screen			
											Depth		Elevation	
		Northing	Easting								Top (feet)	Bottom (feet)	Top (feet)	Bottom (feet)
MW-43	NYD	5,701.90	-9,461.50	206.70	4/14/06	ATL	2-inch diameter PVC	47.00	159.70	209.12	34.50	44.50	172.20	162.20
MW-44	NYD	5,702.40	-9,459.40	206.60	4/18/06	ATL	2-inch diameter PVC	26.50	180.10	209.04	15.00	25.00	191.60	181.60
MW-45	ILF	2,527.60	-9,634.90	193.40	4/19/06	ATL	2-inch diameter PVC	15.50	177.90	195.83	5.00	15.00	188.40	178.40
MW-46	ILF	2,767.17	-9,260.11	198.02	8/13/10	ATL	2-inch diameter PVC	8.00	190.02	200.72	24.00	29.00	174.02	169.02
MW-47	ILF	2,578.15	-9,633.33	193.00	8/13/10	ATL	2-inch diameter PVC	44.00	149.00	196.49	29.00	34.00	164.00	159.00
MW-48	NYD	5,736.01	-8,579.47	191.90	4/23/23	ATL	4-inch diameter PVC	28.00	163.90	194.22	13.00	23.00	178.90	168.90
MW-49	NYD	5,851.52	-9,026.86	185.13	11/8/23	Rockwater	4-inch diameter PVC	50.00	135.13	187.82	37.50	47.50	147.63	137.63
MW-50	NYD	5,874.40	-9,384.17	178.13	11/9/23	Rockwater	4-inch diameter PVC	30.00	148.13	178.03	15.00	25.00	163.13	153.13
MW-51	NYD	5,949.62	-9,469.63	185.77	4/20/23	ATL	4-inch diameter PVC	39.00	146.77	185.70	29.00	39.00	156.77	146.77
MW-52	NYD	6,116.16	-9,524.16	183.29	4/19/23	ATL	4-inch diameter PVC	23.00	160.29	183.24	13.00	23.00	170.29	160.29
MW-54	NYD	5,821.25	-8,558.52	182.31	11/8/23	Rockwater	4-inch diameter PVC	50.00	132.31	185.29	35.00	45.00	147.31	137.31
MW-55	NYD	5,794.03	-7,671.32	173.90	11/7/23	Rockwater	4-inch diameter PVC	36.00	137.90	176.74	15.00	30.00	158.90	143.90
MW-56	NYD	5,005.45	-9,667.55	239.83	11/10/23	Rockwater	4-inch diameter PVC	50.00	189.83	239.91	10.00	20.00	229.83	219.83
MPOF1403D[4]	BMP	4,231.90	-9,994.90	250.40	7/2/96	ATL	2-inch diameter PVC	32.50	217.90	254.95	30.50	32.50	219.90	217.90
MPOF1402S	BMP	4,236.30	-9,996.10	248.70	7/3/96	ATL	2-inch diameter PVC	25.00	223.70	254.21	23.00	25.00	225.70	223.70
MPOG1603D[5]	BMP	4,346.30	-9,785.50	251.00	7/2/96	ATL	2-inch diameter PVC	31.50	219.50	254.72	29.50	31.50	221.50	219.50
MPOG1601S	BMP	4,349.50	-9,795.60	252.70	2/11/95	ATL	2-inch diameter PVC	20.50	232.20	254.32	0.00	19.50	252.70	233.20
Piezometers														
PZ-1	ILF	3,110.15	-8,980.84	215.70	6/5/02	ATL	2-inch diameter PVC	15.20	200.50	218.28	5.20	15.20	210.50	200.50
PZ-2	ILF	3,106.96	-8,974.50	214.30	6/5/02	ATL	2-inch diameter PVC	14.00	200.30	217.04	4.00	14.00	210.30	200.30
PZ-3	ILF	3,103.48	-8,966.37	213.00	6/5/02	ATL	2-inch diameter PVC	14.00	199.00	215.10	7.00	14.00	206.00	199.00
PZ-4	ILF	3,102.54	-8,964.80	212.60	6/5/02	ATL	2-inch diameter PVC	12.00	200.60	215.78	7.00	12.00	205.60	200.60
PZ-5	ILF	3,103.23	-8,962.11	213.00	6/6/02	ATL	2-inch diameter PVC	12.90	200.10	216.02	7.90	12.90	205.10	200.10
PZ-6	ILF	2,862.02	-9,158.43	199.60	5/29/02	ATL	2-inch diameter PVC	14.00	185.60	202.24	9.00	14.00	190.60	185.60
PZ-7	ILF	2,854.46	-9,155.56	198.00	5/29/02	ATL	2-inch diameter PVC	10.40	187.60	201.02	5.40	10.40	192.60	187.60
PZ-8	ILF	2,843.34	-9,150.24	197.70	5/30/02	ATL	2-inch diameter PVC	10.40	187.30	201.85	6.40	10.40	191.30	187.30
PZ-9	ILF	2,841.53	-9,149.39	198.20	5/30/02	ATL	2-inch diameter PVC	10.40	187.80	201.53	6.40	10.40	191.80	187.80
PZ-10	ILF	2,721.24	-9,493.49	199.90	6/3/02	ATL	2-inch diameter PVC	14.00	185.90	202.82	7.00	14.00	192.90	185.90
PZ-11	ILF	2,715.00	-9,490.99	199.20	6/3/02	ATL	2-inch diameter PVC	13.50	185.70	202.43	8.50	13.50	190.70	185.70
PZ-12	ILF	2,702.16	-9,485.72	197.80	6/4/02	ATL	2-inch diameter PVC	11.60	186.20	201.10	7.60	11.60	190.20	186.20
PZ-13	ILF	2,700.22	-9,485.03	197.40	6/4/02	ATL	2-inch diameter PVC	11.70	185.70	201.12	7.70	11.70	189.70	185.70
PZ-14	ILF	2,714.94	-9,918.27	199.50	5/23/02	ATL	2-inch diameter PVC	10.90	188.60	201.91	5.90	10.90	193.60	188.60
PZ-15	ILF	2,709.67	-9,923.35	198.30	5/23/02	ATL	2-inch diameter PVC	9.80	188.50	200.58	5.80	9.80	192.50	188.50
PZ-16	ILF	2,701.32	-9,931.53	198.40	5/23/02	ATL	2-inch diameter PVC	9.90	188.50	200.66	7.90	9.90	190.50	188.50
PZ-17	ILF	2,699.53	-9,933.31	198.60	5/23/02	ATL	2-inch diameter PVC	10.20	188.40	200.99	8.20	10.20	190.40	188.40
PZ-18	ILF	3,100.32	-9,930.31	208.60	5/21/02	ATL	2-inch diameter PVC	11.90	196.70	210.96	6.90	11.90	201.70	196.70
PZ-19	ILF	3,103.66	-9,933.61	207.20	5/21/02	ATL	2-inch diameter PVC	10.50	196.70	209.47	5.50	10.50	201.70	196.70
PZ-20	ILF	3,107.65	-9,939.05	205.50	5/21/02	ATL	2-inch diameter PVC	8.70	196.80	208.10	3.70	8.70	201.80	196.80
PZ-21	ILF	3,109.13	-9,941.03	205.00	5/21/02	ATL	2-inch diameter PVC	8.60	196.40	207.75	3.60	8.60	201.40	196.40
PZ-22	ILF	3,109.92	-9,942.97	205.30	5/21/02	ATL	2-inch diameter PVC	9.40	195.90	207.72	4.40	9.40	200.90	195.90
PZ-23	PSP	5,126.80	-9,324.30	227.30	4/19/06	ATL	1-inch diameter PVC	16.00	211.30	231.80	1.00	16.00	226.30	211.30
PZ-24[a]	PSP	5,208.60	-9,327.80	225.40	4/19/06	ATL	1-inch diameter PVC	12.00	213.40	225.20	2.00	12.00	223.40	213.40

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											Depth		Elevation	
		Northing	Easting								Top (feet)	Bottom (feet)	Top (feet)	Bottom (feet)
PZ-25[a]	PSP	5,255.90	-9,327.20	224.30	4/19/06	ATL	1-inch diameter PVC	12.00	212.30	224.10	1.50	12.00	222.80	212.30
PZ-26[a]	PSP	5,317.60	-9,331.50	224.00	4/19/06	ATL	1-inch diameter PVC	12.00	212.00	223.80	1.50	12.00	222.50	212.00
PZ-27[a]	PSP	5,335.10	-9,265.10	224.10	4/20/06	ATL	1-inch diameter PVC	11.00	213.10	223.90	0.75	11.00	223.35	213.10
PZ-28[a]	PSP	5,291.90	-9,401.80	224.30	4/20/06	ATL	1-inch diameter PVC	12.00	212.30	224.10	1.50	12.00	222.80	212.30
PZ-29	PSP	5,174.00	-9,439.90	225.10	4/20/06	ATL	1-inch diameter PVC	9.50	215.60	229.30	1.50	9.00	223.60	216.10
PZ-30	PSP	5,121.60	-9,388.20	226.50	4/19/06	ATL	1-inch diameter PVC	9.10	217.40	231.50	0.75	9.00	225.75	217.50
PZ-31	PSP	5,054.80	-9,387.80	227.30	4/20/06	ATL	1-inch diameter PVC	12.00	215.30	231.80	1.50	12.00	225.80	215.30
PZ-32	BMP	4,572.60	-10,091.50	246.70	4/17/06	ATL	1-inch diameter PVC	11.10	235.60	251.47	0.70	11.00	246.00	235.70
PZ-33	BMP	4,584.30	-10,132.60	244.20	4/17/06	ATL	1-inch diameter PVC	12.00	232.20	249.03	1.50	12.00	242.70	232.20
PZ-34	BMP	4,591.20	-10,163.50	241.50	4/17/06	ATL	1-inch diameter PVC	10.20	231.30	246.36	1.50	10.00	240.00	231.50
PZ-35	BMP	4,603.20	-10,192.00	240.30	4/18/06	ATL	1-inch diameter PVC	6.00	234.30	244.98	0.75	6.00	239.55	234.30
PZ-36	BMP	4,615.10	-10,222.40	239.30	4/18/06	ATL	1-inch diameter PVC	6.50	232.80	243.85	1.00	6.50	238.30	232.80
PZ-37	BMP	4,129.30	-10,108.80	240.10	4/18/06	ATL	1-inch diameter PVC	16.00	224.10	244.54	0.75	16.00	239.35	224.10
PZ-38	BMP	4,100.70	-10,119.60	239.70	4/18/06	ATL	1-inch diameter PVC	12.00	227.70	244.15	1.50	12.00	238.20	227.70
PZ-39	BMP	4,061.80	-10,127.30	229.30	4/20/06	ATL	1-inch diameter PVC	4.00	225.30	233.63	0.75	4.00	228.55	225.30
PZ-40	BMP	4,024.70	-10,136.60	228.10	4/20/06	ATL	1-inch diameter PVC	2.00	226.10	232.65	0.50	2.00	227.60	226.10
PZ-41	BMP	3,993.80	-10,137.30	228.70	4/20/06	ATL	1-inch diameter PVC	2.00	226.70	232.64	0.50	2.00	228.20	226.70
PZ-42	BMP	4,106.20	-9,846.50	238.20	4/18/06	ATL	1-inch diameter PVC	15.00	223.20	242.72	3.00	13.00	235.20	225.20
PZ-43	BMP	4,083.20	-9,841.60	238.80	4/18/06	ATL	1-inch diameter PVC	16.00	222.80	243.20	1.00	16.00	237.80	222.80
PZ-44	BMP	4,027.80	-9,840.10	225.00	4/18/06	ATL	1-inch diameter PVC	12.00	213.00	229.01	1.50	12.00	223.50	213.00
PZ-45	BMP	3,997.60	-9,837.00	223.20	4/18/06	ATL	1-inch diameter PVC	12.00	211.20	228.24	1.50	12.00	221.70	211.20
PZ-46	BMP	3,962.60	-9,835.00	223.20	4/18/06	ATL	1-inch diameter PVC	7.50	215.70	227.69	1.50	7.50	221.70	215.70
PZ-47	ILF	2,666.55	-9,948.29	192.55	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-48	ILF	2,664.64	-9,943.86	192.76	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-49	ILF	2,621.17	-9,578.61	192.63	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-50	ILF	2,618.77	-9,582.24	192.76	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-51	ILF	2,751.74	-9,308.03	198.90	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-52	ILF	2,754.22	-9,302.20	198.70	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-53	ILF	2,338.60	-9,459.86	191.60	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-54	ILF	2,342.46	-9,456.01	191.64	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-55	ILF	2,132.46	-9,191.93	192.23	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-56	ILF	2,136.99	-9,191.10	192.55	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-57	ILF	2,077.21	-8,794.79	192.30	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-58	ILF	2,080.97	-8,793.47	192.48	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-59	ILF	2,824.95	-8,538.55	191.82	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-60	ILF	2,828.77	-8,539.85	191.70	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-61	ILF	2,743.96	-8,561.26	191.17	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-62	ILF	2,741.57	-8,563.22	191.10	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-63	ILF	2,575.54	-8,590.12	190.72	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-64	ILF	2,578.08	-8,595.12	190.76	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-65	ILF	3,120.40	-7,794.92	201.86	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-66	ILF	3,126.77	-7,800.31	202.25	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]

Table 1
Monitoring Well and Piezometer Construction
2023 Periodic Review Report
Reynolds Metals Company (NYSDEC Site Code 645009)
Massena East, New York

Facility Location and ID														
Monitoring Well ID	Site	Alcoa Coordinates[1]		Ground Elevation (feet)	Date Installed	Company	Material Type and Size	Depth of Well (feet)	Bottom of Hole Elevation (feet)	Top of Inner Casing (feet)	Screen			
											Depth		Elevation	
		Northing	Easting								Top (feet)	Bottom (feet)	Top (feet)	Bottom (feet)
PZ-67	ILF	2,730.85	-8,036.21	192.15	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-68	ILF	2,734.27	-8,034.03	192.29	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-69	ILF	2,978.47	-7,644.46	200.27	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-70	ILF	2,981.21	-7,641.61	200.32	9/29/08 - 10/10/08	ATL	2-inch diameter PVC	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]	---[4]
PZ-71S	ILF	3,162.50	-9,883.48	209.69	7/13/10	ATL	1-inch diameter PVC	35	174.69	212.75	10.00	20.00	199.69	189.69
PZ-71D	ILF	3,162.25	-9,883.43	209.69	7/13/10	ATL	1-inch diameter PVC	35	174.69	212.61	25.00	35.00	184.69	174.69
PZ-72	ILF	3,170.60	-9,871.20	209.94	7/14/10	ATL	1-inch diameter PVC	21	188.94	212.67	10.00	20.00	199.94	189.94
PZ-73S	ILF	3,303.15	-9,630.74	210.67	8/19/10	ATL	1-inch diameter PVC	34	176.67	209.94	15.00	20.00	195.67	190.67
PZ-73D	ILF	3,303.32	-9,630.92	210.67	819/10	ATL	1-inch diameter PVC	34	176.67	210.17	27.50	32.50	183.17	178.17
PZ-74D	ILF	3,303.48	-9,615.68	210.93	8/20/10	ATL	1-inch diameter PVC	34	176.93	210.40	27.50	32.50	183.43	178.43
PZ-74S	ILF	3,303.37	-9,615.76	210.93	8/20/10	ATL	1-inch diameter PVC	34	176.93	210.30	15.00	20.00	195.93	190.93
PZ-75S	ILF	3,210.91	-9,243.21	224.06	7/22/10	ATL	1-inch diameter PVC	46.5	177.56	226.91	16.75	21.75	207.31	202.31
PZ-75D	ILF	3,210.91	-9,243.18	224.06	7/22/10	ATL	1-inch diameter PVC	46.5	177.56	226.90	40.50	45.50	183.56	178.56
PZ-76	ILF	3,211.73	-9,227.95	224.00	7/23/10	ATL	1-inch diameter PVC	46.5	177.50	226.25	40.50	45.50	183.50	178.50
PZ-77	ILF	3,226.95	-9,785.88	210.77	5/24/12	ATL	1-inch diameter PVC	35	175.77	213.53	30.00	35.00	180.77	175.77
PZ-78	ILF	3,302.14	-9,640.86	210.14	5/17/12	ATL	1-inch diameter PVC	35	175.14	210.14	30.00	35.00	180.14	175.14
PZ-79	ILF	3,241.10	-9,378.50	218.90	5/16/12	ATL	1-inch diameter PVC	35	183.90	221.36	30.00	35.00	188.90	183.90
Extraction Wells														
EW-01	ILF	3,156.97	-9,891.80	209.32	7/12/10	ATL	4-inch diameter PVC	55	154.32	212.47	26.00	36.00	183.32	173.32
EW-02	ILF	3,302.29	-9,640.66	210.72	8/18/10	ATL	4-inch diameter PVC	47	163.72	210.13	25.00	35.00	185.72	175.72
EW-03	ILF	3,209.90	-9,253.30	224.06	7/21/10	ATL	4-inch diameter PVC	57	167.06	226.30	38.00	48.00	186.06	176.06
EW-04	ILF	3,314.00	-9,455.20	218.73	5/23/12	ATL	4-inch diameter PVC	49	169.73	218.13	37.00	47.00	181.73	171.73
EW-05	ILF	3,223.40	-9,306.60	223.88	5/16/12	ATL	4-inch diameter PVC	50	173.88	226.55	38.00	48.00	185.88	175.88
EW-06	ILF	3,224.80	-9,129.90	221.55	5/14/12	ATL	4-inch diameter PVC	54	167.55	224.39	42.00	52.00	179.55	169.55

Notes:
Table prepared by CDM Smith.
[a] Decommissioned with NYSDEC approval in 2022.
[1] The northings and eastings listed are based on Alcoa's coordinate system. This system is based on the benchmark location King's Bench, which is located just west of Alcoa's Building 60.
[2] Destroyed during construction.
[3] Borrow Pit
[4] Information was determined to be inaccurate. Information not available.
[5] Information was determined to be inaccurate. Information not available.
--- = Well data unavailable
ATL = Atlantic Testing Company
BMP = Black Mud Pond
East P-Lot = East Parking Lot
ILF = Industrial Landfill
NYD = North Yard
PSP = Potliner Storage Pad
PVC = polyvinyl chloride
WCC = Woodward Clyde Consultants

Table 2
Groundwater Monitoring Schedule
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site	Monitoring Well	Parameters	Sampling Frequency	Water Level Frequency
Black Mud Pond (OU2)	MPOF1402S[1]	---		M
	MPOF1403D[1]	---		M
	MPOG1601S[1]	---		M
	MPOG1603D[1]	---		M
	MW-11SR	CN Free, F, PCBs Total, Sulfate	S	S
	MW-12S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-12D	---		S
	MW-13S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-14S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-15S-87	CN Free, F, PCBs Total, Sulfate	S	S
	MW-15S-91	---		S
	MW-20-85S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-20-85D	---		S
	MW-21-85S	---		S
	MW-21-85D	---		S
	MW-22-85S [2]	CN Free, F, PCBs Total, Sulfate	S	S
	MW-22-85D	---		S
	MW-23-85S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-23-85D	---		S
	MW-25-85S	---		S
	MW-29S	---		S
	MW-30S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-31SR	CN Free, F, PCBs Total, Sulfate	S	S
	PZ-32 thru PZ-43[1]	---		---[3]
	PZ-44 thru PZ-46 [2]	CN Free, F, PCBs Total, Sulfate	S	---[3]
Industrial Landfill (OU1)	PZ-1 thru PZ-22[1]	---	---	M
	MW-10S	CN Free, F, PCBs Total, Sulfate	Q	Q
	MW-39S	CN Free, F, PCBs Total, Sulfate	Q	Q
	MW-40S	CN Free, F, PCBs Total, Sulfate	Q	Q
	MW-45	CN Free, F, PCBs Total, Sulfate	Q	Q
	Wetlands (2 Locations)	CN Free, F, PCBs Total, Sulfate	Q	---
	EW-01	---	---	M
	EW-02	---	---	M
	EW-03	---	---	M
	EW-04	---	---	M
	EW-05	---	---	M
	EW-06	---	---	M
	PZ-76 thru PZ-79	---	---	M
	MW-46	---	---	M
	MW-47	---	---	M
Former Potliner Storage Pad (OU5)	MW-3S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-26S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-27S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-28S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-33S	CN Free	S	S
	MW-34S	CN Free	S	S
	MW-35SR	CN Free, F, PCBs Total, Sulfate	S	S
	MW-42	CN Free, F, PCBs Total, Sulfate	S	S
	MW-43	CN Free, F, PCBs Total, Sulfate	S	S
	MW-44	CN Free, F, PCBs Total, Sulfate	S	S
	MW-56	CN Free, F, PCBs Total, Sulfate	S	S
	PZ-23 thru PZ-31[1]	---		M

Table 2
Groundwater Monitoring Schedule
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site	Monitoring Well	Parameters	Sampling Frequency	Water Level Frequency
North Yard (OU3)	MW-1S	---		S
	MW-16S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-17S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-18	CN Free, F, PCBs Total, Sulfate	S	S
	MW-19S	CN Free, F, PCBs Total, Sulfate	S	S
	MW-36	CN Free, F, PCBs Total, Sulfate	S	S
	MW-37	CN Free, F, PCBs Total, Sulfate	S	S
	MW-38	CN Free, F, PCBs Total, Sulfate	S	S
	MW-41	CN Free, F, PCBs Total, Sulfate	S	S
	MW-48	CN Free, F, PCBs Total, Sulfate	S	S
	MW-49	CN Free, F, PCBs Total, Sulfate	S	S
	MW-50	CN Free, F, PCBs Total, Sulfate	S	S
	MW-51	CN Free, F, PCBs Total, Sulfate	S	S
	MW-52	CN Free, F, PCBs Total, Sulfate	S	S
	MW-54	CN Free, F, PCBs Total, Sulfate	S	S
	MW-55	CN Free, F, PCBs Total, Sulfate	S	S
	French Drain	CN Free, F, Sulfate	S	---
Rectifier Yard (OU6)	Rypondpipe	PCBs	---[4]	---

Notes:
Table prepared by CDM Smith.
[1] Piezometer
[2] Incorporated into quarterly sampling in October 2008 to determine if fluoride is migrating from the Black Mud Pond.
[3] Groundwater levels no longer collected; inaccurate measurements due to upheaval of piezometers.
[4] Sampling discontinued per letter from NYSDEC dated January 3, 2013.
--- = Not sampled
Al = Aluminum
CN = Cyanide
F = Fluoride
M = Monthly
NYSDEC = New York State Department of Environmental Conservation
PCB = polychlorinated biphenyl
Q = Quarterly
S = Semiannual
WAD = Weak Acid Dissociable

NYSDEC. 2013. Alcoa, Inc. - Massena East Plant (Former Reynolds Metals Co.), Site# 645009 Post Closure Monitoring. January 03.

Table 3
Groundwater Elevation Measurements at BMP
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Monthly Piezometer Water Level Elevations (feet msl)												
Location	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23**	**May-23**	**Jun-23**	**Jul-23**	**Aug-23**	**Sep-23**	**Oct-23**	**Nov-23**	**Dec-23**
MPOF1402S	227.87	227.51	227.42	227.43	227.4	227.46	227.49	227.56	227.61	227.6	---	236.96
MPOF1403D	226.54	229.83	229.72	229.69	229.54	229.48	228.86	228.64	228.11	228.01	---	229.51
MPOG1601S	231.35	231.3	235.13	231.2	231.12	231.07	231.54	231.65	231.61	231.77	---	231.51
MPOG1603D	231.57	231.57	231.58	231.7	231.56	231.5	231.27	231.24	231.12	231.06	---	231.33

Semiannual Water Level Elevations and Comprehensive Groundwater Monitoring Elevations (feet msl)												
Location	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23**	**May-23**	**Jun-23**	**Jul-23**	**Aug-23**	**Sep-23**	**Oct-23**	**Nov-23**	**Dec-23**
MW-11SR	---	---	---	235.15	---	232.6	---	231.88	---	---	---	235.1
MW-12D	---	---	---	239	---	234.46	---	232.5	---	---	---	---
MW-12S	---	---	---	243.4	---	240.67	---	239.8	---	---	---	242.96
MW-13D	---	---	---	239.14	---	---	---	235.54	---	---	---	---
MW-13S	---	---	---	239.43	---	237.7	---	236.58	---	---	---	242.21
MW-14S	---	---	---	242.96	---	239.99	---	236.6	---	---	---	242.89
MW-15D	---	---	---	226.16	---	224.9	---	224.49	---	---	---	---
MW-15S-87	---	---	---	232.94	---	229.51	---	226.09	---	---	---	237.89
MW-15S-91	---	---	---	227.7	---	226.49	---	225.51	---	---	---	---
MW-20-85-D	---	---	---	223.68	---	221.49	---	222.01	---	---	---	---
MW-20-85-S	---	---	---	216.14	---	214.95	---	215.89	---	---	---	215.43
MW-21-85D	---	---	---	223.31	---	223.11	---	223.37	---	---	---	---
MW-21-85S	---	---	---	223.26	---	223.04	---	223.37	---	---	---	---
MW-22-85-D	---	---	---	237.74	---	234.51	---	231.44	---	---	---	---
MW-22-85-S	---	---	---	240.35	---	237.34	---	234.16	---	---	---	240.92
MW-23-85-D	---	---	---	239.37	---	236.89	---	234.19	---	---	---	---
MW-23-85-S	---	---	---	239.2	---	235.31	---	230.44	---	---	---	240.07
MW-25-85-S	---	---	---	---[1]	---	---[1]	---	---[1]	---	---	---	---[1]
MW-29S	---	---	---	---	---	---	---	---	---	---	---	---
MW-30S	---	---	---	228.84	---	227.43	---	225.81	---	---	---	227.17
MW-31SR	---	---	---	222.89	---	219.44	---	217.91	---	---	---	223.58
PZ-44	---	---	---	224.27	---	---	---	223.04	---	---	---	224.43
PZ-45	---	---	---	222.97	---	---	---	221.75	---	---	---	222.78
PZ-46	---	---	---	222.25	---	---	---	220.08	---	---	---	221.63

Notes:
[1] No sample was collected, well casing collapsed.
--- = Water levels were not measured
feet msl = feet above mean sea level

Table 4
Groundwater Elevations at Industrial Landfill
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Monthly Piezometer Water Level Elevations (feet msl)												
Location	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23**	**May-23**	**Jun-23**	**Jul-23**	**Aug-23**	**Sep-23**	**Oct-23**	**Nov-23**	**Dec-23**
Transect 1												
PZ-1[a]	206.52	206.91	206.32	206.28	206.11	206.03	205.68	205.66	204.76	204.75	---	206.36
PZ-2	200.51	200.54	200.73	200.56	200.52	200.54	200.53	200.59	200.49	200.5	---	200.57
Drain Invert	*200*	*200*	*200*	*200*	*200*	*200*	*200*	*200*	*200*	*200*	---	*200*
PZ-3	201.93	201.59	202.14	202.16	202.15	202.09	201.99	201.91	202.11	202.16	---	202.13
PZ-4	201.84	201.57	201.55	201.59	201.39	201.33	201.37	201.44	201.37	201.37	---	201.63
PZ-5[b]	202.22	203.46	201.4	201.33	201.36	201.4	201.14	201.14	200.95	200.85	---	203.56
Transect 2												
PZ-6[a]	190.82	190.99	191.01	191.1	191.14	191.09	191.1	191.03	190.88	190.82	---	191.03
PZ-7	191.95	191.68	190.81	191.41	190.69	190.73	190.02	189.92	189.76	189.68	---	192.15
Drain Invert	*188.2*	*188.2*	*188.2*	*188.2*	*188.2*	*188.2*	*188.2*	*188.2*	*188.2*	*188.2*	---	*188.2*
PZ-8	191.93	194.66	192.6	191.69	191.34	191.49	190.45	190.12	189.9	189.78	---	193.52
PZ-9[b]	192.47	193.7	192.68	192.86	191.98	191.94	191.12	190.76	190.42	190.27	---	193.25
Transect 3												
PZ-10[a]	189.1	189.16	189.16	189.17	189.12	189.15	188.85	189	188.91	188.88	---	189.26
PZ-11	188.99	189.18	189.08	189.16	189.11	188.99	189.04	188.97	188.87	188.84	---	189.06
Drain Invert	*186.1*	*186.1*	*186.1*	*186.1*	*186.1*	*186.1*	*186.1*	*186.1*	*186.1*	*186.1*	---	*186.1*
PZ-12	190.88	191.48	190.46	190.71	190.58	190.65	189.85	189.79	189.55	189.66	---	190.49
PZ-13[b]	190.66	191.52	190.46	190.73	190.6	190.57	189.86	189.76	189.55	189.64	---	190.51
Transect 4												
PZ-14[a]	189.91	190.11	189.7	189.88	189.68	189.66	189.51	189.35	189.01	189.05	---	189.7
PZ-15	189.81	189.88	189.78	189.86	189.66	189.72	189.58	190.36	188.98	188.91	---	189.69
Drain Invert	*189.9*	*189.9*	*189.9*	*189.9*	*189.9*	*189.9*	*189.9*	*189.9*	*189.9*	*189.9*	---	*189.9*
PZ-16	190.03	190.29	190.06	190.25	190.11	190.06	189.81	189.5	188.96	189.02	---	189.91
PZ-17[b]	190.57	190.49	190.27	190.46	190.32	190.28	189.98	189.57	189.05	189.14	---	190.02
Transect 5												
PZ-18[a]	201.61	201.59	201.34	201.3	201.21	201.26	200.74	200.79	200.5	200.71	---	201.38
PZ-19	201.02	200.85	200.81	200.89	200.89	200.88	200.83	200.85	200.61	200.81	---	201.14
Drain Invert	*196.5*	*196.5*	*196.5*	*196.5*	*196.5*	*196.5*	*196.5*	*196.5*	*196.5*	*196.5*	---	*196.5*
PZ-20	196.06	195.96	195.92	195.99	195.93	195.91	195.9	195.92	195.89	195.89	---	196
PZ-21	201.18	201.85	200.82	200.75	200.21	200.26	199.81	199.85	199.41	199.46	---	201.02
PZ-22[b]	202.21	202.36	201.13	200.9	200.59	200.64	197.86	199.76	199.09	199.06	---	201.45

Table 4
Groundwater Elevations at Industrial Landfill
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Monthly Water Level Elevations (feet msl)												
Location	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23**	**May-23**	**Jun-23**	**Jul-23**	**Aug-23**	**Sep-23**	**Oct-23**	**Nov-23**	**Dec-23**
EW-01[1]	182.26	181.72	181.64	182.45	185.17	185.23	183	183.07	183.62	184.27	---	189.79
EW-02[1]	210.13	210.13	197.8	196.04	197.21	197.26	194.69	195.81	196.68	195.29	---	200.74
EW-03[1]	194.98	199.38	198.51	204.82	202.08	202.02	189.44	195.11	199.17	196.98	---	196.74
EW-04[1]	---	---	---	---	---	---	---	---	---	---	---	---
EW-05[1]	192.02	194.21	190.7	190.51	191.06	191.01	191.99	190.72	187.09	184.53	---	179
EW-06[1]	192.21	186.01	188	188.9	187.83	188.28	187.26	188.12	188.57	187.64	---	187.63
PZ-76	203.73	205.97	205.44	205.17	204.7	204.75	202.84	202.83	201.89	201.96	---	199.31
PZ-77	205.56	205.94	205.46	205.47	205.24	205.19	203.94	204.05	203.17	204.22	---	205.68
PZ-78	209.52	210.14	205.95	206.32	204.8	204.84	202.14	202.35	201.64	202.25	---	208.79
PZ-79	207.85	209.09	207.71	208.02	206.98	207.01	204.22	204.53	203.97	204.38	---	207.72

Quarterly Water Level Elevations and Comprehensive Groundwater Monitoring Elevations (feet msl)												
Location	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23**	**May-23**	**Jun-23**	**Jul-23**	**Aug-23**	**Sep-23**	**Oct-23**	**Nov-23**	**Dec-23**
MW-10S	---	---	210.69	211.01	---	208.51	---	208.07	---	---	---	211.69
MW-39S	---	---	192.04	192.15	---	191.6	---	190.13	---	---	---	191.72
MW-40S	---	---	192.47	192.53	---	191.96	---	191.3	---	---	---	192.11
MW-45	---	---	192.21	192.07	---	191.6	---	190.52	---	---	---	191.27

Notes:

1. The groundwater extraction system was completed in summer/fall 2012 and monthly groundwater level measurements were initiatied in November 2012.
2. Elevations are given in feet above mean sea level (msl).

--- = Water levels were not measured

a = Upslope side of drain

b = Downslope side of drain

Table 5
Groundwater Elevation Data for Former Potliner Storage Pad Area
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Monthly Piezometer Water Level Elevations at the Former Potliner Storage Pad Area (feet msl)												
Location	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23**	**May-23**	**Jun-23**	**Jul-23**	**Aug-23**	**Sep-23**	**Oct-23**	**Nov-23**	**Dec-23**
PZ-23	220.99	221.71	219.93	221.02	219.74	219.68	220.52	219.58	219.45	220.04	---	220.57
PZ-29	222.08	224.85	222.12	223.15	221.95	221.89	223.15	222.58	222.05	222.47	---	222.62
PZ-30	224.53	225.26	222.82	224.56	223.07	223.03	223.98	223.66	223.03	223.4	---	224.29
PZ-31	226.59	226.23	225.19	225.94	225.29	225.25	225.55	225.26	224.74	225.32	---	225.92
Semiannual Water Level Elevations and Comprehensive Groundwater Monitoring Elevations (feet msl)												
Location	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23[1]**	**May-23**	**Jun-23**	**Jul-23**	**Aug-23**	**Sep-23**	**Oct-23**	**Nov-23**	**Dec-23[2]**
MW-03S	---	---	---	222.12	---	222.61	---	207.42	---	---	---	221.11
MW-26S	---	---	---	214.93	---	214.22	---	214.69	---	---	---	215.16
MW-27S	---	---	---	221.24	---	221.44	---	221.52	---	---	---	221.14
MW-28S	---	---	---	214.12	---	212.8	---	213.82	---	---	---	214.54
MW-33S	---	---	---	213.07	---	212.44	---	212.69	---	---	---	212.79
MW-34S	---	---	---	206.04	---	205.62	---	206.09	---	---	---	206.23
MW-35SR	---	---	---	199.94	---	197.6	---	197.12	---	---	---	195.74
MW-42	---	---	---	190.84	---	190.61	---	189.98	---	---	---	189.85
MW-43	---	---	---	201.21	---	199.42	---	199.48	---	---	---	200.67
MW-44	---	---	---	201.42	---	199.63	---	199.65	---	---	---	200.99

Notes:

[1] April 2023 gauging data was collected between 4/25/2023 and 4/26/2023.

[2] = December 2023 gauging data was collected between 12/13/2023 and 12/26/2023.

--- = Water levels were not measured

feet msl = feet above mean sea level

Table 6
Groundwater Elevation Data for North Yard
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Semiannual Water Level Elevations and Comprehensive Groundwater Monitoring Elevations (feet msl)												
Location	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23**	**May-23**	**Jun-23**	**Jul-23**	**Aug-23**	**Sep-23**	**Oct-23**	**Nov-23**	**Dec-23[1]**
MW-01S	---	---	---	---[1]	---	---[1]	---	---[1]	---	---	---	---[1]
MW-16S	---	---	---	209.81	---	209.8	---	210.15	---	---	---	210.12
MW-17S	---	---	---	217.21	---	215.12	---	214.5	---	---	---	211.72
MW-18S	---	---	---	208.41	---	208.44	---	208.46	---	---	---	208.68
MW-19S	---	---	---	214.18	---	213.49	---	213.46	---	---	---	214.63
MW-36	---	---	---	201.5	---	200.86	---	201.09	---	---	---	201.76
MW-37	---	---	---	203.62	---	202.97	---	202.5	---	---	---	203.77
MW-38	---	---	---	196.67	---	195.8	---	195.93	---	---	---	196.02
MW-41	---	---	---	200.65	---	199.08	---	200.26	---	---	---	200.35
MW-48	---	---	---	---	---	---	---	---	---	---	---	186.7
MW-49	---	---	---	---	---	---	---	---	---	---	---	181.13
MW-50	---	---	---	---	---	---	---	---	---	---	---	176.21
MW-51	---	---	---	---	---	---	---	---	---	---	---	174
MW-52	---	---	---	---	---	---	---	---	---	---	---	175.64
MW-54	---	---	---	---	---	---	---	---	---	---	---	158.57
MW-55	---	---	---	---	---	---	---	---	---	---	---	160.43

Notes:

Not gauged

[1] December 2023 gauging data was collected between 12/13/2023 and 12/28/2023.

--- = Water levels were not measured

feet msl = feet above mean sea level

Table 7
Summary of Groundwater and Surface Water Recovered from Landfill
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	1999		2000		2001		2002	
	Monthly Quantity[1]	Cumulative Total[2]	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	1,050,370	32,130,235	610,802	40,289,510	788,334	53,062,064	1,453,705	64,312,202
February	923,917	33,054,152	896,705	41,186,215	973,735	54,035,799	857,292	65,169,494
March	1,849,073	34,903,225	1,652,232	42,838,447	1,339,237	55,375,036	947,248	66,116,742
April	655,542	35,558,767	1,725,352	44,563,799	984,693	56,359,729	1,407,871	67,524,613
May	366,192	35,924,959	1,848,988	46,412,787	1,155,585	57,515,314	1,139,489	68,664,102
June	398,666	36,323,625	750,211	47,162,998	1,018,585	58,533,899	1,696,212	70,360,314
July	362,670	36,686,295	941,527	48,104,525	533,859	59,067,758	1,037,040	71,397,354
August	324,197	37,010,492	904,441	49,008,966	373,359	59,441,117	404,739	71,802,093
September	384,107	37,394,599	1,114,891	50,123,857	511,950	59,953,067	250,070	72,052,163
October	612,392	38,006,991	676,925	50,800,782	810,097	60,763,164	548,279	72,600,442
November	864,205	38,871,196	752,861	51,553,643	913,594	61,676,758	99,951	72,700,393
December	807,512	39,678,708	720,087	52,273,730	1,181,739	62,858,497	470,219	73,170,612
Total for Year	8,598,843		12,595,022		10,584,767		10,312,115	

Table 7
Summary of Groundwater and Surface Water Recovered from Landfill
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2003		2004		2005		2006	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	485,292	73,655,904	542,455	79,438,633	835,126	86,590,770	1,362,171	99,692,745
February	270,328	73,926,232	365,950	79,804,583	606,581	87,197,351	1,008,073	100,700,818
March	680,754	74,606,986	417,067	80,221,650	1,075,735	88,273,086	974,915	101,675,733
April	659,503	75,266,489	531,531	80,753,181	1,578,756	89,851,842	1,018,407	102,694,140
May	209,581	75,476,070	757,966	81,511,147	1,004,319	90,856,161	1,067,701	103,761,841
June	57,707	75,533,777	573,294	82,084,441	1,087,759	91,943,920	908,499	104,670,340
July	539,202	76,072,979	464,176	82,548,617	787,793	92,731,713	900,737	105,571,077
August	429,135	76,502,114	524,652	83,073,268	464,180	93,195,893	923,987	106,495,064
September	266,833	76,768,947	601,062	83,674,330	1,392,139	94,588,032	664,535	107,159,599
October	518,425	77,287,372	458,382	84,132,712	1,224,686	95,812,718	1,060,939	108,220,538
November	788,915	78,076,287	686,725	84,819,437	1,443,978	97,256,696	987,672	109,208,210
December	819,891	78,896,178	936,207	85,755,644	1,073,878	98,330,574	1,110,134	110,318,344
Total for Year	5,725,566		6,859,466		12,574,930		11,987,770	

Table 7
Summary of Groundwater and Surface Water Recovered from Landfill
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2007		2008		2009		2010	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	1,062,731	111,381,075	1,270,876	122,547,623	866,518	134,961,301	816,164	146,895,958
February	796,631	112,177,706	791,750	123,339,373	958,576	135,919,877	352,554	147,248,512
March	868,294	113,046,000	1,363,158	124,702,531	958,324	136,878,201	1,708,541	148,957,053
April	1,365,215	114,411,215	1,161,146	125,863,677	1,323,900	138,202,101	858,398	149,815,451
May	700,943	115,112,158	1,035,462	126,899,139	879,889	139,081,990	666,947	150,482,398
June	749,659	115,861,817	916,180	127,815,319	1,083,979	140,165,969	553,689	151,036,087
July	783,801	116,645,618	823,865	128,639,184	1,502,728	141,668,697	773,778	151,809,865
August	932,751	117,578,369	409,618	129,048,802	586,191	142,254,888	688,691	152,498,556
September	414,710	117,993,079	1,539,979	130,588,781	1,071,028	143,325,916	702,620	153,201,176
October	1,075,316	119,068,395	734,558	131,323,339	656,505	143,982,421	1,187,114	154,388,290
November	1,207,852	120,276,247	775,246	132,098,585	965,066	144,947,487	1,332,834	155,721,124
December	1,000,500	121,276,747	1,996,198	134,094,783	1,132,307	146,079,794	855,752	156,576,876
Total for Year	10,958,403		12,818,036		11,985,011		10,497,082	

Table 7
Summary of Groundwater and Surface Water Recovered from Landfill
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2011		2012		2013		2014	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	692,092	157,268,968	239,266	166,513,302	72,080	171,817,090	1,160,922	185,050,785
February	456,807	157,725,775	200,134	166,713,436	1,417,987	173,235,077	1,053,588	186,104,373
March	747,466	158,473,241	652,700	167,366,136	971,837	174,206,914	1,270,812	187,375,185
April	877,571	159,350,812	998,391	168,364,527	1,027,140	175,234,053	1,360,116	188,735,301
May	1,322,988	160,673,800	1,297,721	169,662,248	2,025,696	177,259,749	724,358	189,459,659
June	1,032,015	161,705,815	435,391	170,097,639	223,696	177,483,445	625,109	190,084,768
July	852,459	162,558,274	274,020	170,371,659	517,609	178,001,054	247,653	190,332,421
August	759,707	163,317,981	159,842	170,531,501	1,515,543	179,516,598	254,140	190,586,561
September	896,171	164,214,152	131,811	170,663,312	1,032,732	180,549,330	343,200	190,929,761
October	813,781	165,027,933	367,737	171,031,049	1,218,524	181,767,854	164,565	191,094,326
November	795,888	165,823,821	366,636	171,397,685	1,305,517	183,073,371	143,484	191,237,810
December	450,215	166,274,036	347,325	171,745,010	816,492	183,889,863	310,644	191,548,454
Total for Year	9,697,160		5,470,974		12,144,853[3.]		7,658,591	

Table 7
Summary of Groundwater and Surface Water Recovered from Landfill
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2015		2016		2017		2018	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	236,808	191,785,262	956,258	198,731,048	371,407	202,776,083	711,422	205,561,470
February	130,820	191,916,082	682,521	199,413,569	326,000	203,102,083	753,905	206,315,375
March	371,849	192,287,931	536,722	199,950,291	287,196	203,389,279	758,170	207,073,545
April	724,852	193,012,783	734,806	200,685,097	475,254	203,864,533	918,655	207,992,200
May	193,342	193,206,125	299,789	200,984,886	258,801	204,123,334	553,580	208,545,780
June	234,258	193,440,383	250,726	201,235,612	129,593	204,252,927	351,824	208,897,604
July	219,080	193,659,463	171,429	201,407,041	201,341	204,454,268	151,173	209,048,777
August	960,915	194,620,378	126,052	201,533,093	118,198	204,572,466	162,529	209,211,306
September	561,980	195,182,358	108,064	201,641,157	45,468	204,617,934	154,088	209,365,394
October	666,793	195,849,151	158,391	201,799,548	13,097	204,631,031	195,095	209,560,489
November	883,148	196,732,299	247,515	202,047,063	105,726	204,736,757	405,146	209,965,635
December	1,042,491	197,774,790	357,613	202,404,676	113,291	204,850,048	361,804	210,327,439
Total for Year	6,226,336		4,629,886		2,445,372		5,477,391	

Table 7
Summary of Groundwater and Surface Water Recovered from Landfill
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2019		2020		2021		2022		2023	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	368,598	210,696,037	618,532	216,333,539	397,333	220,597,235	301,270	226,054,762	858,484	231,655,002
February	311,684	211,007,721	399,439	216,732,978	385,451	220,982,686	443,996	226,498,758	770,906	232,425,908
March	556,955	211,564,677	1,112,532	217,845,510	940,862	221,923,548	808,590	227,307,348	713,048	233,138,956
April	738,038	212,302,715	706,726	218,552,236	535,385	222,458,933	827,580	228,134,928	798,232	233,937,188
May	841,547	213,144,262	322,308	218,874,544	470,330	222,929,263	800,458	228,935,386	704,616	234,641,804
June	399,813	213,544,075	211,298	219,085,842	217,625	223,146,888	356,818	229,292,204	224,844	234,866,648
July	211,742	213,755,816	82,158	219,168,000	247,166	223,394,054	294,630	229,586,834	272,372	235,139,020
August	136,435	213,892,252	83,448	219,251,448	229,558	223,623,612	272,182	229,859,016	178,270	235,317,290
September	59,944	213,952,196	59,575	219,311,023	230,518	223,854,130	155,772	230,014,788	129,422	235,446,712
October	359,539	214,311,734	132,408	219,443,431	402,958	224,257,088	170,300	230,185,088	154,722	235,601,434
November	779,330	215,091,065	289,693	219,733,124	853,471	225,110,559	193,928	230,379,016	209,740	235,811,174
December	623,942	215,715,007	466,778	220,199,902	642,933	225,753,492	417,502	230,796,518	555,652	236,366,826
Total for Year	5,387,568		4,484,895		5,553,590		5,043,026		5,570,308	

Table 8
Extraction Well Flowmeter Readings
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Date	EW-01	EW-02[1]	EW-04	EW-05	EW-06
1/2/2023	4,137,630	3,327,200	8,062,800	1,366,600	3,068,300
1/30/2023	4,185,930	3,350,400	8,110,900	1,375,300	3,093,100
2/27/2023	4,224,130	3,368,300	8,153,700	1,384,500	3,117,400
3/27/2023	4,261,530	3,438,900	8,194,200	1,393,200	3,141,700
4/24/2023	4,298,930	3,506,100	8,235,400	1,402,200	3,166,100
5/30/2023	4,345,430	3,551,200	8,258,400	1,413,700	3,196,300
6/26/2023	4,377,230	3,564,500	8,295,700	1,421,600	3,217,600
7/31/2023	4,416,430	3,580,600	8,362,000	1,431,600	3,244,400
8/28/2023	4,447,430	3,593,700	8,406,000	1,439,900	3,265,600
9/25/2023	4,475,430	3,606,300	8,434,600	1,448,600	3,286,600
10/30/2023	4,507,630	3,622,100	8,463,200	1,457,100	3,312,700
11/27/2023	4,533,330	3,637,000	8,473,200	1,462,000	3,334,300
12/26/2023	4,559,830	3,684,100	8,504,100	1,463,100	3,358,200
Calc.Total 2023	**425,630**	**360,400**	**453,700**	**98,700**	**296,100**

Notes:
[1] For 2023: EW-02 had its flowmeter replaced the week of February 20th. The pump remained operational, but the volumes for first two weeks of the month are estimated.

Table 9
Extraction Well Analytical Results
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

	EW-01		EW-02		EW-04		EW-05		EW-06	
Date	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)
2/14/2023	0.34	0.0129	1.61	0.0464	0.31	0.13	0.14	0.0879	0.64	0.655
5/9/2023	0.27	0.0070	0.35	0.0279	0.22	0.0933	0.11	0.0557	0.64	0.698
8/15/2023	0.29	0.008	0.33	0.024	0.23	0.0744	0.14	0.0498	0.95	0.59
11/14/2023	0.27	0.01	0.29	0.0249	0.22	0.0871	0.12	0.0606	0.65	0.867

Notes:
mg/L = milligrams per liter

Table 10
Summary of Historical Analytical Results Compared to Results for 2023
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
Black Mud Pond (BMP)										
MW-11SR										
Fluoride	mg/L	1.5	0.10	2.64	0.39	0.29	0.30	0.30	'2/2	No Trend
Sulfate	mg/L	250	110.00	3200.00	952.00	258.00	461.00	359.50	'2/2	No Trend
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-12S										
Fluoride	mg/L	1.5	1.26	16.05	10.97	8.86	9.54	9.20	'2/2	Probably Decreasing
Sulfate	mg/L	250	220.00	1040.00	590.76	724.00	987.00	855.50	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.24	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.24	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.24	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.24	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--

Table 10
Summary of Historical Analytical Results Compared to Results for 2023
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
MW-13S										
Fluoride	mg/L	1.5	0.63	17.00	7.81	2.84	12.00	7.42	'2/2	Stable
Sulfate	mg/L	250	57.00	4132.90	1713.22	504.00	2910.00	1707.00	'2/2	Probably Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.23	0.08	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-14S										
Fluoride	mg/L	1.5	0.25	0.77	0.52	0.37	0.48	0.42	'2/2	Stable
Sulfate	mg/L	250	251.00	526.00	352.24	414.00	417.00	415.50	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.24	0.04	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.24	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.24	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.24	0.04	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-15S-87										
Fluoride	mg/L	1.5	0.90	4.54	1.86	3.96	4.80	4.38	'2/2	Increasing
Sulfate	mg/L	250	36.70	1800.00	400.85	77.10	138.00	107.55	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.10	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.15	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.14	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.14	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.08	0.04	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--

Table 10
Summary of Historical Analytical Results Compared to Results for 2023
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
MW-20-85-S										
Fluoride	mg/L	1.5	0.04	0.80	0.23	0.13	0.16	0.14	'2/2	Stable
Sulfate	mg/L	250	164.99	321.00	252.30	271.00	323.00	297.00	'2/2	Probably Increasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.08	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.08	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.12	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.12	0.03	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.03	0.01	'1/2	--
MW-22-85-S										
Fluoride	mg/L	1.5	0.04	0.88	0.25	0.23	0.24	0.23	'2/2	Stable
Sulfate	mg/L	250	365.00	614.00	441.73	400.00	412.00	406.00	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.12	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.12	0.03	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-23-85-S										
Fluoride	mg/L	1.5	0.10	0.81	0.36	0.31	0.37	0.34	'2/2	Stable
Sulfate	mg/L	250	145.09	439.00	355.10	372.00	459.00	415.50	'2/2	Increasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--

Table 10
Summary of Historical Analytical Results Compared to Results for 2023
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
MW-30S										
Fluoride	mg/L	1.5	4.26	54.20	7.17	5.28	6.35	5.81	'2/2	Stable
Sulfate	mg/L	250	46.00	342.00	110.83	72.70	258.00	165.35	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-31SR										
Fluoride	mg/L	1.5	0.51	3.70	1.15	0.68	0.89	0.79	'2/2	Stable
Sulfate	mg/L	250	140.00	417.47	194.54	191.00	218.00	204.50	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
PZ-44										
Fluoride	mg/L	1.5	1.18	5.74	3.77	4.01	4.43	4.22	'2/2	Stable
Sulfate	mg/L	250	22.60	1660.00	913.84	335.00	963.00	649.00	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.03	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.03	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.03	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.03	0.03	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--

Table 10
Summary of Historical Analytical Results Compared to Results for 2023
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
PZ-45										
Fluoride	mg/L	1.5	0.50	3.80	1.35	1.62	1.99	1.81	'2/2	Stable
Sulfate	mg/L	250	66.00	1960.00	1037.79	1060.00	1410.00	1235.00	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.04	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.04	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.04	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.04	0.03	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
PZ-46										
Fluoride	mg/L	1.5	1.19	3.92	2.11	3.22	3.22	3.22	'1/1	Stable
Sulfate	mg/L	250	17.00	1680.00	966.75	1540.00	1540.00	1540.00	'1/1	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.03	0.07	0.04	0.03	0.03	0.03	'0/1	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.03	0.07	0.04	0.03	0.03	0.03	'0/1	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.03	0.07	0.04	0.03	0.03	0.03	'0/1	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.03	0.07	0.04	0.03	0.03	0.03	'0/1	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
Industrial Landfill (ILF)										
MW-10S										
Fluoride	mg/L	1.5	0.01	1.85	0.24	0.08	0.14	0.11	'4/4	Probably Decreasing
Sulfate	mg/L	250	69.90	550.00	168.80	78.00	111.00	93.88	'4/4	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.24	0.03	0.03	0.03	0.03	'0/4	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.24	0.03	0.03	0.03	0.03	'0/4	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.24	0.03	0.03	0.04	0.03	'1/4	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.24	0.03	0.03	0.04	0.03	'1/4	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'2/4	--

Table 10
Summary of Historical Analytical Results Compared to Results for 2023
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
MW-39S										
Fluoride	mg/L	1.5	0.23	3.99	1.55	1.54	2.45	1.86	'4/4	Increasing
Sulfate	mg/L	250	52.43	477.00	130.04	137.00	330.00	230.50	'4/4	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.26	0.03	0.03	0.03	0.03	'0/4	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.26	0.03	0.03	0.03	0.03	'0/4	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.26	0.03	0.03	0.03	0.03	'0/4	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.26	0.03	0.03	0.03	0.03	'0/4	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'2/4	--
MW-40S										
Fluoride	mg/L	1.5	0.10	0.99	0.23	0.14	0.24	0.19	'4/4	Stable
Sulfate	mg/L	250	0.21	180.65	71.48	52.40	69.60	58.38	'4/4	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/4	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	1.20	0.05	0.03	0.03	0.03	'0/4	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/4	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/4	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'1/4	--
MW-45										
Fluoride	mg/L	1.5	0.26	1.15	0.53	0.31	0.44	0.37	'4/4	Decreasing
Sulfate	mg/L	250	74.13	871.00	330.19	531.00	722.00	597.25	'4/4	Increasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.26	0.03	0.03	0.03	0.03	'0/4	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.26	0.03	0.03	0.03	0.03	'0/4	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.26	0.03	0.03	0.03	0.03	'0/4	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.26	0.03	0.03	0.03	0.03	'0/4	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.01	0.00	'3/4	--

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Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
SLPWETE										
Fluoride	mg/L	1.5	0.05	10.80	3.26	2.72	4.08	3.48	'3/3	Stable
Sulfate	mg/L	250	0.20	199.00	23.47	2.31	20.50	10.07	'3/3	No Trend
PCB-1242 (Aroclor 1242)	ug/L	NR	0.03	0.03	0.03	0.03	0.03	0.03	'0/3	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.03	0.03	0.03	0.03	0.03	0.03	'0/3	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.03	0.03	0.03	0.03	0.03	0.03	'0/3	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.03	0.03	0.03	0.03	0.03	'0/3	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.02	0.01	'2/3	--
SLPWETW										
Fluoride	mg/L	1.5	0.21	6.07	1.99	0.60	1.11	0.78	'3/3	Decreasing
Sulfate	mg/L	250	0.50	158.00	27.45	0.73	22.00	9.16	'3/3	No Trend
PCB-1242 (Aroclor 1242)	ug/L	NR	0.03	0.03	0.03	0.03	0.03	0.03	'0/3	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.03	0.03	0.03	0.03	0.03	0.03	'0/3	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.03	0.07	0.03	0.03	0.03	0.03	'0/3	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.02	0.03	0.03	0.03	0.03	0.03	'0/3	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'1/3	--

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Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
Potliner Storage Pad (PSP)										
MW-03S										
Total Cyanide	mg/L	0.2	0.40	16.00	6.69	0.01	0.01	0.01	'1/1	Decreasing
WAD Cyanide	mg/L	NR	0.01	0.87	0.20	0.01	0.01	0.01	'0/1	Decreasing
Fluoride	mg/L	1.5	8.40	32.10	16.26	5.94	8.77	7.36	'2/2	Decreasing
Sulfate	mg/L	250	64.00	714.78	467.79	10.40	59.80	35.10	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	2.17	0.07	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-26S										
Fluoride	mg/L	1.5	2.70	6.87	4.54	5.25	5.61	5.43	'2/2	Decreasing
Sulfate	mg/L	250	88.00	446.68	243.40	166.00	182.00	174.00	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.18	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.13	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.44	0.04	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--

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			Min	Max	Average	Min	Max	Average		
MW-27S										
Fluoride	mg/L	1.5	0.03	8.90	4.17	2.32	2.87	2.59	'2/2	Probably Decreasing
Sulfate	mg/L	250	140.00	407.00	261.57	287.00	320.00	303.50	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.25	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-28S										
Fluoride	mg/L	1.5	9.50	170.00	40.16	11.90	13.80	12.85	'2/2	Stable
Sulfate	mg/L	250	154.00	690.00	334.77	170.00	197.00	183.50	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.15	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.13	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.13	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.02	0.01	'2/2	--
MW-33S										
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-34S										
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-43										
Fluoride	mg/L	1.5	0.09	0.90	0.26	0.28	0.38	0.33	'2/2	Stable
Sulfate	mg/L	250	109.00	222.00	165.45	121.00	126.00	123.50	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.03	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.03	0.09	0.03	0.03	0.03	0.03	'0/2	--

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			Min	Max	Average	Min	Max	Average		
PCB-1254 (Aroclor 1254)	ug/L	NR	0.03	0.12	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.03	0.12	0.03	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-44										
Fluoride	mg/L	1.5	0.10	1.09	0.28	0.25	0.33	0.29	'2/2	Stable
Sulfate	mg/L	250	85.60	275.00	154.26	116.00	123.00	119.50	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.03	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.03	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.03	0.13	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.03	0.13	0.03	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-56										
Cyanide (Free)	mg/L	NR	--	--	--	0.003	0.003	0.003	'0/1	--
Fluoride	mg/L	1.5	--	--	--	0.47	0.47	0.47	'1/1	--
Sulfate	mg/L	250	--	--	--	340	340	340	'1/1	--
North Yard (NY)										
FDRAIN1										
Fluoride	mg/L	1.5	11.50	38.11	23.67	19.50	21.20	20.35	'2/2	Stable
Sulfate	mg/L	250	67.90	2180.00	449.95	165.00	180.00	172.50	'2/2	Decreasing
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'1/2	--
MW-16S										
Fluoride	mg/L	1.5	1.14	640.00	21.84	7.88	8.47	8.18	'2/2	Stable
Sulfate	mg/L	250	136.00	3600.00	455.63	211.00	233.00	222.00	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.58	0.05	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.18	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.12	0.03	0.03	0.03	0.03	'0/2	--

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			Min	Max	Average	Min	Max	Average		
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.14	0.04	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	1.60	0.28	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/1	--
MW-17S										
Fluoride	mg/L	1.5	0.10	2.50	0.96	1.10	2.77	1.94	'2/2	Stable
Sulfate	mg/L	250	81.60	670.00	244.54	72.00	162.00	117.00	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.02	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.02	0.47	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.02	0.13	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.02	0.13	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.18	0.05	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-18S										
Fluoride	mg/L	1.5	4.87	4800.00	174.44	15.40	25.70	20.55	'2/2	Decreasing
Sulfate	mg/L	250	178.00	20000.00	1424.96	240.00	283.00	261.50	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.08	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.22	0.07	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.13	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.12	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	1.10	0.30	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--

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			Min	Max	Average	Min	Max	Average		
MW-19S										
Fluoride	mg/L	1.5	0.46	10.40	4.89	3.13	3.29	3.21	'2/2	Decreasing
Sulfate	mg/L	250	66.95	490.00	228.02	63.90	98.40	81.15	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.15	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.13	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.13	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--
MW-35SR										
Fluoride	mg/L	1.5	0.20	2.56	0.84	0.83	0.91	0.87	'2/2	Stable
Sulfate	mg/L	250	51.70	878.00	531.56	612.00	766.00	689.00	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.02	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.02	0.28	0.06	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.02	0.56	0.06	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.02	0.12	0.04	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	NR	--	--	--	0.00	0.00	0.00	'0/2	--

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Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
MW-36										
Fluoride	mg/L	1.5	0.38	41.00	3.29	1.75	2.03	1.89	'2/2	Decreasing
Sulfate	mg/L	250	42.50	1640.00	535.92	346.00	378.00	362.00	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.08	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.08	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.25	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.12	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	NR	--	--	--	0.00	0.00	0.00	'1/2	--
MW-37										
Fluoride	mg/L	1.5	0.10	2.16	0.46	0.32	0.33	0.32	'2/2	No Trend
Sulfate	mg/L	250	28.50	383.00	282.05	296.00	318.00	307.00	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.16	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.47	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.13	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--

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			Min	Max	Average	Min	Max	Average		
MW-38										
Fluoride	mg/L	1.5	0.35	2.69	0.64	0.49	0.77	0.63	'2/2	Stable
Sulfate	mg/L	250	40.70	284.14	177.56	183.00	198.00	190.50	'2/2	Stable
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.12	0.04	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.16	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.13	0.03	0.03	0.03	0.03	'0/2	--
Total PCBs	ug/L	0.09	0.03	0.03	0.03	--	--	--	--	--
Cyanide (Free)	mg/L	NR	--	--	--	0.00	0.00	0.00	'0/2	--
MW-41										
Fluoride	mg/L	1.5	0.16	0.61	0.31	0.23	0.23	0.23	2/2	Stable
Sulfate	mg/L	250	130.96	922.00	374.37	282.00	284.00	283.00	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.13	0.03	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.13	0.03	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'0/2	--

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			Min	Max	Average	Min	Max	Average		
MW-42										
Fluoride	mg/L	1.5	1.31	48.30	22.21	25.50	39.30	32.40	'2/2	Stable
Sulfate	mg/L	250	66.50	1910.00	1095.79	1140.00	1170.00	1155.00	'2/2	Decreasing
PCB-1242 (Aroclor 1242)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	0.01	0.09	0.03	0.03	0.03	0.03	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	0.01	0.13	0.04	0.03	0.03	0.03	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	0.01	0.12	0.03	0.03	0.03	0.03	'0/2	--
Cyanide (Free)	mg/L	0.2	--	--	--	0.00	0.00	0.00	'1/2	--

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			Min	Max	Average	Min	Max	Average		
MW-48										
Cyanide (Free)	mg/L	NR	--	--	--	0.031	0.031	0.031	'1/1	--
Fluoride	mg/L	1.5	--	--	--	0.193	0.193	0.193	'1/1	--
Sulfate	mg/L	250	--	--	--	138	138	138	'1/1	--
PCB-1242 (Aroclor 1242)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1248 (Aroclor 1248)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1254 (Aroclor 1254)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1260 (Aroclor 1260)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
MW-49										
Cyanide (Free)	mg/L	0.2	--	--	--	0.031	0.031	0.031	'1/1	--
Fluoride	mg/L	1.5	--	--	--	1.67	1.67	1.67	'1/1	--
Sulfate	mg/L	250	--	--	--	132	132	132	'1/1	--
PCB-1242 (Aroclor 1242)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1248 (Aroclor 1248)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1254 (Aroclor 1254)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1260 (Aroclor 1260)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--

Table 10
Summary of Historical Analytical Results Compared to Results for 2023
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
MW-50										
Cyanide (Free)	mg/L	0.2	--	--	--	0.038	0.038	0.038	'1/1	--
Fluoride	mg/L	1.5	--	--	--	0.373	0.373	0.373	'1/1	--
Sulfate	mg/L	250	--	--	--	362	362	362	'1/1	--
PCB-1242 (Aroclor 1242)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1248 (Aroclor 1248)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1254 (Aroclor 1254)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1260 (Aroclor 1260)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
MW-51										
Cyanide (Free)	mg/L	0.2	--	--	--	0.0013	0.038	0.01965	'2/2	--
Fluoride	mg/L	1.5	--	--	--	0.18	0.207	0.1935	'2/2	--
Sulfate	mg/L	250	--	--	--	278	278	278	'1/1	--
PCB-1242 (Aroclor 1242)	ug/L	NR	--	--	--	0.0325	0.049	0.04075	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	--	--	--	0.0325	0.049	0.04075	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	--	--	--	0.0325	0.049	0.04075	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	--	--	--	0.0325	0.049	0.04075	'0/2	--

Table 10
Summary of Historical Analytical Results Compared to Results for 2023
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
MW-52										
Cyanide (Free)	mg/L	0.2	--	--	--	0.0015	0.032	0.01675	'2/2	--
Fluoride	mg/L	1.5	--	--	--	0.14	0.207	0.1735	'2/2	--
Sulfate	mg/L	250	--	--	--	278	278	278	'1/1	--
PCB-1242 (Aroclor 1242)	ug/L	NR	--	--	--	0.0325	0.049	0.04075	'0/2	--
PCB-1248 (Aroclor 1248)	ug/L	NR	--	--	--	0.0325	0.049	0.04075	'0/2	--
PCB-1254 (Aroclor 1254)	ug/L	NR	--	--	--	0.0325	0.049	0.04075	'0/2	--
PCB-1260 (Aroclor 1260)	ug/L	NR	--	--	--	0.0325	0.049	0.04075	'0/2	--
MW-54										
Cyanide (Free)	mg/L	0.2	--	--	--	0.003	0.003	0.003	'0/1	--
Fluoride	mg/L	1.5	--	--	--	0.492	0.492	0.492	'1/1	--
Sulfate	mg/L	250	--	--	--	185	185	185	'1/1	--
PCB-1242 (Aroclor 1242)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1248 (Aroclor 1248)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1254 (Aroclor 1254)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1260 (Aroclor 1260)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--

Table 10
Summary of Historical Analytical Results Compared to Results for 2023
2023 Periodic Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Site Area / Location / Parameter	Unit	NYSWQS	Historical Ranges			2023 Results			2023 Frequency of Detection	Post Closure Trend
			Min	Max	Average	Min	Max	Average		
MW-55										
Cyanide (Free)	mg/L	0.2	--	--	--	0.003	0.003	0.003	'0/1	--
Fluoride	mg/L	1.5	--	--	--	0.306	0.306	0.306	'1/1	--
Sulfate	mg/L	250	--	--	--	157	157	157	'1/1	--
PCB-1242 (Aroclor 1242)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1248 (Aroclor 1248)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1254 (Aroclor 1254)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--
PCB-1260 (Aroclor 1260)	ug/L	NR	--	--	--	0.0325	0.0325	0.0325	'0/1	--

Notes:

1. For calculation of summary statistics (minimum, maximum, and average), 1/2 the report detection limit is used for non-detect values.
2. Summary statistic calculations do not consider rejected samples and rely on historical reported detection limits for calculation of non-detect substitution values.
3. Although there is no NYSWQS established for individual Aroclors, a standard of 0.09 µg/L total PCBs is used.
4. Statistical Analysis displays the results from Plant Closure in 2014. Samples considered are from Q3-present.

'--' = No data due to persistent results below detection or lack of results for the current year
µg/L = micrograms per liter
mg/L = milligrams per liter
ND = Non-detect
NR = Not Regulated
NYCRR = New York Codes, Rules, and Regulations
NYSWQS = New York State Water Quality Standards
PCB = polychlorinated biphenyl
WAD = weak acid dissociable

Table 11
Summary of Groundwater Quantities Removed for BMP
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	1997		1998		1999		2000	
	Monthly Quantity[1]	Cumulative Total[2]	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	62,210	766,370	26,439	1,309,112	21,042	1,530,707	9,213	1,691,692
February	41,900	808,270	10,411	1,319,523	20,223	1,550,930	10,179	1,701,871
March	39,600	847,870	16,430	1,335,953	11,184	1,562,114	0	1,701,871
April	41,550	889,420	4,890	1,340,843	14,271	1,576,385	2,807	1,704,678
May	49,620	939,040	6,910	1,347,753	13,831	1,590,216	23,697	1,728,375
June	54,730	993,770	24,290	1,372,043	13,359	1,603,575	3,286	1,731,661
July	69,210	1,062,980	24,800	1,396,843	12,566	1,616,141	13,876	1,745,537
August	60,625	1,123,605	24,800	1,421,643	11,118	1,627,259	8,245	1,753,782
September	52,047	1,175,652	20,800	1,442,443	14,010	1,641,269	11,447	1,765,229
October	45,176	1,220,828	24,800	1,467,243	14,799	1,656,068	2,615	1,767,844
November	30,345	1,251,173	20,960	1,488,203	13,276	1,669,344	18,235	1,786,079
December	31,500	1,282,673	21,462	1,509,665	13,135	1,682,479	12,272	1,798,351
Total for Year	578,513		226,992		172,814		115,872	

Table 11
Summary of Groundwater Quantities Removed for BMP
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2001		2002		2003		2004[3]	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	11,324	1,809,675	9,738	1,902,167	472	1,990,028	1,600[4]	2,050,617
February	9,334	1,819,009	8,574	1,910,741	0	1,990,028	2,800[4]	2,053,417
March	11,228	1,830,237	8,090	1,918,831	0	1,990,028	3,100[4]	2,056,517
April	9,222	1,839,459	10,109	1,928,940	0	1,990,028	8,000[4]	2,064,517
May	9,728	1,849,187	9,669	1,938,609	0	1,990,028	7,816[5]	2,072,333
June	6,990	1,856,177	4,675	1,943,284	0	1,990,028	8,935[5]	2,081,268
July	10,240	1,866,417	9,907	1,953,191	44,991	2,035,019	9,074[5]	2,090,342
August	8,920	1,875,337	11,316	1,964,507	5,598	2,040,617	10,329[5]	2,100,671
September	9,935	1,885,272	3,975	1,968,482	2,800	2,043,417	10,977[5]	2,111,648
October	7,157	1,892,429	8,596	1,977,078	2,800	2,046,217	11,664[5]	2,123,312
November	0	1,892,429	9,804	1,986,882	0	2,046,217	12,285[5]	2,135,597
December	0	1,892,429	2,674	1,989,556	2,800	2,049,017	15,691[5]	2,151,288
Total for Year	94,078		97,127		59,461		102,271	

Table 11
Summary of Groundwater Quantities Removed for BMP
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2005[4]		2006[4]		2007[4]		2008[4]	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	5,600[4]	2,156,888	7,200	2,282,888	10,400	2,399,688	8,400	2,497,488
February	9,600[4]	2,166,488	11,200	2,294,088	11,200	2,410,888	6,600	2,504,088
March	11,200[4]	2,177,688	8,400	2,302,488	9,400	2,420,288	8,400	2,512,488
April	8,600[4]	2,186,288	8,400	2,310,888	9,600	2,429,888	5,600	2,518,088
May	16,800[4]	2,203,088	8,400	2,319,288	6,600	2,436,488	8,400	2,526,488
June	11,200[4]	2,214,288	11,200	2,330,488	8,400	2,444,888	5,600	2,532,088
July	10,400[4]	2,224,688	8,400	2,338,888	4,200	2,449,088	8,400	2,540,488
August	0	2,224,688	8,400	2,347,288	10,200	2,459,288	8,400	2,548,888
September	15,800[4]	2,240,488	8,400	2,355,688	10,200	2,469,488	5,600	2,554,488
October	8,400[4]	2,248,888	14,000	2,369,688	5,600	2,475,088	5,600	2,560,088
November	11,200[4]	2,260,088	8,400	2,378,088	8,400	2,483,488	8,400	2,568,488
December	15,600[4]	2,275,688	11,200	2,389,288	5,600	2,489,088	11,200	2,579,688
Total for Year	124,400		113,600		99,800		90,600	

Table 11
Summary of Groundwater Quantities Removed for BMP
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2009[4]		2010[4]		2011[4]		2012[4]	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	8,400	2,588,088	8,600	2,678,088	10,400	2,784,888	5,600	2,885,688
February	5,600	2,593,688	5,600	2,683,688	8,400	2,793,288	8,400	2,894,088
March	5,600	2,599,288	12,200	2,695,888	11,200	2,804,488	8,400	2,902,488
April	5,600	2,604,888	5,600	2,701,488	8,400	2,812,888	11,200	2,913,688
May	10,400	2,615,288	11,200	2,712,688	8,400	2,821,288	5,600	2,919,288
June	5,600	2,620,888	5,600	2,718,288	5,600	2,826,888	8,400	2,927,688
July	11,200	2,632,088	8,600	2,726,888	5,600	2,832,488	2,800	2,930,488
August	8,400	2,640,488	11,200	2,738,088	5,600	2,838,088	8,400	2,938,888
September	5,600	2,646,088	5,600	2,743,688	11,200	2,849,288	2,800	2,941,688
October	8,400	2,654,488	14,000	2,757,688	8,400	2,857,688	2,800	2,944,488
November	8,400	2,662,888	11,200	2,768,888	8,400	2,866,088	8,400	2,952,888
December	6,600	2,669,488	5,600	2,774,488	14,000	2,880,088	11,200	2,964,088
Total for Year	89,800		105,000		105,600		84,000	

Table 11
Summary of Groundwater Quantities Removed for BMP
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2013[4]		2014[4]		2015[4]		2016[4]	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	5,600	2,969,688	8,400	3,070,488	8,400	3,185,288	2,800	3,241,688
February	5,600	2,975,288	8,400	3,078,888	5,600	3,190,888	0	3,241,688
March	8,400	2,983,688	5,600	3,084,488	14,400	3,205,288	11,200	3,252,888
April	8,400	2,992,088	8,400	3,092,888	2,800	3,208,088	5,600	3,258,488
May	5,600	2,997,688	8,400	3,101,288	5,600	3,213,688	8,400	3,266,888
June	8,400	3,006,088	8,400	3,109,688	8,400	3,222,088	2,800	3,269,688
July	8,400	3,014,488	14,000	3,123,688	2,800	3,224,888	5,600	3,275,288
August	8,400	3,022,888	14,000	3,137,688	5,600	3,230,488	8,400	3,283,688
September	8,400	3,031,288	11,200	3,148,888	2,800	3,233,288	8,400	3,292,088
October	11,200	3,042,488	11,200	3,160,088	0	3,233,288	7,600	3,299,688
November	5,600	3,048,088	8,400	3,168,488	2,800	3,236,088	8,400	3,308,088
December	14,000	3,062,088	8,400	3,176,888	2,800	3,238,888	8,400	3,316,488
Total for Year	98,000		114,800		62,000		77,600	

Table 11
Summary of Groundwater Quantities Removed for BMP
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2017[4,6]		2018[7]		2019[8]		2020	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	5,000	3,321,488	6,967	3,396,857	7,209	3,458,272	1,051	3,518,011
February	7,600	3,329,088	5,673	3,402,530	3,126	3,461,398	9,313	3,527,324
March	8,400	3,337,488	6,042	3,408,572	7,430	3,468,828	6,294	3,533,618
April	2,800	3,340,288	0	3,408,572	3,319	3,472,147	4,792	3,538,410
May	8,400	3,348,688	5,117	3,413,689	6,015	3,478,162	4,686	3,543,096
June	8,400	3,357,088	6,269	3,419,958	6,242	3,484,404	6,394	3,549,490
July	5,600	3,362,688	5,192	3,425,150	4,976	3,489,380	4,582	3,554,072
August	7,700	3,370,388	5,133	3,430,283	4,994	3,494,374	6,414	3,560,486
September	0	3,370,388	6,930	3,437,213	3,730	3,498,104	5,138	3,565,624
October	0	3,370,388	2,174	3,439,387	7,416	3,505,520	5,423	3,571,047
November	0	3,370,388	5,725	3,445,112	5,515	3,511,035	6,730	3,577,777
December	19502	3,389,890	5,951	3,451,063	5,925	3,516,960	4,021	3,581,798
Total for Year	73,402		61,173		65,897		64,838	

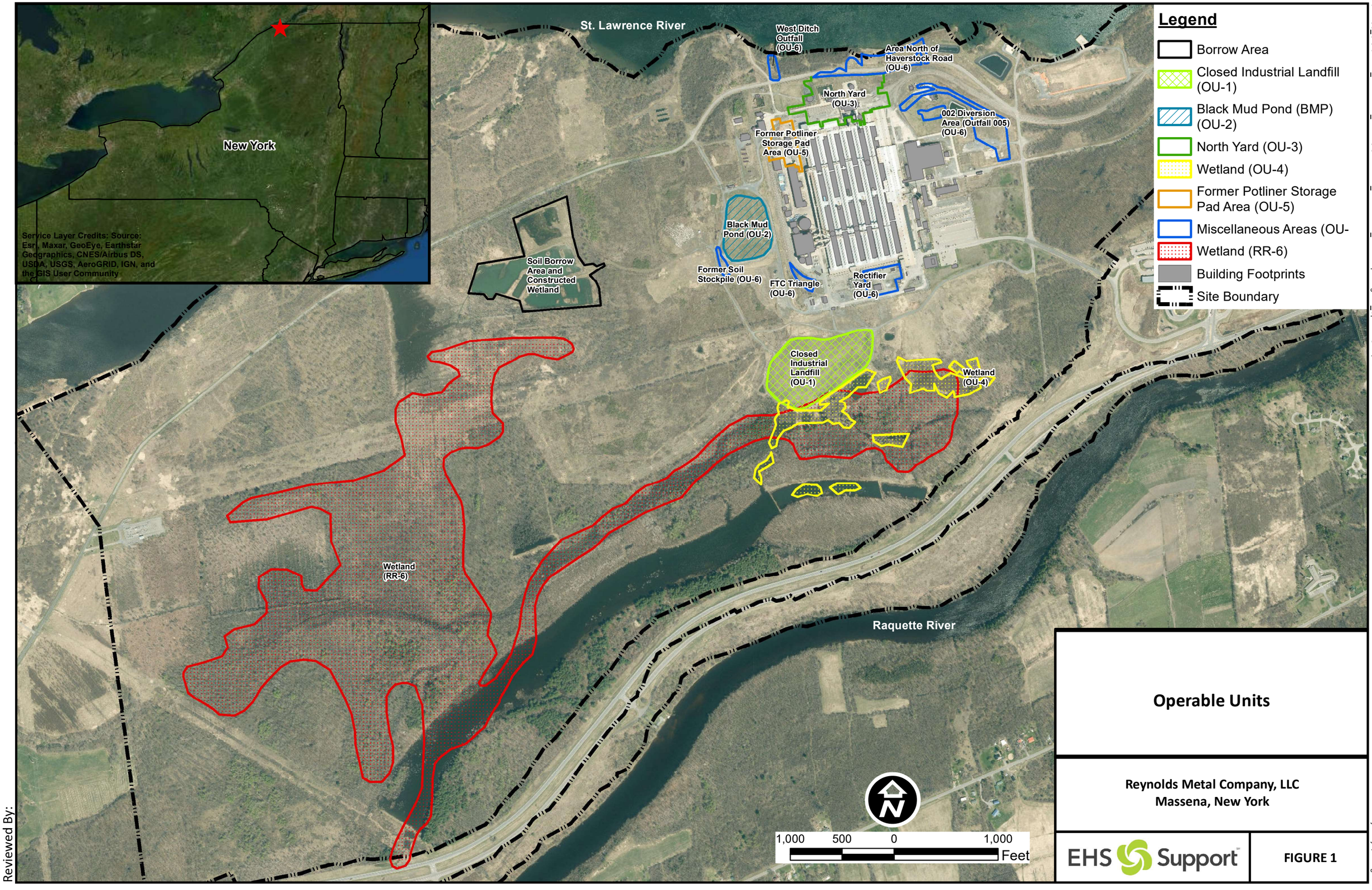
Table 11
Summary of Groundwater Quantities Removed for BMP
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	2021		2022		2023	
	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total	Monthly Quantity	Cumulative Total
January	6,953	3,588,751	4,763	3,643,654	6,350	3,690,296
February	4,580	3,593,331	4,407	3,648,061	4,698	3,694,994
March	3,260	3,596,591	2,901	3,650,962	4,301	3,699,295
April	3,308	3,599,899	2,650	3,653,612	4,557	3,703,852
May	4,285	3,604,184	2,855	3,656,467	6,066	3,709,918
June	3,620	3,607,804	2,881	3,659,348	4,320	3,714,238
July	4,325	3,612,129	3,297	3,662,645	5,540	3,719,778
August	5,589	3,617,718	4,348	3,666,993	4,280	3,724,058
September	4,725	3,622,443	3,417	3,670,410	4,510	3,728,568
October	4,960	3,627,403	4,401	3,674,811	2,929	3,731,497
November	6,260	3,633,663	4,281	3,679,092	3,197	3,734,694
December	5,228	3,638,891	4,854	3,683,946	1,801	3,736,495
Total for Year	57,093		45,055		52,549	

Table 12
French Drain Flow Data
2023 Annual Review Report
Reynolds Metal Company (NYSDEC Site Code 645009)
Massena East, New York

Month	Volume (gallons)
January	395,699
February	308,461
March	222,006
April	311,591
May	201,468
June	50,465
July	93,497
August	69,242
September	57,311
October	86,260
November	88,411
December	264,451
2023 Total	2,148,862

Figures



Reviewed By:

Operable Units

Reynolds Metal Company, LLC
Massena, New York

EHS Support

FIGURE 1

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St. Lawrence River

Outfall 008

Outfall 001

Outfall 003

Outfall 002

Outfall 005

Black Mud Pond leachate water is transported off-site for treatment

Outfall 01A

Outfall 01C directed to Outfall 003

Outfall 02E

Outfall 02E (002 Pond overflow) directed to Outfall 005

Outfall 010

Outfall 01C Landfill runoff groundwater/leachate

Outfall 010 Surface Drainage

Outfall 010 to Raquette River via Surface Drainage

Outfall 011 to Raquette River Not regulated under the SPDES permit

Raquette River

Legend

Layer

- Outfall 001
- Outfall 002
- Outfall 003
- Outfall 005
- Outfall 008
- Outfall 010
- Outfall O1A

FACILITY OUTFALLS REGULATED UNDER SPDES PERMIT NO. NY0000132

Outfall No.	Receiving Waterbody Discharge Location, Latitude N/Longitude W (deg,min,sec)	Receiving Stream/Class	Monitoring Location, Latitude N/Longitude W (deg,min,sec)
001	44,59,11/74,44,46	St. Lawrence River/A	Same as Receiving Waterbody
01A	See 001	Outfall 001	44,59,03/74,45,19
01C	See 001	Outfall 01A	44,58,37/74,45,09
02E	See 005	Outfall 005	44,59,05/74,44,52
003	44,59,11/74,44,50	St. Lawrence River/A	44,59,07/74,44,57
005	44,59,11/74,44,45	St. Lawrence River/A	Same as Receiving Waterbody
008	44,59,11/74,45,18	St. Lawrence River/A	Same as Receiving Waterbody
010	44,58,33/74,44,38	Raquette River/B	44,58,38/74,44,40

TABLE RETRIEVED FROM REYNOLDS SPDES PERMIT NO. NY0000132

575 287.5 0 575 Feet

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES

Outfall Location Plan

Reynolds Metal Company, LLC
Massena, New York

EHS Support

FIGURE 2

Reviewed By:

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St. Lawrence River

Outfall 002/003

Outfall 001

Outfall 005

Outfall 008

Outfall Watershed 001
0.7 Acres

Outfall Watershed 001
2 Acres

Outfall 02E
(002 pond overflow
directed to Outfall 005)

Outfall Watershed 003
1.1 Acres

Outfall Watershed 002
1.5 Acres

Outfall 01A
(not used)

Outfall 01C directed to
Outfall 003

Outfall Watershed 008
15.5 Acres

Outfall Watershed 001
49.9 Acres

Outfall Watershed 005
31 Acres

Outfall Watershed 002
15.9 Acres

Black Mud Pond Leachate
(transported off-site for treatment)

Extraction Wells
(Directed to Outfall 001)

Outfall Watershed 001
2.4 Acres

Outfall Watershed 010
114.8 Acres

Outfall Watershed 001C/003
13.3 Acres

Outfall 01C
(landfill runoff/
groundwater/leachate directed to
Outfall 003 for treatment)

Outfall 010
to Raquette River
via Surface Drainage

Outfall 011
to Raquette River (not
regulated under SPDES
permit)

Raquette River

Outfall Watershed 011
99.2 Acres

650 325 0 650
Feet

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES

Legend

Outfalls

- Outfall 001
- Outfall 002
- Outfall 003
- Outfall 005
- Outfall 008
- Outfall 010
- Outfall O1A

Outfall Watersheds

- Outfall 001
- Outfall 001C/003
- Outfall 002
- Outfall 003
- Outfall 005
- Outfall 008
- Outfall 010
- Outfall 011

Outfall Locations

Reynolds Metal Company, LLC
Massena, New York

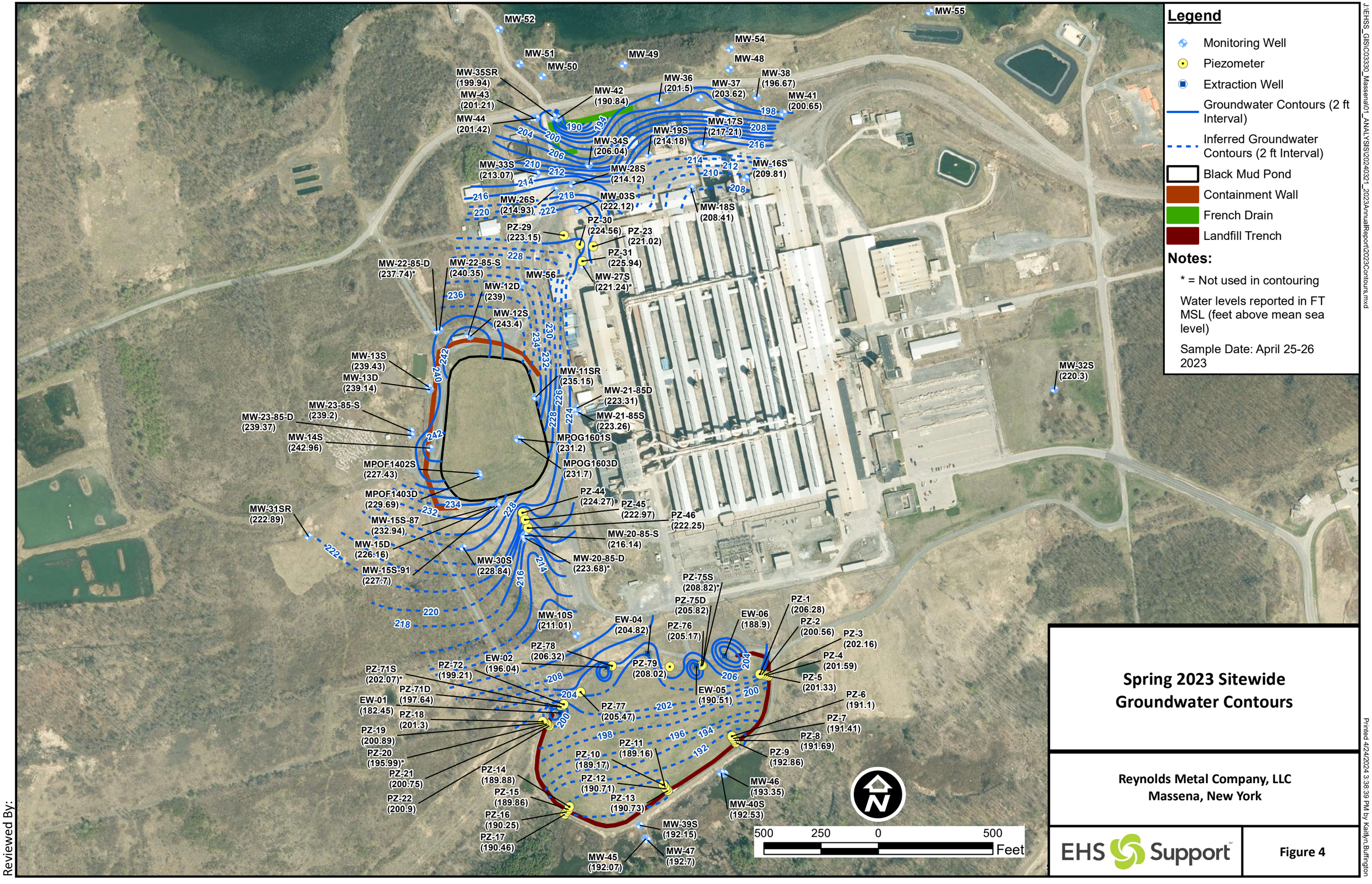
EHS Support℠

FIGURE 3

Reviewed By:

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Legend

- Monitoring Well
- Piezometer
- Extraction Well
- Groundwater Contours (2 ft Interval)
- Inferred Groundwater Contours (2 ft Interval)
- Black Mud Pond
- Containment Wall
- French Drain
- Landfill Trench

Notes:

* = Not used in contouring

Water levels reported in FT MSL (feet above mean sea level)

Sample Date: April 25-26 2023

Spring 2023 Sitewide Groundwater Contours

Reynolds Metal Company, LLC
Massena, New York

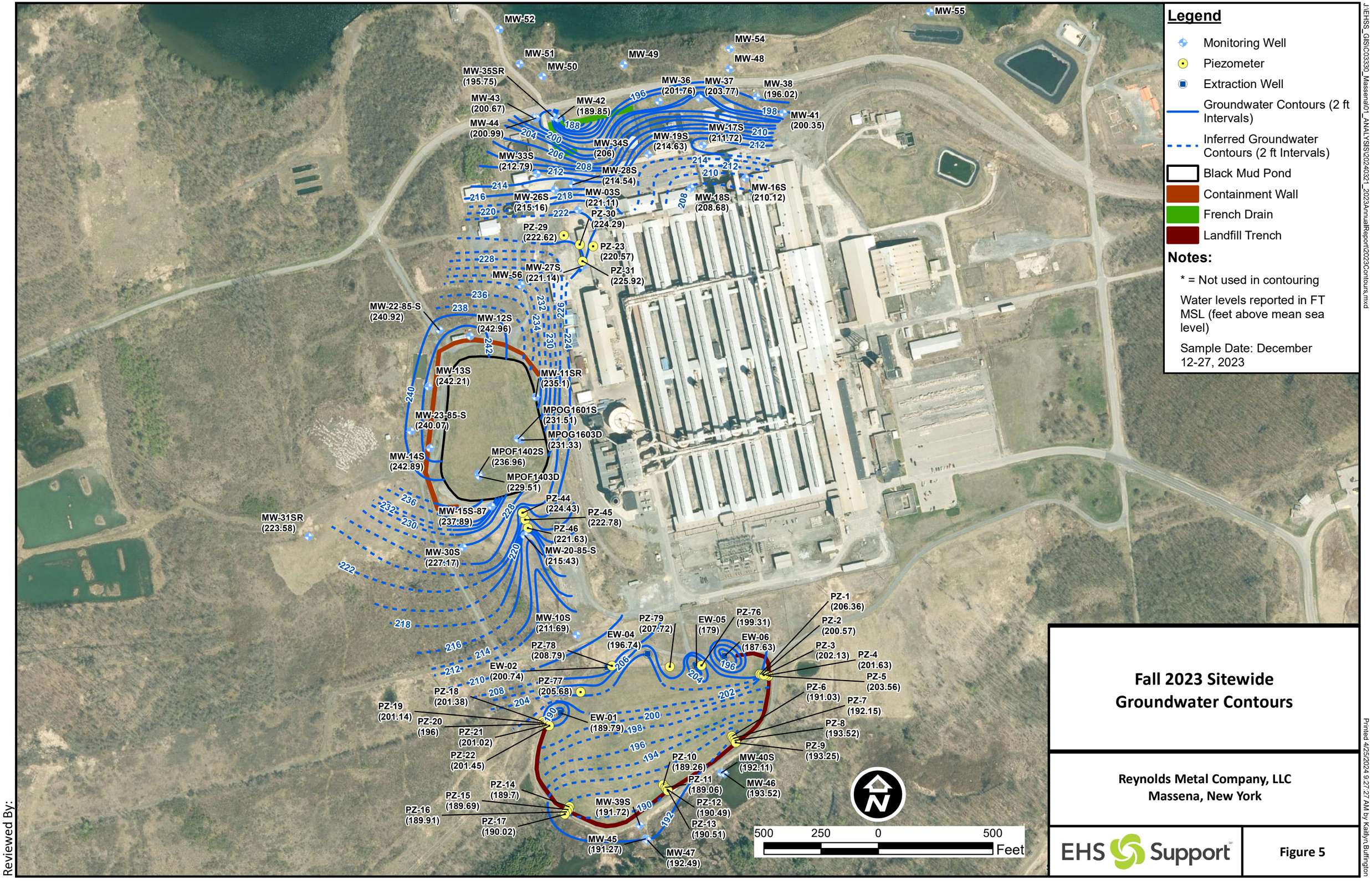
EHS Support

Figure 4

Reviewed By:

J:\EHS_GIS\CO3330_Massena\01_ANALYSIS\20240321_2023AnnualReport2023Contours.mxd

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Legend

- Monitoring Well
- Piezometer
- Extraction Well
- Groundwater Contours (2 ft Intervals)
- Inferred Groundwater Contours (2 ft Intervals)
- Black Mud Pond
- Containment Wall
- French Drain
- Landfill Trench

Notes:

* = Not used in contouring

Water levels reported in FT MSL (feet above mean sea level)

Sample Date: December 12-27, 2023

Fall 2023 Sitewide Groundwater Contours

Reynolds Metal Company, LLC
Massena, New York

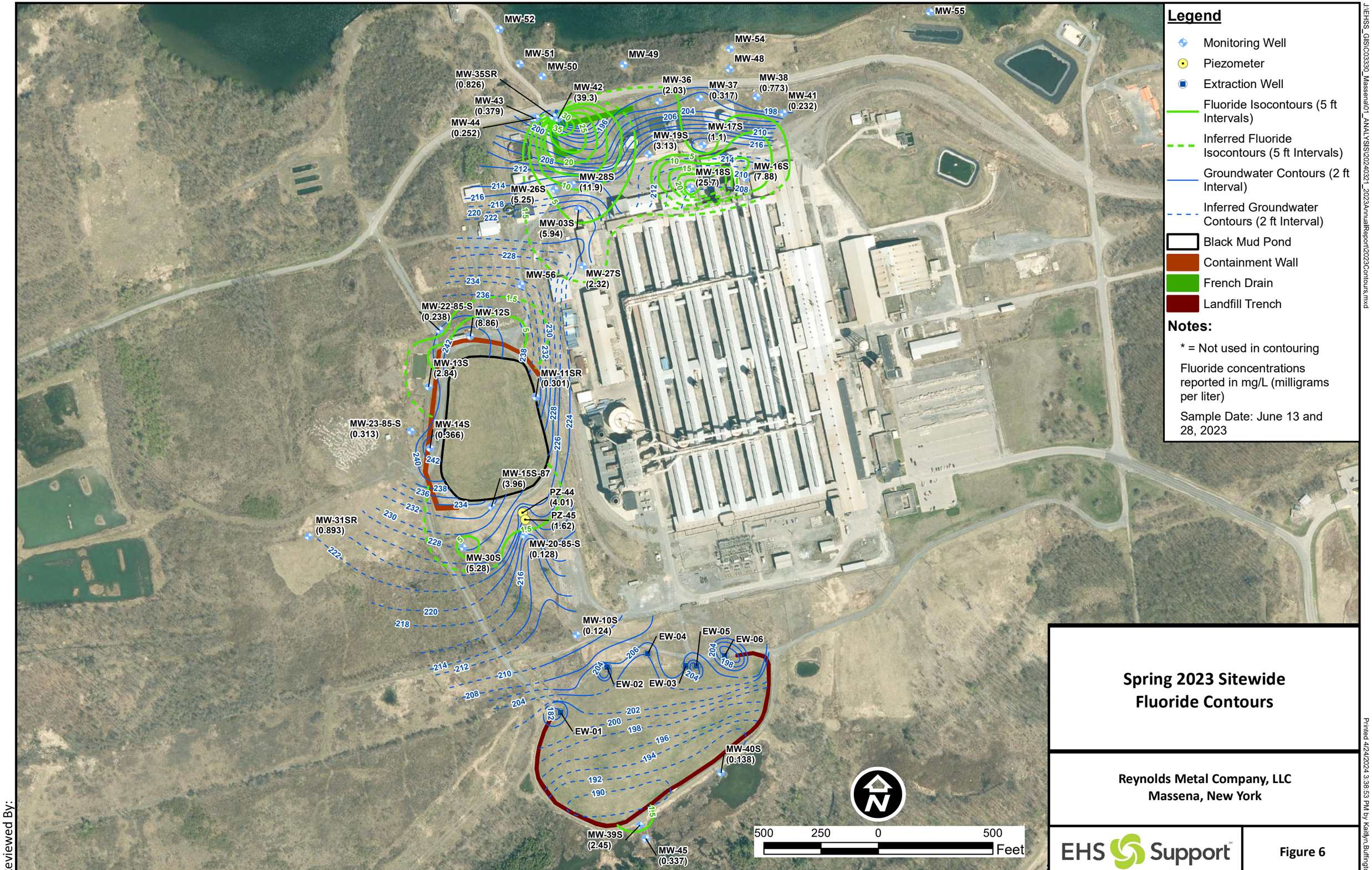
EHS Support

Figure 5

Reviewed By:

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Printed 4/25/2024 9:27:27 AM by Kaitlyn.Buffington



Legend

- Monitoring Well
- Piezometer
- Extraction Well
- Fluoride Isocontours (5 ft Intervals)
- Inferred Fluoride Isocontours (5 ft Intervals)
- Groundwater Contours (2 ft Interval)
- Inferred Groundwater Contours (2 ft Interval)
- Black Mud Pond
- Containment Wall
- French Drain
- Landfill Trench

Notes:

* = Not used in contouring

Fluoride concentrations reported in mg/L (milligrams per liter)

Sample Date: June 13 and 28, 2023

Spring 2023 Sitewide Fluoride Contours

Reynolds Metal Company, LLC
Massena, New York

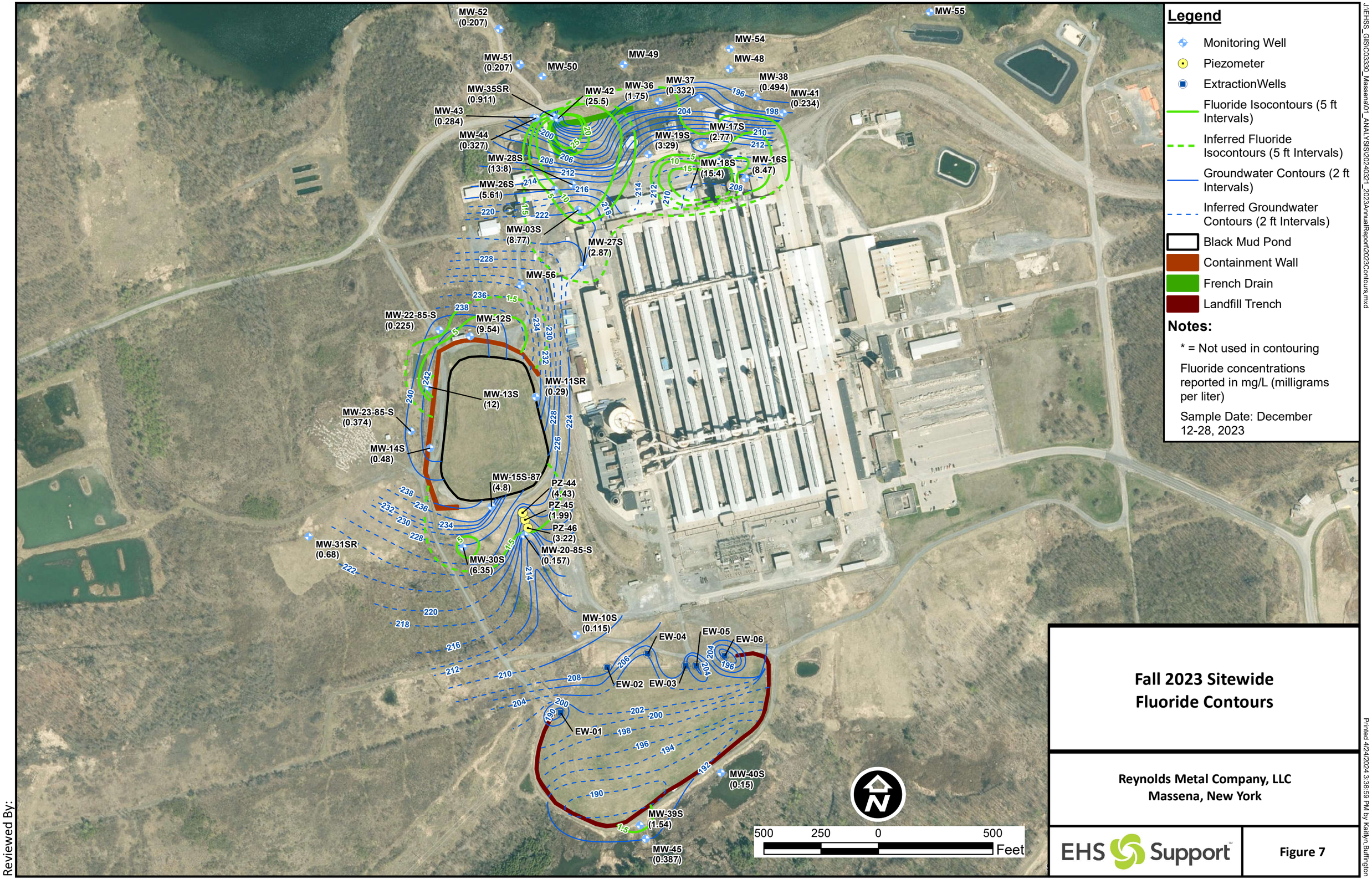
EHS Support

Figure 6

Reviewed By:

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Legend

- Monitoring Well
- Piezometer
- ExtractionWells
- Fluoride Isocontours (5 ft Intervals)
- Inferred Fluoride Isocontours (5 ft Intervals)
- Groundwater Contours (2 ft Intervals)
- Inferred Groundwater Contours (2 ft Intervals)
- Black Mud Pond
- Containment Wall
- French Drain
- Landfill Trench

Notes:

* = Not used in contouring

Fluoride concentrations reported in mg/L (milligrams per liter)

Sample Date: December 12-28, 2023

Fall 2023 Sitewide Fluoride Contours

Reynolds Metal Company, LLC
Massena, New York

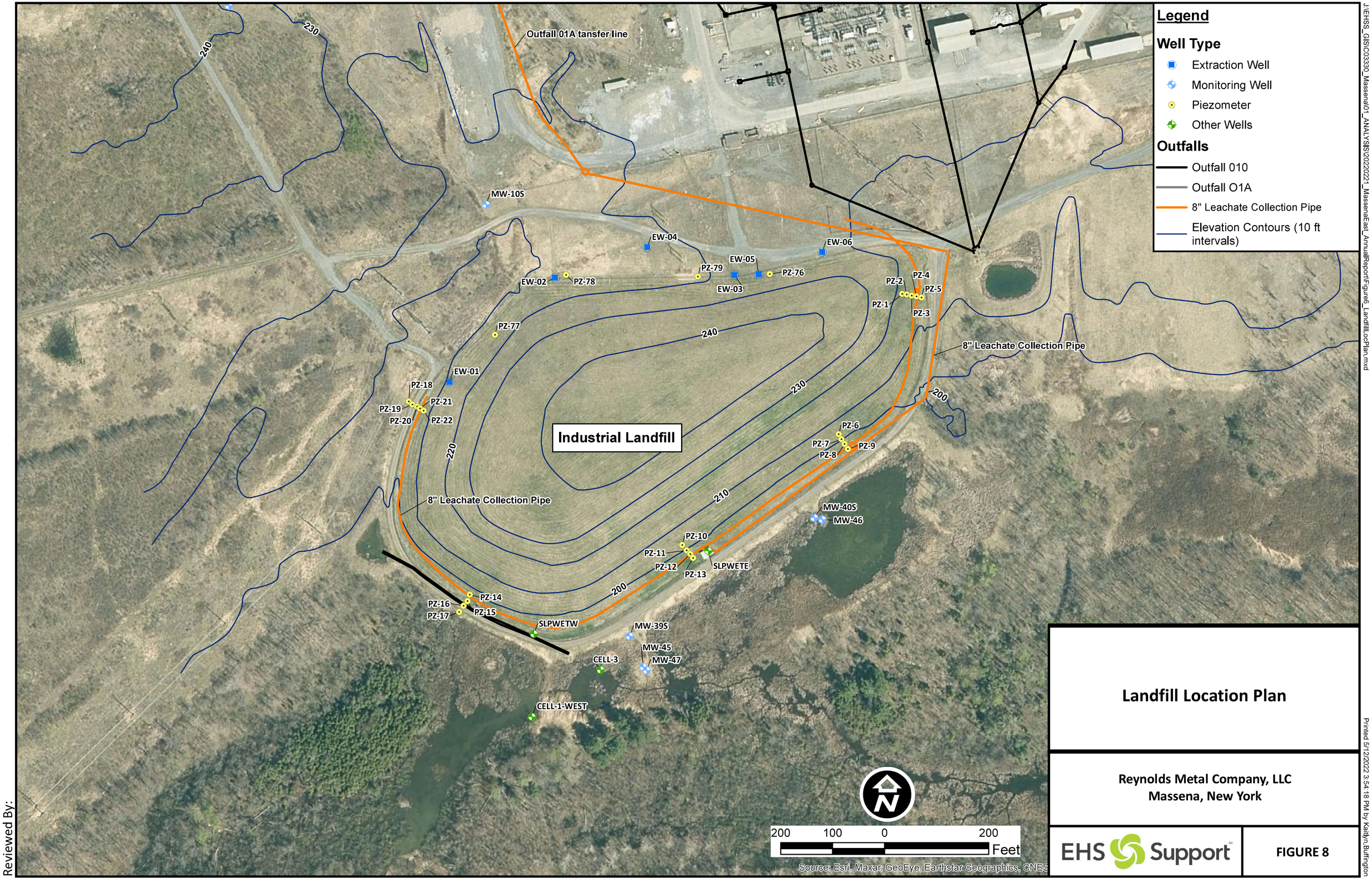
EHS Support

Figure 7

Reviewed By:

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Reviewed By:

Landfill Location Plan

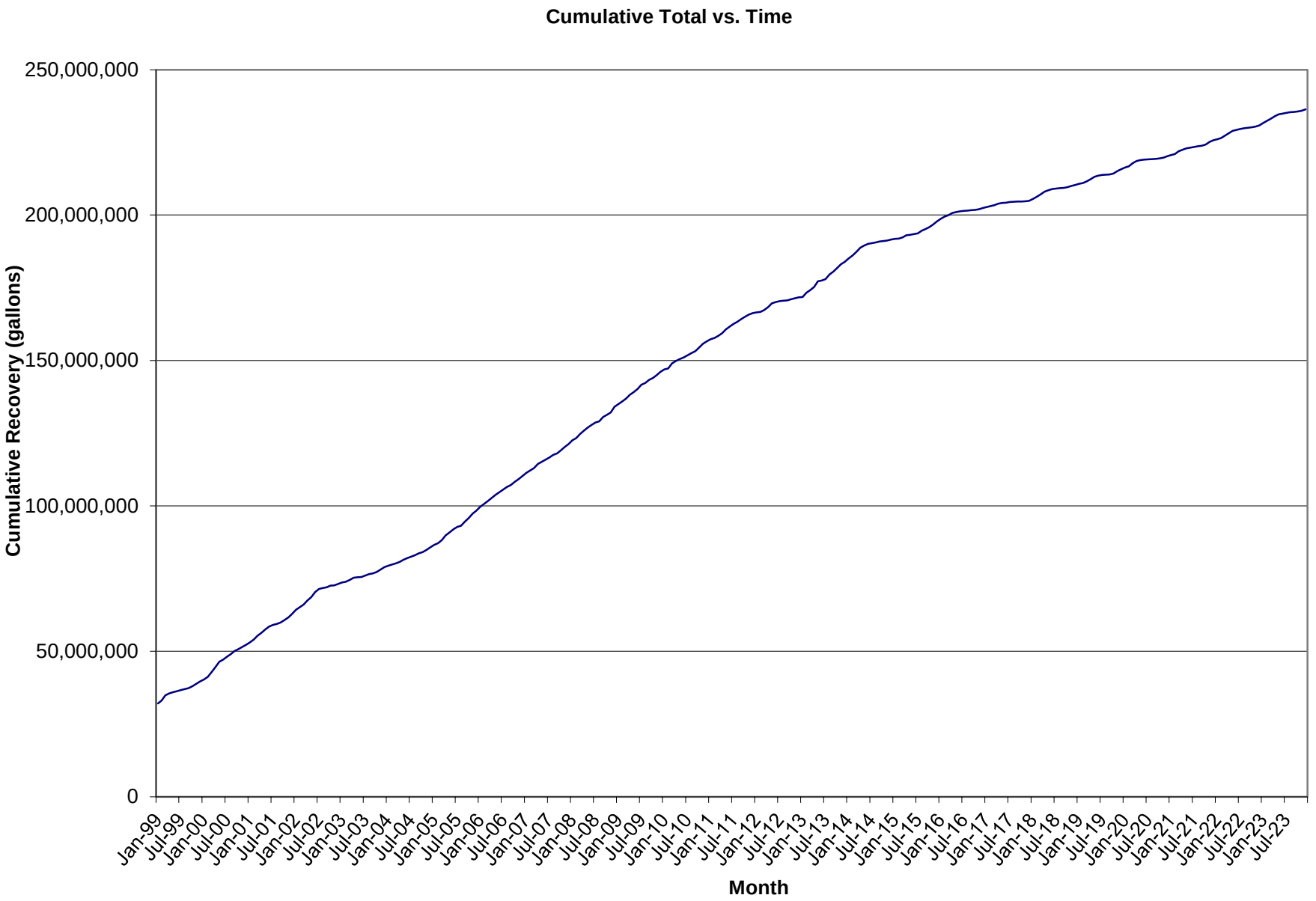
Reynolds Metal Company, LLC
Massena, New York

EHS Support

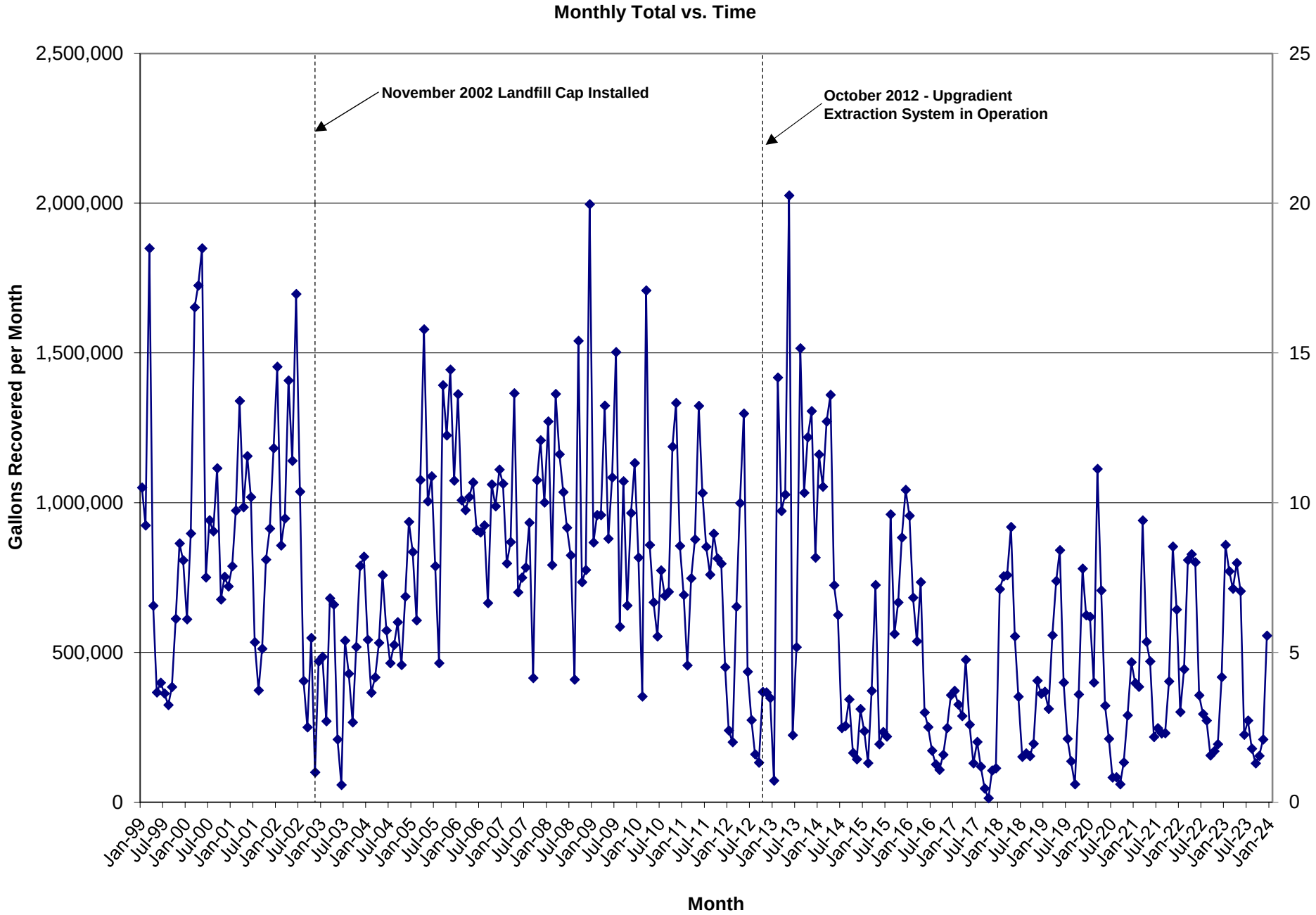
FIGURE 8

J:\EHS_GIS\C03330_Massena\01_ANALYSIS\20220221_MassenaEast_AnnualReportFigure6_LandfillLocPlan.mxd

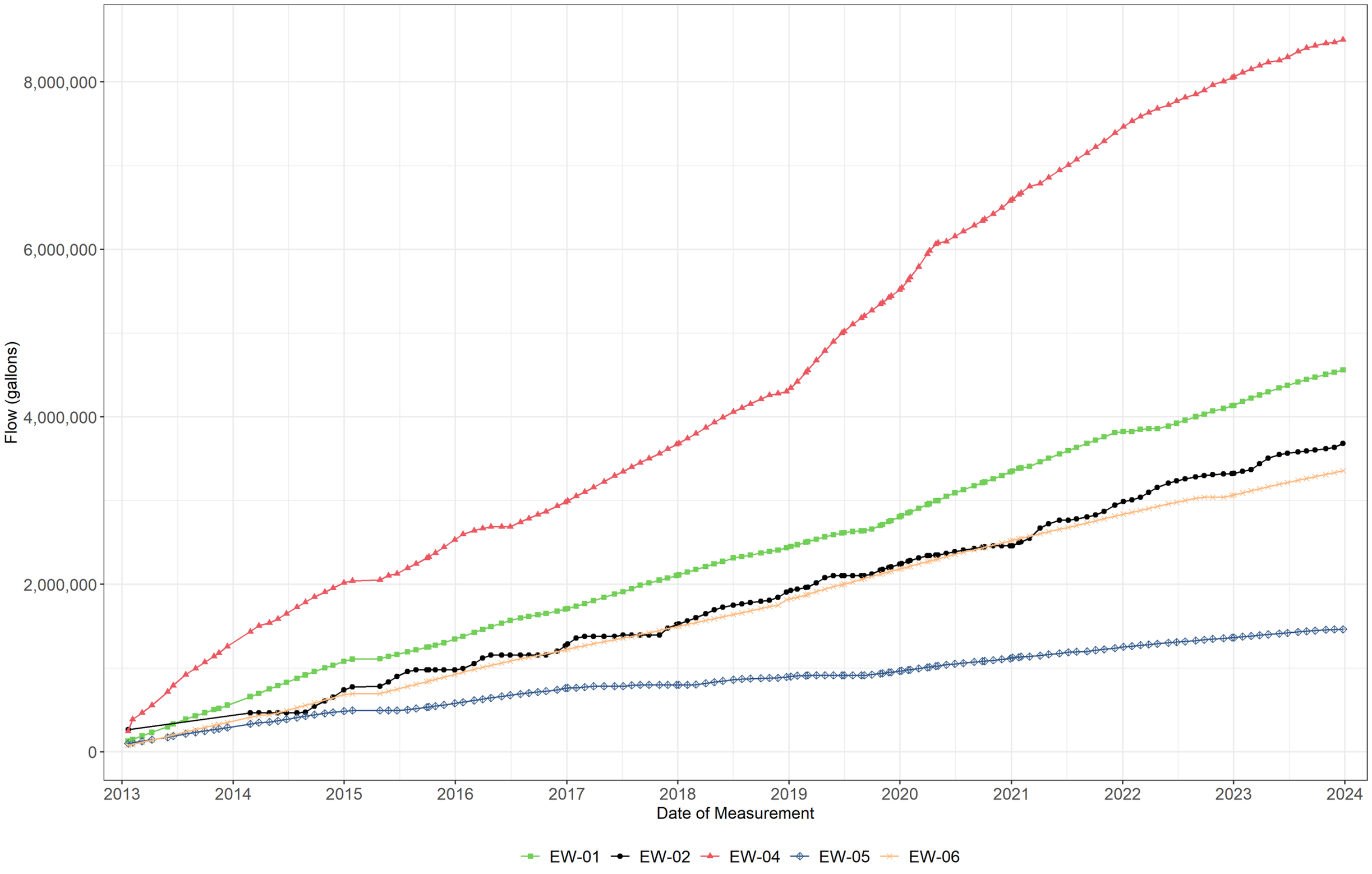
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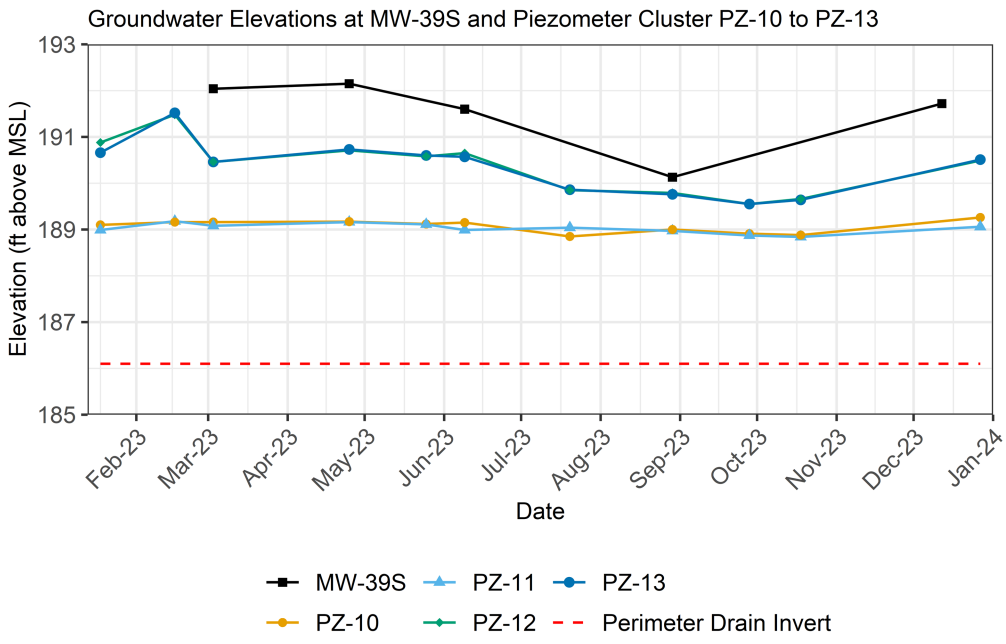
Note:
Cumulative recovery is calculated from time of pumping system startup in October 1995.

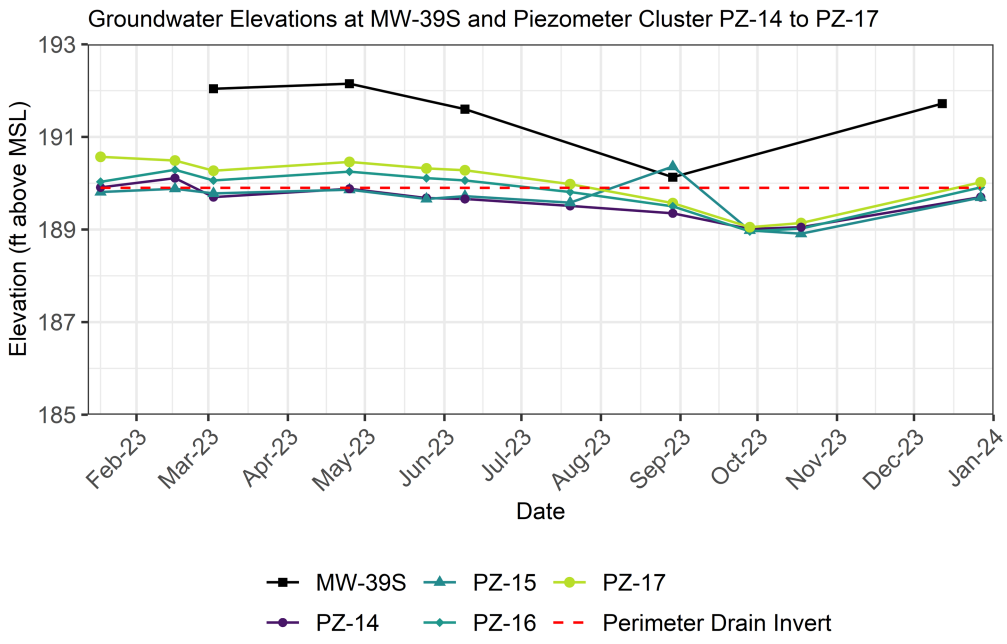


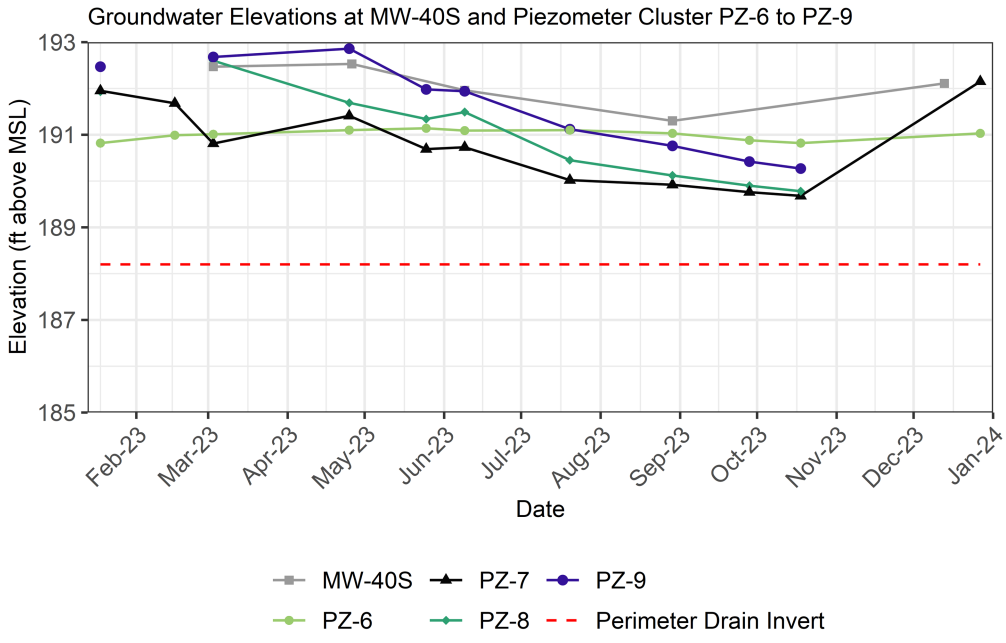
EHS Support	Reynolds Metal Company, LLC Massena, New York	Monthly Landfill Groundwater Removal	Figure 10

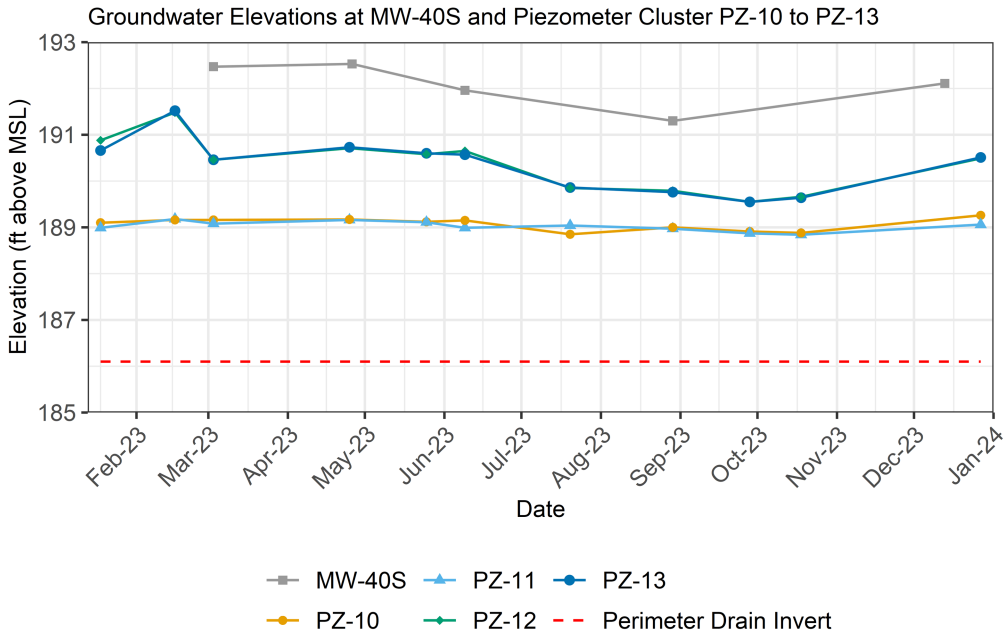


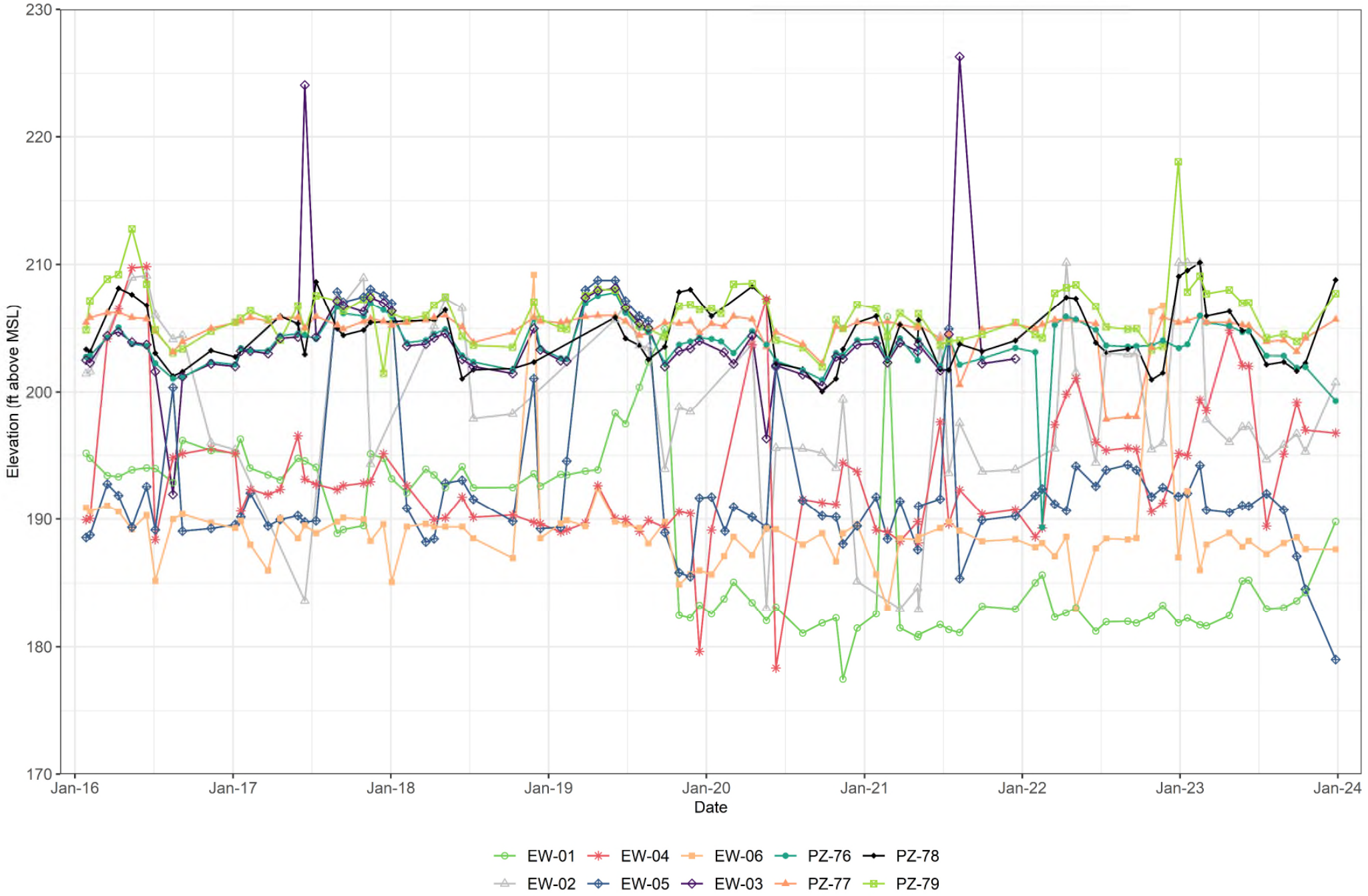
EHS Support℠	Historical Flowmeter Readings for Extraction Wells through 2023	**2023 Annual Groundwater Monitoring Report Massena East Site Massena, New York**	**Figure 11**


Groundwater Elevations at MW-39S and Piezometer Cluster PZ-10 to PZ-13
Elevation (ft above MSL)
193
191
189
187
185
Feb-23
Mar-23
Apr-23
May-23
Jun-23
Jul-23
Aug-23
Sep-23
Oct-23
Nov-23
Dec-23
Jan-24
Date
MW-39S
PZ-11
PZ-13
PZ-10
PZ-12
Perimeter Drain Invert

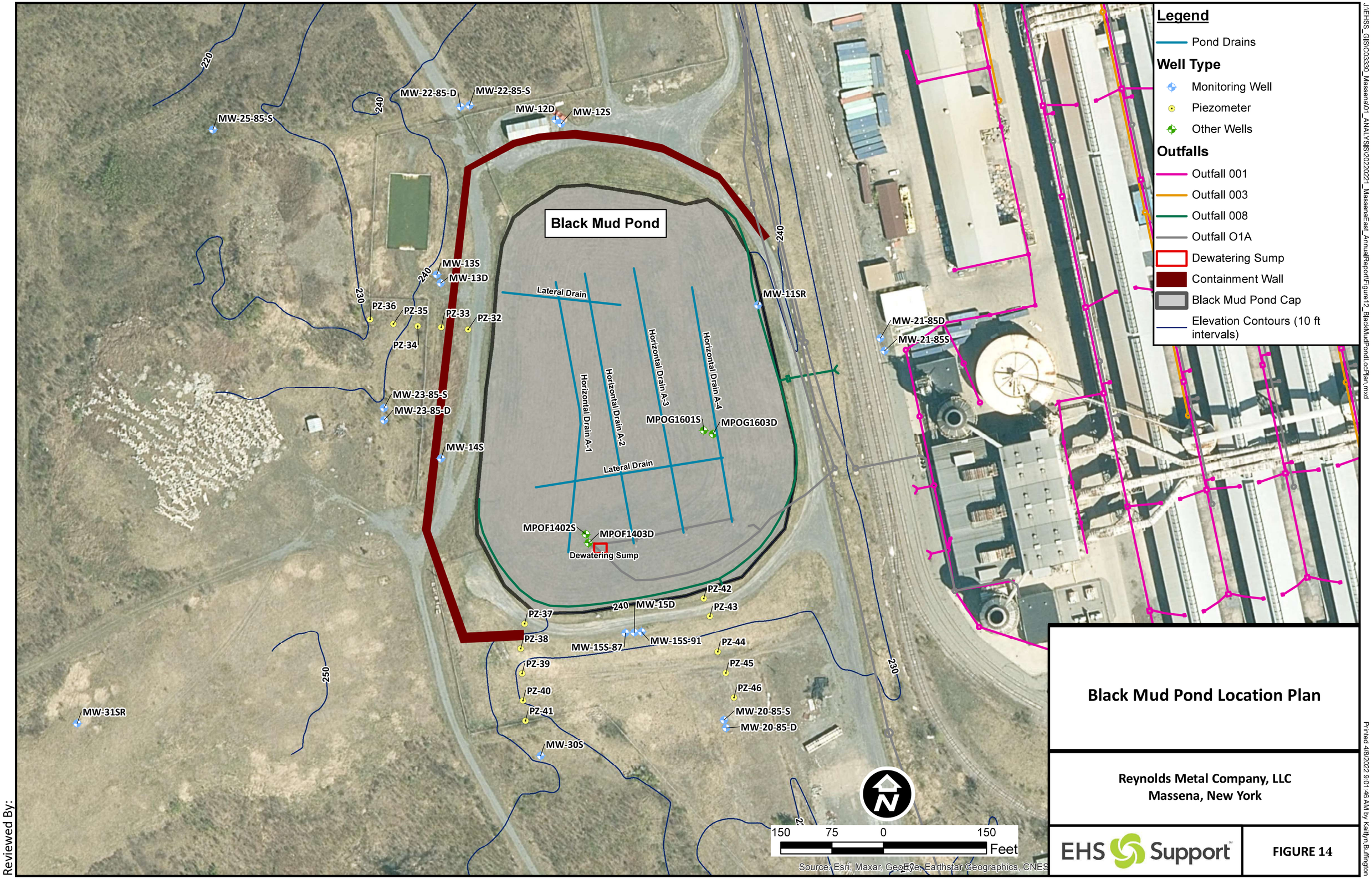

Groundwater Elevations at MW-39S and Piezometer Cluster PZ-14 to PZ-17
Elevation (ft above MSL)
193
191
189
187
185
Feb-23
Mar-23
Apr-23
May-23
Jun-23
Jul-23
Aug-23
Sep-23
Oct-23
Nov-23
Dec-23
Jan-24
Date
MW-39S
PZ-15
PZ-17
PZ-14
PZ-16
Perimeter Drain Invert


Groundwater Elevations at MW-40S and Piezometer Cluster PZ-6 to PZ-9
Elevation (ft above MSL)
193
191
189
187
185
Feb-23
Mar-23
Apr-23
May-23
Jun-23
Jul-23
Aug-23
Sep-23
Oct-23
Nov-23
Dec-23
Jan-24
Date
MW-40S
PZ-7
PZ-9
PZ-6
PZ-8
Perimeter Drain Invert


Groundwater Elevations at MW-40S and Piezometer Cluster PZ-10 to PZ-13
Elevation (ft above MSL)
193
191
189
187
185
Feb-23
Mar-23
Apr-23
May-23
Jun-23
Jul-23
Aug-23
Sep-23
Oct-23
Nov-23
Dec-23
Jan-24
Date
MW-40S
PZ-11
PZ-13
PZ-10
PZ-12
Perimeter Drain Invert



EHS Support	Reynolds Metal Company, LLC Massena, New York	Groundwater Elevations in Extraction Wells	Figure 13



Legend

- Pond Drains

Well Type

- Monitoring Well
- Piezometer
- Other Wells

Outfalls

- Outfall 001
- Outfall 003
- Outfall 008
- Outfall O1A
- Dewatering Sump
- Containment Wall
- Black Mud Pond Cap
- Elevation Contours (10 ft intervals)

Black Mud Pond Location Plan

Reynolds Metal Company, LLC
Massena, New York

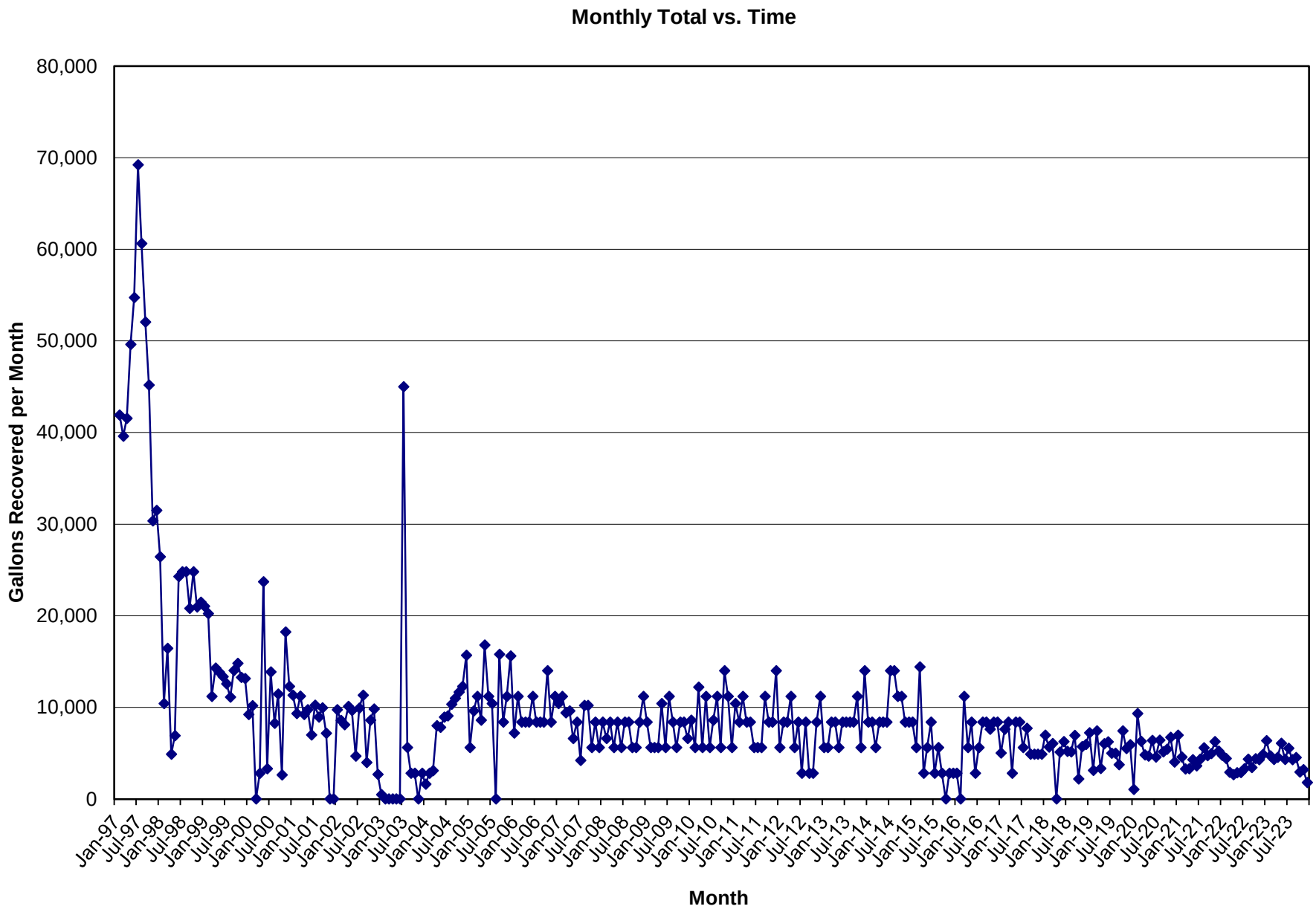
EHS Support

FIGURE 14

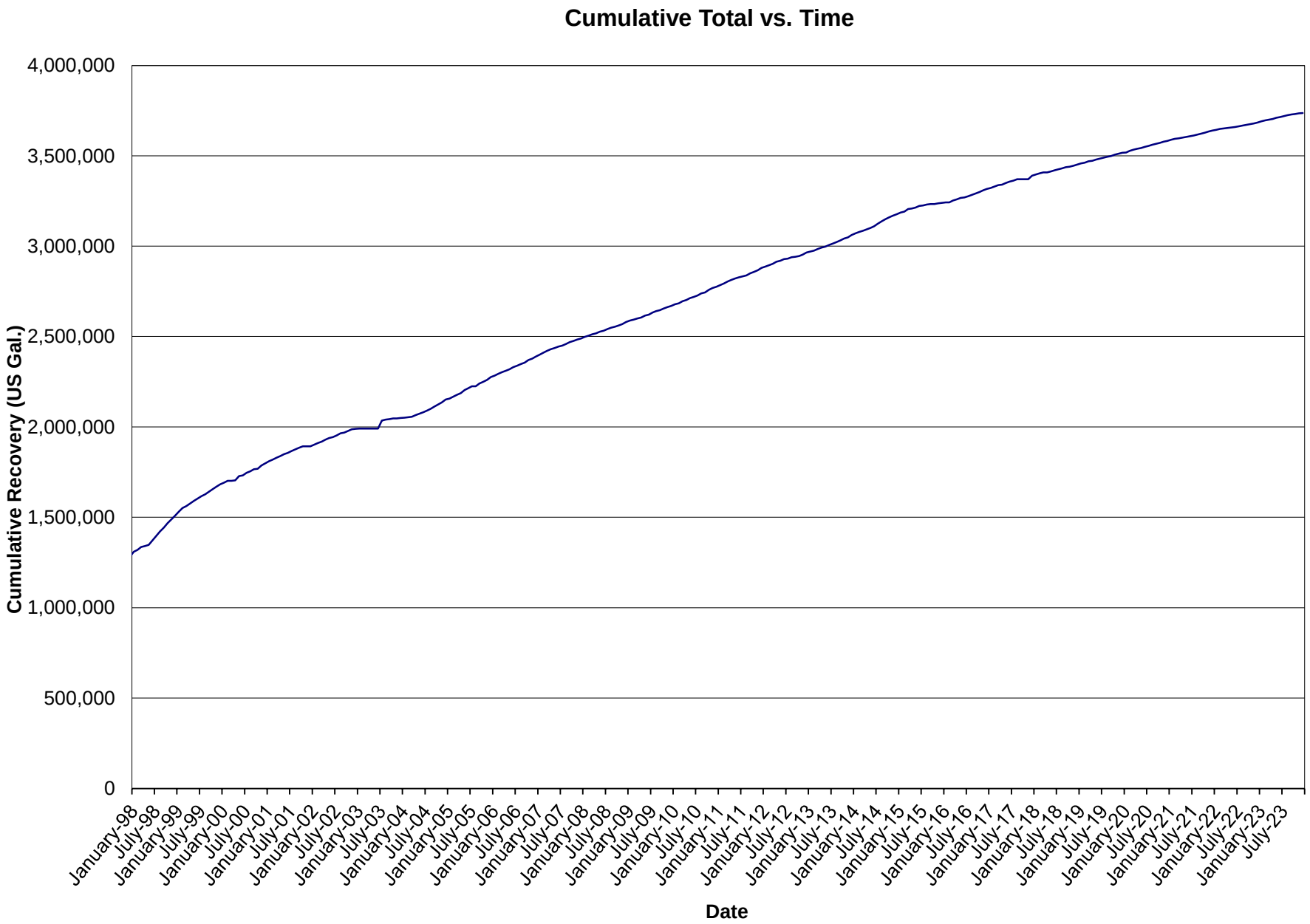
Reviewed By:

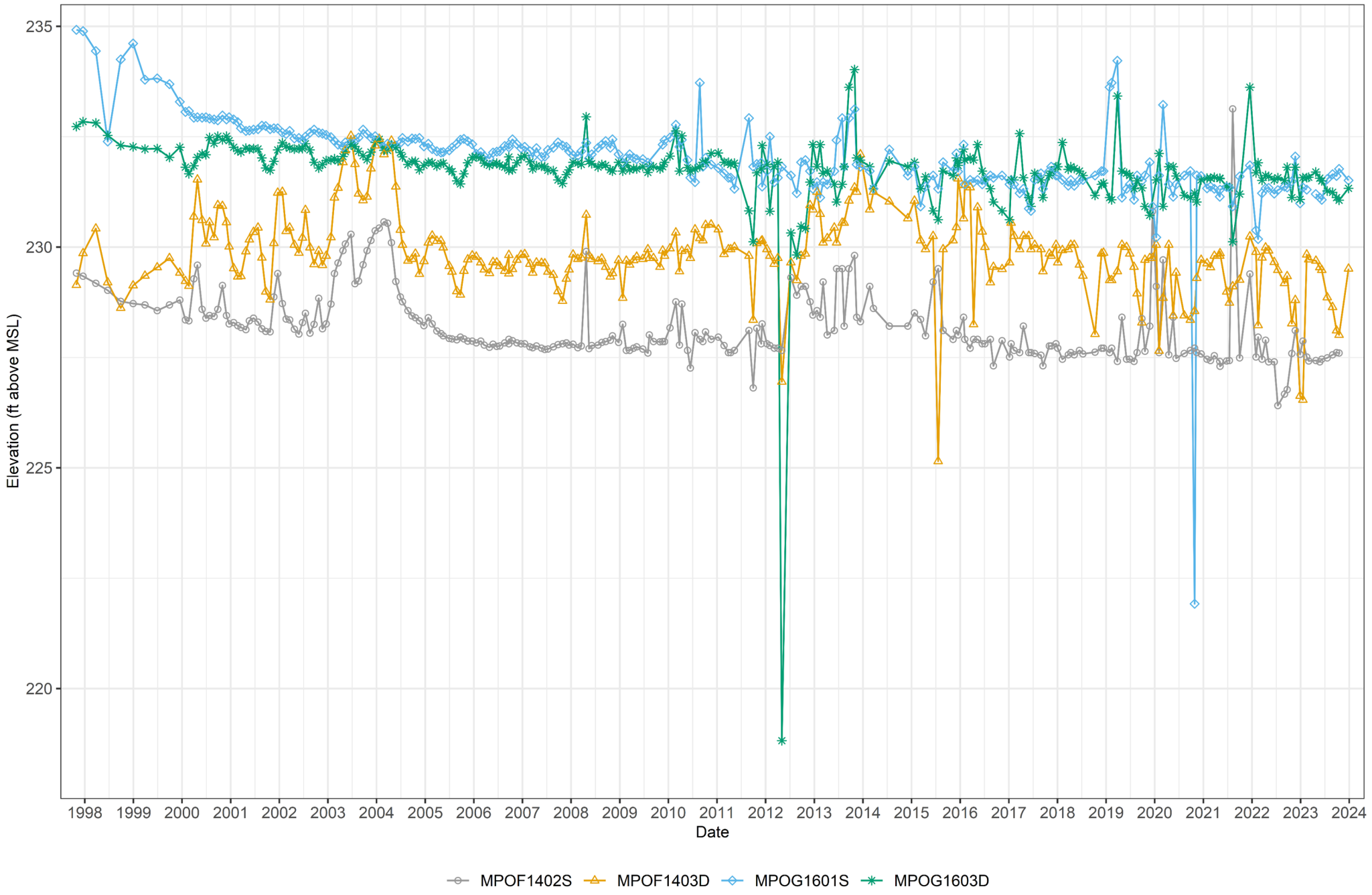
J:\EHSS_GIS\C03330_Massena\01_ANALYSIS\20220221_MassenaEast_AnnualReportFigure12_BlackMudPondLocPlan.mxd

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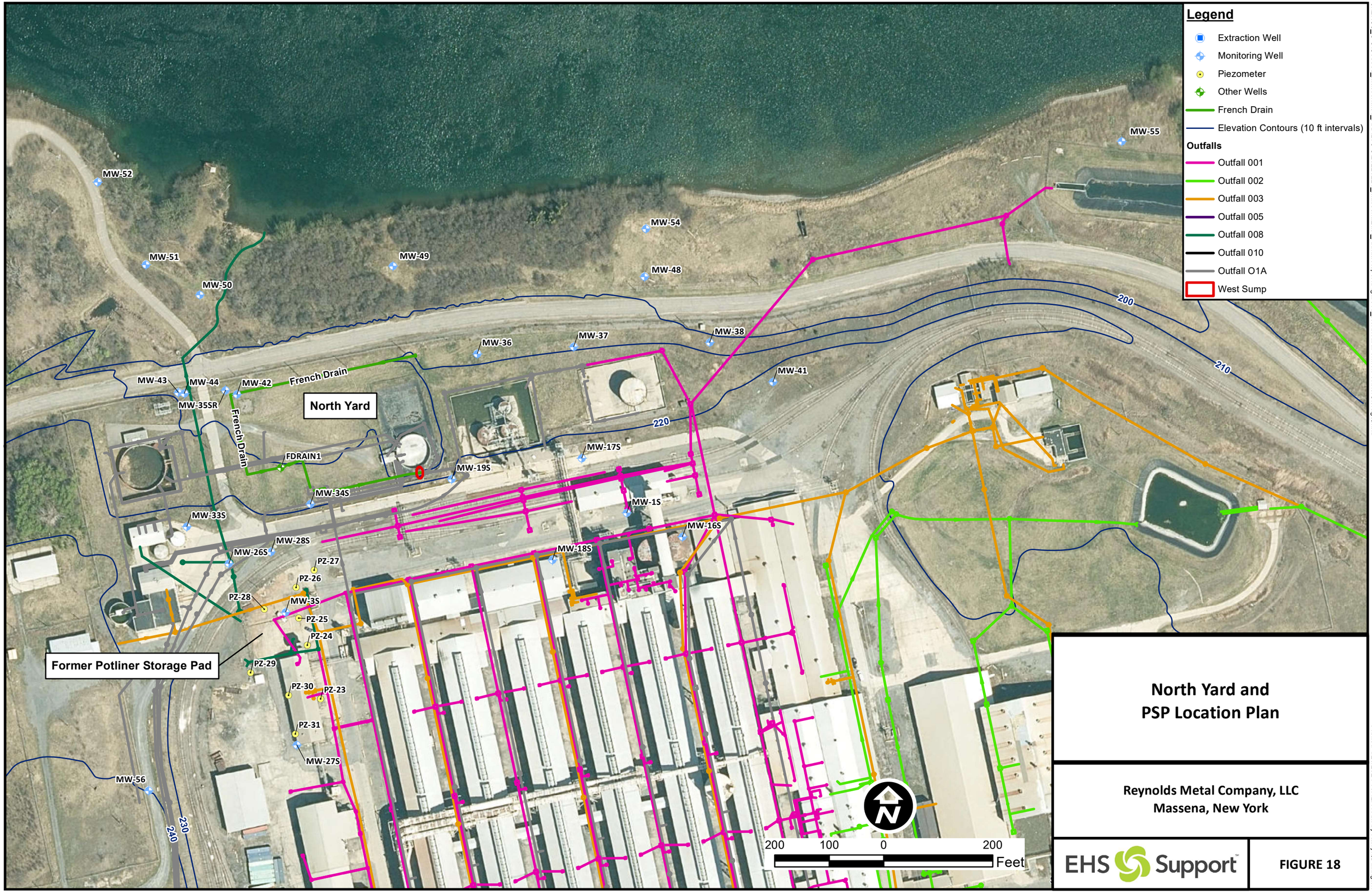


EHS Support	Reynolds Metal Company, LLC Massena, New York	Monthly BMP Groundwater Removal	Figure 15


Cumulative Total vs. Time
Cumulative Recovery (US Gal.)
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
January-98
July-98
January-99
July-99
January-00
July-00
January-01
July-01
January-02
July-02
January-03
July-03
January-04
July-04
January-05
July-05
January-06
July-06
January-07
July-07
January-08
July-08
January-09
July-09
January-10
July-10
January-11
July-11
January-12
July-12
January-13
July-13
January-14
July-14
January-15
July-15
January-16
July-16
January-17
July-17
January-18
July-18
January-19
July-19
January-20
July-20
January-21
July-21
January-22
July-22
January-23
July-23
Date



EHS Support	Reynolds Metal Company, LLC Massena, New York	Groundwater Elevations in BMP Piezometers	Figure 17



Reviewed By:

North Yard and PSP Location Plan

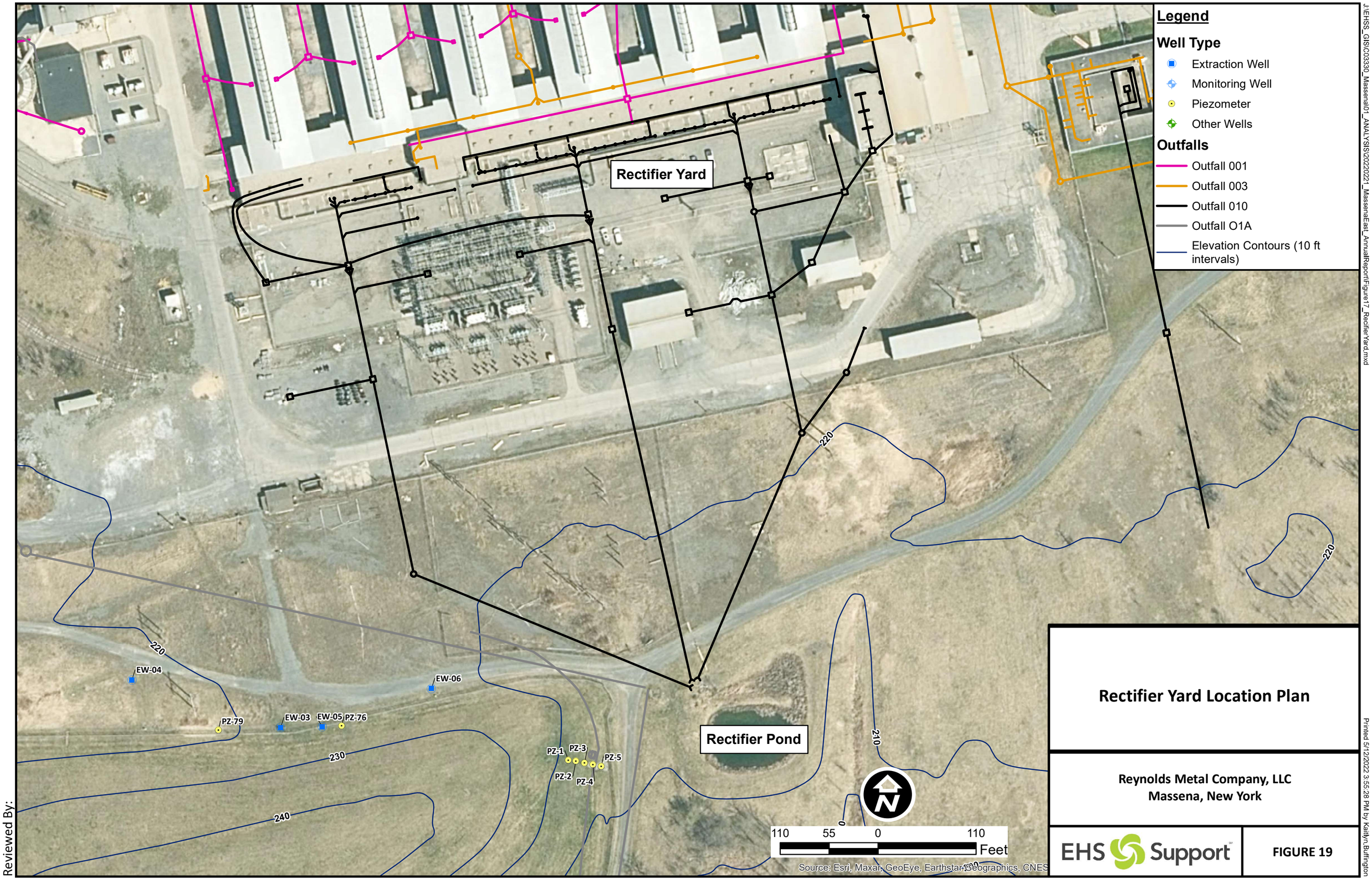
Reynolds Metal Company, LLC
Massena, New York

EHS Support

FIGURE 18

J:\EHS_GIS\C03330_Massena\01_ANALYSIS\20220221_MassenaEast_AnnualReportFigure16_NorthYardFormerPotlinerStorage.mxd

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Legend

Well Type

- Extraction Well
- Monitoring Well
- Piezometer
- Other Wells

Outfalls

- Outfall 001
- Outfall 003
- Outfall 010
- Outfall O1A
- Elevation Contours (10 ft intervals)

Rectifier Yard Location Plan

Reynolds Metal Company, LLC
Massena, New York

EHS Support

FIGURE 19

Reviewed By:

J:\EHS_GIS\CO3330_Massena\01_ANALYSIS\20220221_MassenaEast_AnnualReportFigure17_RectifierYard.mxd

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Appendix A O&M Activities

Appendix A
O&M Schedule
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Description of Activity	Schedule Requirements	Planned Schedule											
		J	F	M	A	M	J	J	A	S	O	N	D
Surface Water [1]													
Inspect surface water monitoring stations	Annually				X								
Groundwater													
Inspect monitoring wells/piezometers	Annually					X							
Monitor groundwater chemistry	Quarterly[4]			X			X			X			X
Measure water levels in wells/piezometers	Quarterly			X			X			X			X
General Area Inspections													
Inspect BMP cap and area	Spring and Fall				X						X		
Inspect Landfill cap and area	Spring and Fall				X						X		
Inspect North Yard and tank containments	Annually					X							
Inspect North Yard west and east sumps	Quarterly	X			X			X			X		
Inspect PSP and area	Annually					X							
Inspect RY and area	Annually					X							
BMP Groundwater Removal													
Measure groundwater elevations inside BMP	Monthly	X	X	X	X	X	X	X	X	X	X	X	X
Obtain groundwater transfer quantity from BMP	Monthly	X	X	X	X	X	X	X	X	X	X	X	X
Inspect discharge line from BMP sump	Quarterly	X			X			X			X		
Landfill Groundwater & Stormwater Removal													
Measure groundwater elevations around landfill	Monthly	X	X	X	X	X	X	X	X	X	X	X	X
Record quantity of groundwater and stormwater transferred from Landfill [2]	Weekly - Reported Monthly	X	X	X	X	X	X	X	X	X	X	X	X
Inspect LCRS and groundwater transfer line	Quarterly	X			X			X			X		

Notes:

[1] SPDES surface water monitoring is performed and reported separately

[2] Transfer will consist only of landfill groundwater (i.e., no stormwater)

[3] Quarterly sampling for PCBs discontinued per letter from NYSDEC dated January 3, 2013

[4] Groundwater sampled quarterly at Landfill; all other areas sampled semi-annually

Appendix B Field Sampling Forms

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL #	MW-10S-0323	**SITE:SLP**	**DATE** 3-29-23
PURGE METHOD:	WATERRA / BAILER / GRUNDFOS / PERISTALTIC X		**SAMPLED BY** JC

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES	**#1 VOLUME**	**GALLONS**
TOTAL DEPTH	23.5	FEET	**#2 VOLUME**	**GALLONS**
STATIC LEVEL	6.14	FEET	**#3 VOLUME**	4.17 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES 4.25 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
3.30.	1125	25	0.697	7.45	6.9	257.1

STATIC AT SAMPLING 6.52 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

MS/MSD

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL #	MW-39S-0323	SITE:SLP	DATE	3-29-23
PURGE METHOD:	WATERRA BAILER GRUNDFOS PERISTALTIC X		SAMPLED BY	BC

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES	#1 VOLUME		GALLONS
TOTAL DEPTH	18.50	FEET	#2 VOLUME		GALLONS
STATIC LEVEL	3.93	FEET	#3 VOLUME	7.4	GALLONS

AMOUNT PURGED IF < 3 VOLUMES 3.75 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
3-20-	1205	24	0.799	7.34	5.8	204.4

STATIC AT SAMPLING 3.79 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BD - 1210

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

4-6-23

MONITOR WELL #	MW-40S-0323	**SITE:SLP**	**DATE** 3-30-23
PURGE METHOD:	WATERRA BAILER GRUNDFOS PERISTALTIC X		**SAMPLED BY** BC

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES	**#1 VOLUME**	**GALLONS**
TOTAL DEPTH	17.50	FEET	**#2 VOLUME**	**GALLONS**
STATIC LEVEL	1.7	FEET	**#3 VOLUME** 8.0	**GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
4-6-23	0825	4	0.828	7.82	8.1	206.2

STATIC AT SAMPLING 1.93 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

No Sample Flooded

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL #	MW-45-0323	**SITE:SLP**	**DATE** 3-29-23
PURGE METHOD:	WATERRA BAILER GRUNDFOS PERISTALTIC X		**SAMPLED BY** BC

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES	**#1 VOLUME**	**GALLONS**
TOTAL DEPTH	17.85	FEET	**#2 VOLUME**	**GALLONS**
STATIC LEVEL	3.54	FEET	**#3 VOLUME** 7.2	**GALLONS**

AMOUNT PURGED IF < 3 VOLUMES 3 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
3-30	1230	11	1.35*1	7.15	5.2	197.1

STATIC AT SAMPLING 3.53 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # SLPWETE-0323 **SITE:SLP** **DATE** 3-30-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	NA	INCHES
TOTAL DEPTH	NA	FEET
STATIC LEVEL	NA	FEET

#1 VOLUME		**GALLONS**
#2 VOLUME		**GALLONS**
#3 VOLUME	X	**GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
3-30	1245	12	0,2298	7,3	5.6	193.8

STATIC AT SAMPLING NA **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BATTERY POWER PUMP

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # SLPWETW-0323 **SITE:SLP** **DATE** 3-30-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	NA	INCHES
TOTAL DEPTH	NA	FEET
STATIC LEVEL	NA	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME _____ **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
3-30	1105	14	0.1052	7.21	1.9	237.6

STATIC AT SAMPLING NA **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BATTERY POWER PUMP

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: C Dm Smith
Address: 4 Highland Rd Suite 1
Mossend NY 13676
Phone: 315 296 9028
Fax:
Email: Kingsley.RL@CDmSmith

Project Information

Project Name: Reynolds
Project Location: NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

PCB, TI, SDG

Sample Filtration
☐ **Done**
☐ **Lab to do**
Preservation
☐ **Lab to do**
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCB	TI, SDG	Sample Specific Comments
	MW-105-0323	3-30-23	1125	water	BC	x	x	
	MW-105-0323 MS	3-30-23	1125	water	BC	x	x	
	MW-105-0323 MSD	3-30-23	1125	water	BC	x	x	
	SLPWETW-0323	3-30-23	1155	water	BC	x	x	
	SLPWETE-0323	3-30-23	1245	water	BC	x	x	
	MW-395-0323	3-30-23	1205	water	BC	x	x	
	MW-1206-0323 BD	3-30-23	1210	water	BC	x	x	
	MW-45-0323	3-30-23	1230	water	BC	x	x	
	MW-1207-0323 FB	3-30-23	1211	water	BC	x	x	

Container Type: A P
Preservative: A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Basil Coy	3-30-23 1400		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Daniel Posadas	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-90340-16707.1
Client Contact: Joshua Glosenger	Phone:	E-Mail: Andy Johnson@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-10S-0323	3-30-23	1125	G	Water			X		
MW-10S-0323-MS	3-30-23	1125	G	Water			X		
MW-10S-0323-MSD	3-30-23	1125	G	Water			X		
MW-39S-0323	3-30-23	1105	G	Water			X		
MW-40S-0323	~~3-30-23~~ DP			Water					
MW-45S-0323	3-30-23	1230	G	Water			X		
SLPWETE-0323	3-30-23	1245	G	Water			X		
SLPWETW-0323	3-30-23	1155	G	Water			X		
MW-1206-0323BD	3-30-23	1210	G	Water			X		
MW-1207-0323FBW	3-30-23	1211	G	Water			X		
MW-108-0323FBW			-	Water					

180-154490 Chain of Custody

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	3/30/23 1344		[signature]	4-3-23 0930	EPI/TME
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Chain of Custody Record

eurofins | Environment Testing America

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Eurofins Environment Testing America

Client Contact	Project Manager: Ryan Kingsley	Site Contact: Daniel Posadas	Date: 4/6/23	COC No:
CDM Smith	Email: kingsleyrl@cdmsmith.com	Lab Contact: Andy Johnson	Carrier:	1 of 1 COCs
4 Highland Rd Suite 1	Tel/Fax: (315) 296-9012			TALS Project #:
Massena, NY 13662	Analysis Turnaround Time			Sampler: Daniel Posadas
(315) 296-9000 Phone	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(xxx) xxx-xxxx FAX	TAT if different from Below _____			Walk-in Client:
Project Name: Reynolds Groundwater Sampling	☑ 2 weeks			Lab Sampling:
Site: Alcoa East Plant	☐ 1 week			Job / SDG No.:
P O # 110837	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	1677-Free-Free Cyanide	Sample Specific Notes:
MW-405-0323	4-6-23	0825	G	water	1	X	X	X	
MW-1208-0323	4-6-23	0830	G	water	1			X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by: Daniel Posadas	Company: CDM Smith	Date/Time: 1040 4/6/23	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-9288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 44 Highland Rd Suite 1
Massena NY 13662
Phone: 315-298-9012
Fax:
Email: Kingsleyrl@cdmsmith.com

Project Information

Project Name: Reynolds Sampling
Project Location: NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

PFAS - 8082
FL, 504

Sample Filtration
☐ **Done**
☐ **Lab to do**
Preservation
☐ **Lab to do**
(Please Specify below)

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PFAS - 8082	FL, 504	Total Bottle
	MW-405-0323	4-6-23	0805	water	BL	X	X	
	MW-1208-0323 FBW	4-6-23	0830	water	BL	X	X	

Container Type	A	P
Preservative	A	A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Basil Cox	4-6-23 1400		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Reynolds GW 3-30-23

VSI #5 Turbidity Meter #3

pH 4 - 4.01 - 4.00

7 - 6.95 - 7.00

10 - 9.96 - 10.00

ORP 220 mV - 216 - 220

Conductivity 1.413 - 1.557 - 1.413

Turbidity 20 - 19.8

100 - 100

800 - 798

10 - 10.6

Phil Brooks

Rite in the Rain

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

COC J 3C

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Daniel Posadas	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-94092-17279.1
Client Contact: Joshua Glosenger	Phone:	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin: NY	Page: Page 1 of 1
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide by 1677	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-12S-0623	8/23/23	0932	G	Water		X	X		
MW-12S-0623-MS	8/23/23	0932	G	Water			X		
MW-12S-0623-MSD	8/23/23	0932	G	Water			X		
MW-13S-0623	8/23/23	0905	G	Water			X		
MW-23-85S-0623	8/23/23	0855	G	Water			X		
MW-1213-0623BD	8/23/23	0937	G	Water			X		
MW-1214-0623FBW	8/23/23	0935	G	Water			X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Posadas	8/23/23 1523	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 222497 | Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-23-85S-0623 | SITE:SLP | DATE 8-22-23

PURGE METHOD: WATERRA X | BAILER | GRUNDFOS | PERISTALTIC | SAMPLED BY AC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	30.50	FEET
STATIC LEVEL	11.63	FEET

#1 VOLUME _____ GALLONS
#2 VOLUME _____ GALLONS
#3 VOLUME 9.16 GALLONS

AMOUNT PURGED IF < 3 VOLUMES 3.75 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
8-23	0855	1020	0.990	7.46	13.3	224.6

STATIC AT SAMPLING 18.69 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

Resample

po 1100891

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-13S-0623 | SITE: SLP | DATE 8-22-23

PURGE METHOD: WATERRA | BAILER | GRUNDFOS | PERISTALTIC X | SAMPLED BY JL/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	17.5	FEET
STATIC LEVEL	8.19	FEET

#1 VOLUME		GALLONS
#2 VOLUME		GALLONS
#3 VOLUME	4.7	GALLONS

AMOUNT PURGED IF < 3 VOLUMES 3.25 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
8.23	0905	18.8	4.970	7.27	15.5	230.2

STATIC AT SAMPLING 12.42 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-12S-0623 | SITE: SLP | DATE 8-22-23

PURGE METHOD: WATERRA | BAILER | GRUNDFOS | PERISTALTIC X | SAMPLED BY JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	16.5	FEET
STATIC LEVEL	8.64	FEET

AMOUNT PURGED IF < 3 VOLUMES 3 GALLONS

#1 VOLUME		GALLONS
#2 VOLUME		GALLONS
#3 VOLUME	4.0	GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
8-23	0932	18.4	2.93	7.73	16.8	221.6

STATIC AT SAMPLING 9.67' Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

MS/MSD 3D - 0937

FB - [redacted] - 0935

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-9288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 41 Highland Pk Suite 1
Massena NY 13662
Phone: 315-296-9012
Fax:
Email: KinneyAL@cdmsmith.com

Project Information

Project Name: Reynolds Groundwater
Project Location: NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Randall Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

TAL MW-125-0623 (MS, MSD)
TAL CN MW-125-0623 (MS, MSD)

Sample Filtration
☐ **Done**
☐ **Lab to do**
Preservation
☐ **Lab to do**
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TAL	CN	Sample Specific Comments
	MW-125-0623	8-23-23	0932	water	BC	X	X	
	MW-125-0623 MS	8-23-23	0932	water	BC	X	X	
	MW-125-0623 MSD	8-23-23	0932	water	BC	X	X	
	MW-123-0623 BK	8-23-23	0937	water	BC	X	X	
	MW-1214-0623 FBW	8-23-23	0935	water	BC	X	X	

Container Type: P P
Preservative: E E

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Basil Cox	8-24-23 1400		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-10S-0623 **SITE:SLP** **DATE** 6-12-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** BL/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	23.5	FEET
STATIC LEVEL	9.41	FEET

AMOUNT PURGED IF < 3 VOLUMES 5.25 GALLONS

#1 VOLUME		**GALLONS**
#2 VOLUME		**GALLONS**
#3 VOLUME	7.1	**GALLONS**

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13-23	0723	19	0.674	7.57	12.7	206.8

STATIC AT SAMPLING 9.57 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

MS/MSD

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # SLPWETW-0623 **SITE:SLP** **DATE** 6-13-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	NA	INCHES
TOTAL DEPTH	NA	FEET
STATIC LEVEL	NA	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME _____ **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	0801	8	0.176	7.26	16.7	28.8

STATIC AT SAMPLING _____ **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BATTERY POWER PUMP

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-39S-0623 **SITE:SLP** **DATE** 6-12-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** BK/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	18.50	FEET
STATIC LEVEL	4.71	FEET

AMOUNT PURGED IF < 3 VOLUMES 3.25 GALLONS

#1 VOLUME	**GALLONS**
#2 VOLUME	**GALLONS**
#3 VOLUME 7.0	**GALLONS**

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	0922	49	0.731	7.23	12.0	122.3

STATIC AT SAMPLING 4.64 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

WAD CN, TCN - MS/MSD

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-45-0623 | SITE: SLP | DATE 6-12-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X | SAMPLED BY BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	17.85	FEET
STATIC LEVEL	4.44	FEET

AMOUNT PURGED IF < 3 VOLUMES 3 GALLONS

#1 VOLUME	GALLONS
#2 VOLUME	GALLONS
#3 VOLUME	4.8 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	0930	11	1.424	7.04	12.2	141.2

STATIC AT SAMPLING 4.44 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # SLPWETE-0623 **SITE:SLP** **DATE** 6-13-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** SC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	NA	INCHES
TOTAL DEPTH	NA	FEET
STATIC LEVEL	NA	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME _____ **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	0943	1	0.3231	8.39	18.9	109.0

STATIC AT SAMPLING _____ **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BATTERY POWER PUMP

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL #	MW-40S-0623	**SITE:SLP**		**DATE**	6-12-23
PURGE METHOD:	WATERRA	BAILER	GRUNDFOS	PERISTALTIC K	**SAMPLED BY** JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	17.50	FEET
STATIC LEVEL	2.52	FEET

AMOUNT PURGED IF < 3 VOLUMES 5 GALLONS

#1 VOLUME		**GALLONS**
#2 VOLUME		**GALLONS**
#3 VOLUME	7.6	**GALLONS**

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13-23	0955	1	1.115	7.25	12.5	160.4

STATIC AT SAMPLING 2.54 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-30S-0623 | SITE: SLP | DATE 6-12-23

PURGE METHOD: WATERRA | BAILER | GRUNDFOS | PERISTALTIC X | SAMPLED BY BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	17.55	FEET
STATIC LEVEL	7.39	FEET

AMOUNT PURGED IF < 3 VOLUMES 4.0 GALLONS

#1 VOLUME	GALLONS
#2 VOLUME	GALLONS
#3 VOLUME	5.1 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	1010	30	0.773	7.49	11.2	169.3

STATIC AT SAMPLING 14.02 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-31SR-0623 **SITE:SLP** **DATE** 6-12-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	29.85	FEET
STATIC LEVEL	15.49	FEET

AMOUNT PURGED IF < 3 VOLUMES 3.5 GALLONS

#1 VOLUME	GALLONS
#2 VOLUME	GALLONS
#3 VOLUME	7.3 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	1026	172	0.659	7.82	10.8	165.9

STATIC AT SAMPLING 14.68 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-23-85S-0623 **SITE:SLP** **DATE** 6-12-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	30.50	FEET
STATIC LEVEL	10.02	FEET

AMOUNT PURGED IF < 3 VOLUMES 4.25 GALLONS

#1 VOLUME	**GALLONS**
#2 VOLUME	**GALLONS**
#3 VOLUME 10.4	**GALLONS**

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	1040	201	0.996	7.44	11.1	180.6

STATIC AT SAMPLING ~~TEMP~~ 17.26 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-14S-0623 | SITE: SLP | DATE 12/6-8-23

PURGE METHOD: WATERRA | BAILER | GRUNDFOS | PERISTALTIC X | SAMPLED BY BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	19.85	FEET
STATIC LEVEL	8.78	FEET

AMOUNT PURGED IF < 3 VOLUMES 4.5 GALLONS

#1 VOLUME	GALLONS
#2 VOLUME	GALLONS
#3 VOLUME 5.6	GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	1107	23	1.071	7.64	11.2	195.6

STATIC AT SAMPLING 11.8 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
MW-1202-0623 BD-1112

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL #	MW-13S-0623	**SITE:SLP**		**DATE**	6-12-23
PURGE METHOD:	WATERRA	BAILER	GRUNDFOS	PERISTALTIC x	**SAMPLED BY**	JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	17.5	FEET
STATIC LEVEL	7.68	FEET

AMOUNT PURGED IF < 3 VOLUMES 4 GALLONS

#1 VOLUME		**GALLONS**
#2 VOLUME		**GALLONS**
#3 VOLUME	5.0	**GALLONS**

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	1125	3	4.511	7.27	10.1	204.4

STATIC AT SAMPLING 12.14 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-20-85S-0623 **SITE:SLP** **DATE** 6-12-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	18.60	FEET
STATIC LEVEL	11.0	FEET

AMOUNT PURGED IF < 3 VOLUMES 1.25 GALLONS

#1 VOLUME	GALLONS
#2 VOLUME	GALLONS
#3 VOLUME	3.8 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	1143	3	1.778	12.10	11.4	-27.7

STATIC AT SAMPLING 13.2 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-15S-87-0623 **SITE:SLP** **DATE** 6-12-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	24.85	FEET
STATIC LEVEL	12.95	FEET

AMOUNT PURGED IF < 3 VOLUMES 4.5 GALLONS

#1 VOLUME	GALLONS
#2 VOLUME	GALLONS
#3 VOLUME	6.0 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	1154	398	0.598	7.67	12.3	~~139.7~~ 152.3

STATIC AT SAMPLING 22.94 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-11SR-0623 **SITE:SLP** **DATE** 6-12-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	24.66	FEET
STATIC LEVEL	10.2	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 7.3 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES _____ GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	1203	49	1,279	7.51	12.4	163.9

STATIC AT SAMPLING 11.27 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-12S-0623 **SITE:SLP** **DATE** 6-12-25

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	16.5	FEET
STATIC LEVEL	7.51	FEET

AMOUNT PURGED IF < 3 VOLUMES 3.5 GALLONS

#1 VOLUME		**GALLONS**
#2 VOLUME		**GALLONS**
#3 VOLUME	4.4	**GALLONS**

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-13	1215	20	2.744	7.53	11.6	164.3

STATIC AT SAMPLING 8.97 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # FDRAIN-0623 **SITE:SLP** **DATE** 6-28-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** AL/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	NA	INCHES
TOTAL DEPTH	NA	FEET
STATIC LEVEL	NA	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1322	1	0.862	8.15	12.9	253.4

STATIC AT SAMPLING 12.79 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BATTERY POWER PUMP

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-34S-0623 | SITE: SLP | DATE 6-27-23

PURGE METHOD: WATERRA X | BAILER | GRUNDFOS | PERISTALTIC | SAMPLED BY JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	32.90	FEET
STATIC LEVEL	12.94	FEET

AMOUNT PURGED IF < 3 VOLUMES 4.5 GALLONS

#1 VOLUME		GALLONS
#2 VOLUME		GALLONS
#3 VOLUME	10.0	GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	0814	96	2,201	7.85	12.2	179.0

STATIC AT SAMPLING 19.91 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

Free cyanide only

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-38-0623 | SITE: SLP | DATE 6-27-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC | SAMPLED BY BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	37.20	FEET
STATIC LEVEL	6.91	FEET

#1 VOLUME _____ GALLONS
#2 VOLUME _____ GALLONS
#3 VOLUME 15.4 GALLONS

AMOUNT PURGED IF < 3 VOLUMES 7.25 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1305	> 800	0.4650	8.26	11.7	165.1

STATIC AT SAMPLING 12.24 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-37-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	36.08	FEET
STATIC LEVEL	4.71	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 15.9 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES 6.5 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1253	~~2400~~ 800	0.461	8.37	11.1	158.9

STATIC AT SAMPLING 5.86 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-36-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	34.05	FEET
STATIC LEVEL	8.54	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 13.0 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES 7.75 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1244	7800	1.959	8.60	11.1	164.5

STATIC AT SAMPLING 17.14 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-35SR-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** AC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	28.55	FEET
STATIC LEVEL	15.94	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 6.4 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1235	7800	1.607	7.28	11.3	190.5

STATIC AT SAMPLING 19.09 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-42-0623 | SITE: SLP | DATE 6-27-23

PURGE METHOD: WATERRA X | BAILER | GRUNDFOS | PERISTALTIC | SAMPLED BY BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	47.15	FEET
STATIC LEVEL	20.79	FEET

#1 VOLUME _____ GALLONS
#2 VOLUME _____ GALLONS
#3 VOLUME 13.4 GALLONS

AMOUNT PURGED IF < 3 VOLUMES 4.25 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1232	239	2.702	8.08	11.4	174.3

STATIC AT SAMPLING 24.64 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-44-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	28.55	FEET
STATIC LEVEL	9.41	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 9.7 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES _____ GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1223	5	0.711	7.19	11.3	161.4

STATIC AT SAMPLING 9.2 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-43-0623 | SITE: SLP | DATE 6-27-23

PURGE METHOD: WATERRA X | BAILER | GRUNDFOS | PERISTALTIC | SAMPLED BY JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	47.80	FEET
STATIC LEVEL	9.70	FEET

#1 VOLUME		GALLONS
#2 VOLUME		GALLONS
#3 VOLUME	19.4	GALLONS

AMOUNT PURGED IF < 3 VOLUMES _____ GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1215	29.7	D.746	7.19	11.5	164.8

STATIC AT SAMPLING 9.63 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

MS/MSD

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-17S-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	19.90	FEET
STATIC LEVEL	12.0	FEET

AMOUNT PURGED IF < 3 VOLUMES 3 GALLONS

#1 VOLUME	**GALLONS**
#2 VOLUME	**GALLONS**
#3 VOLUME 4.0	**GALLONS**

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1157	28	0.870	7.54	11.4	168.6

STATIC AT SAMPLING 17.67 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-41-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** JL/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	47.25	FEET
STATIC LEVEL	25.17	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 11.2 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES 3.5 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1148	>800	0.885	7.71	11.9	145.3

STATIC AT SAMPLING 34.99 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-16S-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** SC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	23.5	FEET
STATIC LEVEL	18.9	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 2.3 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1134	17	0.850	8.12	12.3	128.5

STATIC AT SAMPLING 18.80 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-18S-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	26.50	FEET
STATIC LEVEL	18.43	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 4.1 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES _____ GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1110	4	1.206	7.98	12.5	108.4

STATIC AT SAMPLING 18.39 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

MW-1201-0623 FD - 1115

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-27S-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	23.00	FEET
STATIC LEVEL	9.06	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 7.1 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES 5.6 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1058	9	6.78	7.30	12.6	147.3

STATIC AT SAMPLING 9.50 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-03-0623 | SITE: SLP | DATE 6-27-23

PURGE METHOD: WATERRA | BAILER | GRUNDFOS | PERISTALTIC X | SAMPLED BY RL/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	22.12	FEET
STATIC LEVEL	4.54	FEET

#1 VOLUME _____ GALLONS
#2 VOLUME _____ GALLONS
#3 VOLUME 8.9 GALLONS

AMOUNT PURGED IF < 3 VOLUMES 5.4 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1045	517	0.890	8.09	14.5	119.3

STATIC AT SAMPLING 16.02 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		X
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

Flushmount - needs new cap & collar

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL #	MW-19S-0623	**SITE:SLP**	**DATE** 6-27-23
PURGE METHOD:	WATERRA BAILER GRUNDFOS PERISTALTIC X		**SAMPLED BY** BL/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES	**#1 VOLUME**	**GALLONS**
TOTAL DEPTH	18.00	FEET	**#2 VOLUME**	**GALLONS**
STATIC LEVEL	13.27	FEET	**#3 VOLUME** 2.4	**GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1028	3	0.743	7.56	11.9	120.4

STATIC AT SAMPLING 13.8 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-28S-0623 | SITE: SLP | DATE 6-27-23

PURGE METHOD: WATERRA | BAILER | GRUNDFOS | PERISTALTIC ✓ | SAMPLED BY JL/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	25.00	FEET
STATIC LEVEL	13.74	FEET

#1 VOLUME		GALLONS
#2 VOLUME		GALLONS
#3 VOLUME	5.7	GALLONS

AMOUNT PURGED IF < 3 VOLUMES _____ GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1020	55	0.840	8.21	12.66	80.3

STATIC AT SAMPLING 13.62 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-26S-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** JC / DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	30.50	FEET
STATIC LEVEL	11.14	FEET

AMOUNT PURGED IF < 3 VOLUMES 4.25 GALLONS

#1 VOLUME		**GALLONS**
#2 VOLUME		**GALLONS**
#3 VOLUME	9.8	**GALLONS**

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1010	7800	0.738	7.42	11.7	76.3

STATIC AT SAMPLING 10.75 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-33S-0623 | SITE: SLP | DATE 6-27-25

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC | SAMPLED BY BL/DC

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	29.60	FEET
STATIC LEVEL	13.28	FEET

#1 VOLUME _____ GALLONS
#2 VOLUME _____ GALLONS
#3 VOLUME 8.3 GALLONS

AMOUNT PURGED IF < 3 VOLUMES 2.25 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1005	371	1.482	7.64	12.5	14.7

STATIC AT SAMPLING 23.25 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

Free CN only

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # PZ-44-0623 | SITE: SLP | DATE 6-28-23

PURGE METHOD: WATERRA | BAILER | GRUNDFOS | PERISTALTIC X | SAMPLED BY BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	1	INCHES
TOTAL DEPTH	15.40	FEET
STATIC LEVEL		FEET

#1 VOLUME _____ GALLONS
#2 VOLUME _____ GALLONS
#3 VOLUME _____ GALLONS

AMOUNT PURGED IF < 3 VOLUMES _____ GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	0930	>1000	2.189	7.23	15.6	-59.9

STATIC AT SAMPLING 5.09 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BATTERY POWER PUMP

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # PZ-45-0623 **SITE:SLP** **DATE** 6-28-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC ✓ **SAMPLED BY** JC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	1	INCHES	**#1 VOLUME**	**GALLONS**
TOTAL DEPTH	15.25	FEET	**#2 VOLUME**	**GALLONS**
STATIC LEVEL	7.28	FEET	**#3 VOLUME**	**GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	0920	289	1.764	7.20	15.4	-84.6

STATIC AT SAMPLING 7.28 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BATTERY POWER PUMP

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # PZ-46-0623 | SITE: SLP | DATE 6·28·23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X | SAMPLED BY BC/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	1	INCHES	
TOTAL DEPTH	~~11.20~~	FEET	10.34
STATIC LEVEL		FEET	

#1 VOLUME		GALLONS
#2 VOLUME		GALLONS
#3 VOLUME		GALLONS

AMOUNT PURGED IF < 3 VOLUMES _____ GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6·28	0905	>800	2.022	7.34	18.8	10.5
				x		

STATIC AT SAMPLING 9.29 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

BATTERY POWER PUMP

~~No sample~~ Free cyanide only

Change DTB

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

CDM Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-22-85S-0623 **SITE:SLP** **DATE** 6-27-23

PURGE METHOD: WATERRA X BAILER GRUNDFOS PERISTALTIC **SAMPLED BY** JL/DP

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	30.50	FEET
STATIC LEVEL	18.86	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME 10.0 **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES 4.25 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
6-28	1340	24	1.436	7.44	12.5	197.3

STATIC AT SAMPLING 11.03 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Posadas, Daniel	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.1
Client Contact: Joshua Glosenger	Phone: (315) 296-9012	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page 1 of 5
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site: Reynolds Plant	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-03S-0623	6-28-23	1045	G	Water			X		
MW10S-0623				Water					
MW-10S-0623-MS				Water					
MW-10S-0623-MSD				Water					
MW-11SR-0623				Water					
MW-12S-0623				Water					
MW-13S-0623				Water					
MW-14S-0623				Water					
MW-15S-87-0623				Water					
MW-16S-0623	6-28-23	1134	G	Water			X		
MW-17S-0623	6-28-23	1157	G	Water			X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Posadas	6/28/23 1500	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 220253

Cooler Temperature(s) °C and Other Remarks:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Posadas, Daniel	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.2
Client Contact: Joshua Glosenger	Phone: (315) 296-9012	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page 2 of 5
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site: Reynolds Plant	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-18S-0623	6-27-23	1110	G	Water			X		
MW-19S-0623	6-27-23	1028	G	Water			X		
MW-20-85S-0623				Water					
MW-22-85S-0623	6-27-23	1340	G	Water			X		
MW-23-85S-0623				Water					
MW-26-S-0623	6-27-23	1010	G	Water			X		
MW-27S-0623	6-27-23	1058	G	Water			X		
MW-28S-0623	6-27-23	1020	G	Water			X		
MW-30S-0623				Water					
MW-31SR-0623				Water					
MW-33S-0623	6-27-23	1005	G	Water			X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Posadas	6/29/23 1500	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2201653

Cooler Temperature(s) °C and Other Remarks:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Posadas, Daniel	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.3
Client Contact: Joshua Glosenger	Phone: (315) 296-9612	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page 3 of 5
Company: CDM Smith Inc	PWSID:			Job #:

Address: 4 Highland Road Suite 1	Due Date Requested:
City: Massena	TAT Requested (days):
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No
Phone: 315-296-9012(Tel)	PO #: 110837
Email: glosengerjc@cdmsmith.com	WO #:
Project Name: Reynolds Facility	Project #: 18026950
Site: Reynolds Plant	SSOW#:

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-34S-0623	6-28-23	1314	G	Water			X		
MW-35SR-0623	6-28-23	1235	G	Water			X		
MW-36-0623	6-28-23	1244	G	Water			X		
MW-37-0623	6-28-23	1253	G	Water			X		
MW-38-0623	6-28-23	1305	G	Water			X		
MW-39S-0623				Water					
MW-40S-0623				Water					
MW-41-0623	6-28-23	1148	G	Water			X		
MW-42-0623	6-28-23	1232	G	Water			X		
MW-43-0623	6-28-23	1215	G	Water			X		
MW-43-0623-MS	6-28-23	1215	G	Water		X	X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Daniel Posadas	Date/Time: 6/29/23 1500	Company CDM Smith	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2202653

Cooler Temperature(s) °C and Other Remarks:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Posadas, Daniel	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.4
Client Contact: Joshua Glosenger	Phone: (315) 296-9012	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page 4 of 5
Company: CDM Smith Inc	PWSID:	Analysis Requested		Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			Preservation Codes:
City: Massena	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			Other:
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site: Reynolds Plant	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-43-0623-MSD	6-28-23	1215	G	Water		X	X		
MW-44-0623	6-28-23	1223	G	Water			X		
MW-45-0623				Water					
PZ-44-0623	6-29-23	0930	G	Water			X		
PZ-45-0623	6-28-23	0920	G	Water			X		
PZ-46-0623	6-28-23	0905	G	Water			X		
SLPWETE-0623				Water					
SLPWETW-0623				Water					
FDRAIN-0623	6-28-23	1322	G	Water			X		
MW-1201-0623BD	6-28-23	1115	G	Water			X		
MW-1202-0623BD				Water					

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Posadas	6/28/23 1500	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 220653

Cooler Temperature(s) °C and Other Remarks:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Posadas, Daniel	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.5
Client Contact: Joshua Glosenger	Phone: (315) 296-9012	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page 5 of 5
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site: Reynolds Plant	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free + Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-1203-0623FBW				Water					
MW-1204-0623FBW	6-27-23	1040	G	Water			X		
MW-1205-0623FBW				Water					

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Daniel Posadas	6/27/23 1500	CDM Smith			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2201653

Cooler Temperature(s) °C and Other Remarks:

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road, Suite 1
Massena, NY 13662
Phone: 315-296-9006
Fax: 514-591-3489 cell
Email: KingsleyRL@cdmsmith.com

Project Information

Project Name: Reynolds Plant Groundwater
Project Location: NY
Project # 110084
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCB	SUB-WAD Cyanide	Total Cyanide	Fluoride, Sulfate	Total Bottles	Sample Specific Comments
	MW-26S-0623	6-28-23	1010	Water	BC	X			X		
	PZ-44-0623	6-28-23	0930	Water	BC	X			X		
	PZ-45-0623	6-28-23	0920	Water	BC	X			X		
	MW-22-85S-0623	6-28-23	1340	Water	BC	X			X		
	MW-120A-0623 FAW	6-28-23	1040	Water	BC	X	X	X	X		
				Water							
				Water							
				Water							
				Water							
				Water							

	PCB	SUB-WAD Cyanide	Total Cyanide	Fluoride, Sulfate
Container Type	A	P	P	P
Preservative	A	E	E	A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Brad Cox	6-29-23 1400		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road, Suite 1
Massena, NY 13662
Phone: 315-296-9006
Fax: 514-591-3489 cell
Email: KingsleyRL@cdmsmith.com

Project Information

Project Name: Reynolds Plant Groundwater
Project Location: NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCB 2C	SUB-WAD Cyanide	Total Cyanide	Fluoride, Sulfate				Total # Bottles	Sample Specific Comments
	FDrain - 0623	6-28-23	1322	Water	BC				X					
	~~MW-34S - 0623 BC~~	~~6-28-23~~	~~1314 BC~~	Water	~~BC~~ BC									
	MW-38 - 0623	6-28-23	1305	Water	BC	X			X					
	MW-37 - 0623	6-28-23	1253	Water	BC	X			X					
	MW-36 - 0623	6-28-23	1244	Water	BC	X			X					
	MW-35SR - 0623	6-28-23	1235	Water	BC	X			X					
	MW-42 - 0623	6-28-23	1232	Water	BC	X			X					
	MW-44 - 0623	6-28-23	1223	Water	BC	X			X					
	MW-43 - 0623	6-28-23	1215	Water	BC	X			X					
	MW-43 - 0623 MS	6-28-23	1215	Water	BC	X			X					
	Container Type					A	P	P	P					
	Preservative					A	E	E	A					

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Candace Fox	6-28-23 1400		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road, Suite 1
Massena, NY 13662
Phone: 315-296-9006
Fax: 514-591-3489 cell
Email: KingsleyRL@cdmsmith.com

Project Information

Project Name: Reynolds Plant Groundwater
Project Location: NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottles

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCB	SUB-WAD Cyanide	Total Cyanide	Fluoride, Sulfate	Sample Specific Comments
	MW-43-0623 MSD	6-28-23	1215	Water	BC	X			X	
	MW-175-0623	6-28-23	1157	Water	BC	X			X	
	MW-41-0623	6-28-23	1148	Water	BC	X			X	
	MW-165-0623	6-28-23	1134	Water	BC	X			X	
	MW-185-0623	6-28-23	1110	Water	BC	X	X	X	X	
	MW-1201-0623 BD	6-28-23	1115	Water	BC	X	X	X	X	
	MW-275-0623	6-28-23	1058	Water	BC	X			X	
	MW-03-0623	6-28-23	1045	Water	BC	X	X	X	X	
	MW-195-0623	6-28-23	1028	Water	BC	X			X	
	MW-285-0623	6-28-23	1020	Water	BC	X			X	

Container Type: A P P P
Preservative: A E E A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Brad Cox	6-29-23 1400		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road, Suite 1
Massena, NY 13662
Phone: 315-296-9006
Fax: 514-591-3489 cell
Email: KingsleyRL@cdmsmith.com

Project Information

Project Name: Reynolds Plant Groundwater
Project Location: NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCB	SUB-WAD Cyanide	Total Cyanide	Fluoride, Sulfate					Sample Specific Comments	Total Bottles
	MW-1203-D1223 FB(W)	6-13-23	1053	Water	RL	2	2	2	2						
				Water											
				Water											
				Water											
				Water											
				Water											
				Water											
				Water											
				Water											
				Water											

Container Type: A P P P
Preservative: A E E A

Sample Filtration

☐ Done
☐ Lab to do

Preservation

☐ Lab to do

(Please Specify below)

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Randy Cox	6-13-23 1400		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road, Suite 1
Massena, NY 13662
Phone: 315-296-9006
Fax: 514-591-3489 cell
Email: KingsleyRL@cdmsmith.com

Project Information

Project Name: Reynolds Plant Groundwater
Project Location: NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

☐ These samples have been previously analyzed by Alpha

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCB	SUB-WAD Cyanide	Total Cyanide	Fluoride, Sulfate	Total Bottle	Sample Specific Comments
	MW-30S-0623	6-13-23	1010	Water	BC	X			X		
	MW-31SR-0623	6-13-23	1026	Water	BC	X			X		
	MW-23-85S-0623	6-13-23	1040	Water	BC	X			X		
	MW-14S-0623	6-13-23	1107	Water	BC	X			X		
	MW-1202-0623 BD	6-13-23	1112	Water	BC	X			X		
	MW-13S-0623	6-13-23	1125	Water	BC	X			X		
	MW-20855-0623	6-13-23	1143	Water	BC	X			X		
	MW-15S-87-0623	6-13-23	1154	Water	BC	X			X		
	MW-11SR-0623	6-13-23	1203	Water	BC	X			X		
	MW-12S-0623	6-13-23	1215	Water	BC	X	X	X	X		

	A	P	P	P
Container Type				
Preservative	A	E	E	A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Basil Coy	6-13-23		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road, Suite 1
Massena, NY 13662
Phone: 315-296-9006
Fax: 514-591-3489 cell
Email: KingsleyRL@cdmsmith.com

Project Information

Project Name: Reynolds Plant Groundwater
Project Location: NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCB	SUB-WAD Cyanide	Total Cyanide	Fluoride, Sulfate					Total Bottles	Sample Specific Comments
	MW-105-0623	6-13-23	0723	Water	BL	X			X						
	MW-105-0623 MS	6-13-23	0723	Water	BL	X			X						
	MW-105-0623 MSD	6-13-23	0723	Water	BL	X			X						
	SLP-WETW-0623	6-13-23	0801	Water	BL	X			X						
	MW-395-0623	6-13-23	0922	Water	BL	X	X	X	X						
	MW-395-0623 MS	6-13-23	0922	Water	BL		X	X							
	MW-395-0623 MSD	6-13-23	0922	Water	BL		X	X							
	MW-45-0623	6-13-23	0930	Water	BL	X			X						
	SLP-WETE-0623	6-13-23	0945	Water	BL	X			X						
	MW-405-0623	6-13-23	0955	Water	BL	X			X						

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Daniel Posadas	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.1
Client Contact: Joshua Glosenger	Phone: 315 296 9012	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin: NY	Page: Page 1 of 5
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site: Reynolds	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-03S-0623				Water					
MW10S-0623	6-13-23	0723	G	Water			X		
MW-10S-0623-MS	6-13-23	0723	G	Water		X	X		
MW-10S-0623-MSD	6-13-23	0723	G	Water		X	X		
MW-11SR-0623	6-13-23	1203	G	Water			X		
MW-12S-0623	6-13-23	1215	G	Water			X		
MW-13S-0623	6-13-23	1125	G	Water			X		
MW-14S-0623	6-13-23	1107	G	Water			X		
MW-15S-87-0623	6-13-23	1154	G	Water			X		
MW-16S-0623				Water					
MW-17S-0623				Water					

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Posadas	6/13/23 1331	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 2202652	Cooler Temperature(s) °C and Other Remarks:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Daniel Posadas	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.2
Client Contact: Joshua Glosenger	Phone: 315 296 9012	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin: NY	Page: Page 2 of 5
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site: Reynolds	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-18S-0623				Water					
MW-19S-0623				Water					
MW-20-85S-0623	6-13-23	1143	G	Water			X		
MW-22-85S-0623				Water					
MW-23-85S-0623	6-13-23	1040	G	Water			X		
MW-26-S-0623				Water					
MW-27S-0623				Water					
MW-28S-0623				Water					
MW-30S-0623	6-13-23	1010	G	Water			X		
MW-31SR-0623	6-13-23	1026	G	Water			X		
MW-33S-0623				Water					

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Daniel Posadas	Date/Time: 6/13/23 1331	Company: CDM Smith	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 2202652	Cooler Temperature(s) °C and Other Remarks:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Daniel Posadas	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.3
Client Contact: Joshua Glosenger	Phone: 315 296 9012	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin: NY	Page: Page 3 of 5
Company: CDM Smith Inc	PWSID:			Job #:

Address: 4 Highland Road Suite 1	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Massena	TAT Requested (days):		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No		
Phone: 315-296-9012(Tel)	PO #: 110837		
Email: glosengerjc@cdmsmith.com	WO #:		Other:
Project Name: Reynolds Facility	Project #: 18026950		
Site: Reynolds	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-34S-0623				Water					
MW-35SR-0623				Water					
MW-36-0623				Water					
MW-37-0623				Water					
MW-38-0623				Water					
MW-39S-0623	6-13-23	0922	G	Water		MS/MSD	X		
MW-40S-0623	6-13-23	0955	G	Water			X		
MW-41-0623				Water					
MW-42-0623				Water					
MW-43-0623				Water					
MW-43-0623-MS				Water					

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Posadas	6/13/23 1331				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 220652	Cooler Temperature(s) °C and Other Remarks:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Daniel Posadas	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.4
Client Contact: Joshua Glosenger	Phone: 315 296 9012	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin: NY	Page: Page 4 of 5
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site: Reynolds	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-43-0623-MSD				Water					
MW-44-0623				Water					
MW-45-0623	6-13-23	0930	G	Water			X		
PZ-44-0623				Water					
PZ-45-0623				Water					
PZ-46-0623				Water					
SLPWETE-0623	6-13-23	0945	G	Water			X		
SLPWETW-0623	6-13-23	0801	G	Water			X		
FDRAIN-0623				Water					
MW-1201-0623BD				Water					
MW-1202-0623BD	6-13-23	1112	G	Water			X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by: Daniel Posadas	Date/Time: 6/13/23 1331	Company: CDM Smith	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 220652

Cooler Temperature(s) °C and Other Remarks:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Daniel Posadas	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-92305-16707.5
Client Contact: Joshua Glosenger	Phone: 315 296 9012	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin: NY	Page: Page 5 of 5
Company: CDM Smith Inc	PWSID:	Analysis Requested		Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site: Reynolds	SSOW#:			

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-1203-0623FBW	6-13-23	1053	G	Water			X		
MW-1204-0623FBW				Water					
MW-1205-0623FBW				Water					

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Posadas	6/13/23 1331	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2202652 | Cooler Temperature(s) °C and Other Remarks:

Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-10S-0923 **SITE:SLP** **DATE** 9-19-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** JL

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	23.5	FEET
STATIC LEVEL	10.18	FEET

#1 VOLUME		**GALLONS**
#2 VOLUME		**GALLONS**
#3 VOLUME	6.7	**GALLONS**

AMOUNT PURGED IF < 3 VOLUMES 5 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
9/20	0943	2.11	0.676	7.42	13.8	210.1

STATIC AT SAMPLING 10.43 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
MS/MSD

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # SLPWETW-0923 **SITE:SLP** **DATE** _____

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** _____

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	NA	INCHES
TOTAL DEPTH	NA	FEET
STATIC LEVEL	NA	FEET

#1 VOLUME _____ **GALLONS**
#2 VOLUME _____ **GALLONS**
#3 VOLUME _____ **GALLONS**

AMOUNT PURGED IF < 3 VOLUMES _____ GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
9/20	1016	129	0.1795	6.84	16.1	0.3

STATIC AT SAMPLING _____ **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BATTERY POWER PUMP

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # MW-39S-0923 | SITE:SLP | DATE 9-19-23

PURGE METHOD: WATERRA | BAILER | GRUNDFOS | PERISTALTIC X | SAMPLED BY BC

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES
TOTAL DEPTH	18.50	FEET
STATIC LEVEL	6.68	FEET

#1 VOLUME		GALLONS
#2 VOLUME		GALLONS
#3 VOLUME	6.0	GALLONS

AMOUNT PURGED IF < 3 VOLUMES 3 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
9/20	1025	17	0.964	7.08	11.9	91.4

STATIC AT SAMPLING 6.65 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL #	MW-45-0923	SITE:SLP	DATE	9-19-23

PURGE METHOD: WATERRA | BAILER | GRUNDFOS | PERISTALTIC X — SAMPLED BY B

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES	#1 VOLUME	GALLONS
TOTAL DEPTH	17.85	FEET	#2 VOLUME	GALLONS
STATIC LEVEL	5.71	FEET	#3 VOLUME 6.1	GALLONS

AMOUNT PURGED IF < 3 VOLUMES 2.75 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
9/20	1031	2.03	1.564	7.21	13.7	143.8

STATIC AT SAMPLING 5.96 Feet

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
3D - 1036

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL # SLPWETE-0923 **SITE:SLP** **DATE** 9-20-23

PURGE METHOD: WATERRA BAILER GRUNDFOS PERISTALTIC X **SAMPLED BY** DP/JL

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	NA	INCHES	**#1 VOLUME**	**GALLONS**
TOTAL DEPTH	NA	FEET	**#2 VOLUME**	**GALLONS**
STATIC LEVEL	NA	FEET	**#3 VOLUME**	**GALLONS**

AMOUNT PURGED IF < 3 VOLUMES_____GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
9:20	1055	7.50	0.513	8.61	19.0	163.3

STATIC AT SAMPLING NA **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS
BATTERY POWER PUMP

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

Smith
listen. think. deliver.

Form Revision Date: 12/15/2015

MONITORING WELL SAMPLING SHEET

MONITOR WELL #	MW-40S-0923	**SITE:SLP**		**DATE**	9-19-23
PURGE METHOD:	WATERRA	BAILER	GRUNDFOS	PERISTALTIC X	**SAMPLED BY** RK

STATIC WATER LEVEL & PURGE VOLUMES

DIAMETER	2	INCHES	**#1 VOLUME**		**GALLONS**
TOTAL DEPTH	17.50	FEET	**#2 VOLUME**		**GALLONS**
STATIC LEVEL	3.32	FEET	**#3 VOLUME**	7.2	**GALLONS**

AMOUNT PURGED IF < 3 VOLUMES 4.75 GALLONS

FIELD PARAMETERS

DATE	TIME	TURBIDITY	CONDUCTIVITY	pH	TEMP	Eh
9/20	~~1105~~ 1101	3.97	1.183	7.33	16.6	180.2

STATIC AT SAMPLING 3.33 **Feet**

WELL CONDITION

	GOOD	NEEDS REPAIR
COVER		
LOCK		
CASING		
GROUT		
PAINT		

COMMENTS

C.F.	PIPE SIZE
0.08	1.25"
0.17	2"
0.66	4"
1.5	6"

1 VOLUME = (TOTAL DEPTH - STATIC LEVEL) X C.F.

COC ✓
3V

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Daniel Posadas	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-94690-17369.1
Client Contact: Joshua Glosenger	Phone: 315-296-9006	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin: NY	Page: Page 1 of 1
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide by 1677	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-10S-0923	9/20/23	0943	G	Water			X		
MW-10S-0923-MS	9/20/23	0943	G	Water		X	X		
MW-10S-0923-MSD	9/20/23	0943	G	Water		X	X		
MW-39S-0923	9/20/23	1025	G	Water			X		
MW-40S-0923	9/20/23	1101	G	Water			X		
MW-45-0923	9/20/23	1031	G	Water			X		
SLPWETE-0923	9/20/23	1055	G	Water			X		
SLPWETW-0923	9/20/23	1016	G	Water			X		
MW-1206-0923BD	9/20/23	1036	G	Water			X		
MW-1207-0923FBW	9/20/23	1047	G	Water			X		
MW-1208-0923FBW				Water					

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Posadas	9/20/23 1400				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 2137288	Cooler Temperature(s) °C and Other Remarks:

LOC - DL

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road, Suite 1
Massena, NY 13662
Phone: 315-296-9003
Fax:
Email: glosengerjc@cdmsmith.com

Project Information

Project Name: Reynolds September Groundwater Sampling 2023
Project Location: NY
Project # 110051
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCBs 8082	F-300	SO4-300	Total Bottle	Sample Specific Comments
	MW-105-0923	9-20-23	0943	water	BC	X	X	X		
	MW-105-0923 MS	9-20-23	0943	water	BC	X	X	X		
	MW-105-0923 MSD	9-20-23	0943	water	BC	X	X	X		
	SLPWETW-0923	9-20-23	1016	water	BC	X	X	X		
	MW-395-0923	9-20-23	1035	water	BC	X	X	X		
	MW-45-0923	9-20-23	1031	water	BC	X	X	X		
	MW-1201A-0923BD	9-20-23	1036	water	BC	X	X	X		
	SLPWETE-0923	9-20-23	1055	water	BC	X	X	X		
	MW-405-0923	9-20-23	1101	water	BC	X	X	X		
	MW-1207-0923FBW	9-20-23	1047	water	BC	X	X	X		

GRL 9/14/23

YSI # 5 Turbidity meter #4

pH 4 - 4.13 - 4.00
7 - 7.13 - 7.01
10 - 9.98 - 10.02

ORP 220mV - 218.7 - 220.2

cond 1.413 - 1.267 - 1.413

Turbidity <0.10 pass
20 pass
100 pass
800 pass

Reynolds 9/20/23

YSI # 5 Turbidity meter #4

pH 4 - 3.83 - 4.00
7 - 6.95 - 7.01
10 - 10.14 - 10.03

ORP 220mV - 224.1 = 220.0

cond 1.413 - 1.497. 1.413

Turbidity <0.10 pass
20 pass
100 pass
800 pass

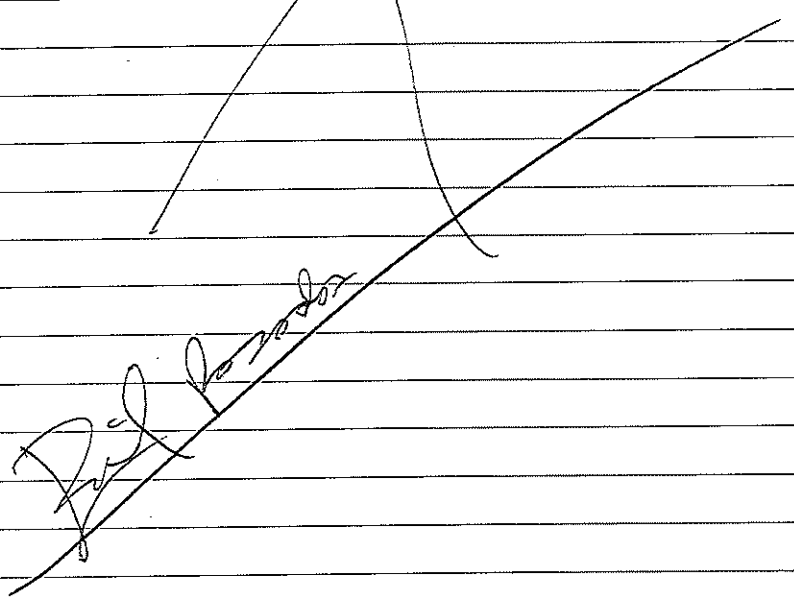
Rite in the Rain

GRL 9/14/23

Samples collected - TCN, FL, SO_4, Am-Nit, PCB

MW-208B - MS/MSD / ~~BD~~ DP

MW-18 03 BD

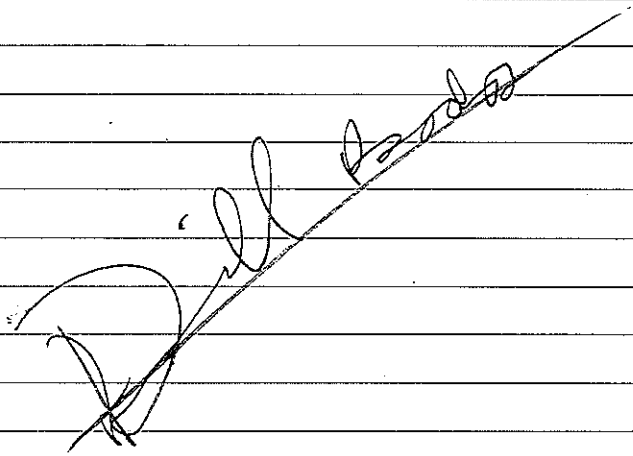


Reynolds 9/20/23

Samples collected - PCB, Fl, FCN, Sulfate

MW-10S - MS/MSD

MW-48 - BD



Rite in the Rain

CDM Smith
listen. think. deliver.

(Page 1 of 1)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/19/23	1) FCN	Y	8:18	
Well ID: MW-03S	2) Flouride	Y	8:18	
Sampler: JLG & EDP	3) Sulfate	Y	8:18	
	4) PCBs	Y	8:18	
	5)			

Pre-purge Water Elevation: 6.09' (BTIC)		Temp: 28°	°F
Intake Elevation: ~~10~~ 20' (4' limit) (BTIC)	Final Water Elevation: 16.43 (BTIC)	Wind: 10	MPH
Screened Interval: 15-25 (BTIC)	Pump used (Circle one)	Direction: South East ↘	
TIC Elevation: 225.89 (FT)	Waterra (Peristaltic) Grundfos Bailer	YSI #: Rental 3375	
Depth of Well: 25 (FT)	Turbidimeter #: 5		

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
8:58	6.82	42.6	—	150	7.00	6.4	0.511	196.0	3.20	
9:03	7.56	36.0	0.74	150	7.58	7.3	0.525	179.7	2.17	
9:08	8.70	35.1			7.70	7.1	0.522	175.8	—	
9:14	12.00	45.5		450	7.77	10.3	0.506	170	—	
9:21	13.80	32.3			8.86	10.3	0.511	166.6	—	
9:42	16.8									
9:07	16.43	41.5		110	7.65	7.3	0.567	159.3	14.7	Sample

12/20/23

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5
1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.				

Comments

less than 10 ft of water above screen. Draw down greater than 1 ft. Upping pumping rate to 450 - 500 mL/min.
12/20/23 - low recovery, lowering intake
3.5 gal purged

CDM Smith
listen. think. deliver.

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-12-23	1) FCN	Y	13:30	
Well ID: MW-10S	2) Flouride	Y	13:30	
Sampler: D. Posada / B. Cox	3) Sulfate	Y	13:30	
	4) PCBs	Y	13:30	
	5)			

Pre-purge Water Elevation: 5.93 (BTIC)
Intake Elevation: 18.36' (BTIC)
Screened Interval: 12.5-22.5 (BTIC)
TIC Elevation: 216.65 (FT)
Depth of Well: ~~33.64~~ 23.36 (FT)

Final Water Elevation: 6.31 (BTIC)
Pump used (Circle one)
Waterra (Peristaltic) Grundfos Bailer
Turbidimeter #: 5

Temp: 32 °F
Wind: 15-25 MPH
Direction: SW
YSI #: 5

Time	Water Level (ft btic)	DO %/~~(mg/L)~~	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
9:47	~~7.93~~ 7.48	43	-	125	7.21	6.3	0.529	207	1.78	
9:52	7.95	42	0.47	125	7.26	6.5	0.530	205.1	1.07	
9:57	8.70	41	0.75	125	7.3	7.0	0.537	203.9	1.12	
10:02	9.09	40	0.39	130	7.33	6.8	0.537	203.3	2.3	Change Pump Battery
10:07	9.49	39	0.3	125	7.34	6.5	0.531	202.7	1.95	
10:12	9.96	37	0.47	125	7.34	7.0	0.538	201.8	0.99	
10:17	10.38	36	0.42	150-125	7.37	6.9	0.538	200.8	2.48	Turn Pump Down
10:22	10.72	35	0.5	125	7.39	6.8	0.536	199.8	1.81	
10:27	11.01	34	0.29	130	7.35	7.2	0.541	199.0	2.01	
10:32	11.25	34	0.24	125	7.39	6.8	0.537	199.2	1.86	
10:37	11.43	33	0.18	120	7.38	6.8	0.539	199.2	1.90	
10:42	11.64	33	0.21		7.39	7.0	0.542	199	1.72	
13:30	6.31	42	-	-	7.54	7.0	0.355	130.1	1.34	Sample Parameters

Volume Calculation

PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Stabization achieved except drawdown, insufficat volume to collect sample. letting recharge and collecting sample
2.25 gallons purged
WL @ sample 6.31' 1245 FBW 13:48

CDM Smith
listen. think. deliver.

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/14/23	1) FCN	Y	15:31	
Well ID: MW-11SR	2) Flouride	Y	15:31	
Sampler: JCG & EDP	3) Sulfate	Y	15:31	
	4) PCBs	Y	15:31	
	5)			

Pre-purge Water Elevation: ~~6.59~~ 7.7	(BTIC)	Final Water Elevation: 9.6	(BTIC)	Temp: 25	°F
Intake Elevation: ~~24~~ 19.5 (8' limit)	(BTIC)	Pump used (Circle one)		Wind: 7	MPH
Screened Interval: 9-29	(BTIC)	Waterra (Peristaltic) Grundfos Bailer		Direction: North East ↗	
TIC Elevation: 248.04	(FT)	Turbidimeter #: 5		YSI #: Rental	
Depth of Well: ~~29~~ 24.6	(FT)				

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
10:44	8.43	56.5	—	240	7.41	7.9	0.896	139.7	8.16	
10:49	9.30	52.7	0.87	150	7.29	7.6	0.873	140.1	5.99	
10:54	9.90	52.3	0.40	150	7.27	7.5	0.875	142.6	5.72	
10:59										
15:31	9.6	41.2		150	7.36	7.8	1.064	133.7	3.61	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Initial wl less than 10 ft above screen. Upping to 500mL/min
check construction log
Purged 8.25 gallons
FD @ 15:49 (1213)

CDM Smith

listen. think. deliver.

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/14/23 - 12/15/23	1) FCN	Y	9:51	
Well ID: MW-12S	2) Flouride	X	9:51	
Sampler: JCG & EDP	3) Sulfate	Y	9:51	
	4) PCBs	Y	9:51	
	5)WAD/TCN	Y	9:51	

Pre-purge Water Elevation: 5.52 (BTIC)	Final Water Elevation: 5.61 (BTIC)	Temp: 17	°F
Intake Elevation: 14' (8' limit) (BTIC)	Pump used (Circle one)	Wind: 6	MPH
Screened Interval: 9-19 (BTIC)	Waterra (Peristaltic) Grundfos Bailer	Direction: North East ↗	
TIC Elevation: 247.08 (FT)	Turbidimeter #: 4	YSI #: Rental	
Depth of Well: 19 (FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
9:28	6.13	57.8	—	120	7.16	2.5	3.321	208.3	2.14	
9:33	6.89	53.4	0.76	150	7.27	4.5	3.354	197.1	2.00	
9:38	7.44	49.1	0.55	150	7.27	4.5	3.336	196.2	2.08	
~~9:43~~	—	47.5		250	7.26	6.3	3.300	194.4	2.52	upped to 500 mL/min
9:48	9.26									
10:03	12.73	90.6		450-800	7.21	9.6	3.325	188.2		
9:51	5.61	66.7	—	150	7.46	9.1	3.020	148.4	9.41	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

MS/MSD and BD at this location
Initial WL less than 10' above screen, First 3 reading WL dropped more than 1ft. upping purge to 500mL/min until Dry.
Purge 3.6 gal

CDM Smith
listen. think. deliver.

(Page 1 of 1)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/18/23	1) FCN		~~11:10~~	~~12:01~~ 11:10
Well ID: MW-13S	2) Flouride		11:10	
Sampler: JCG & EDP	3) Sulfate		11:10	
	4) PCBs		11:10	
	5)			

Pre-purge Water Elevation: 2.95 (BTIC)		Temp: 45°	°F
Intake Elevation: 13.5 (BTIC)	Final Water Elevation: 3.30 (BTIC)	Wind: 5	MPH
Screened Interval: 8.5-18.5 (BTIC)	Pump used (Circle one)	Direction: South ↓	
TIC Elevation: 245.17 (FT)	Waterra (Peristaltic) Grundfos Bailer	YSI #: 5	
Depth of Well: 18.77 (FT)	Turbidimeter #: 5		

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
10:30	3.07	50	—	175	7.26	7.4	3.984	234.0	1.27	
10:35	3.04	52.0	+0.03	150	7.20	8.4	3.875	275.2	0.19	
10:40	3.22	52	—	150	7.22	8.4	3.522	292.3	0.33	
10:45	3.22	54	~~-0.02~~	150	7.28	8.4	2.920	300.3	0.96	
10:50	3.30	54	-0.02	150	7.31	8.3	2.582	301.9	0.53	
10:55	3.30	55	-0.01	150	7.30	8.3	2.346	303.6	0.86	
11:00	3.30	59	—	150	7.25	8.3	2.104	305.2	0.68	
11:05	3.30	59	—	150	7.23	8.3	1.940	305.4	0.52	
11:10	3.30	59	—	150	7.21	8.3	1.712	304.4	0.96	# sample
12:01										

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Stabilization except cond. but its close and consistent trend. taking sample. 1.5 gallon purge

CDM Smith
listen. think. deliver.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/18/23	1) FCN	Y	12:01	
Well ID: MW-14S	2) Flouride	Y	12:01	
Sampler: JCG & EDP	3) Sulfate	Y	12:01	
	4) PCBs	Y	12:01	
	5)			

Pre-purge Water Elevation: 5.30 (BTIC)			Temp: 46°	°F
Intake Elevation: 15 (BTIC)	Final Water Elevation: 12.93 (BTIC)		Wind: 10	MPH
Screened Interval: 10.15-20.15 (BTIC)	Pump used (Circle one)		Direction: South West	
TIC Elevation: 247.97 (FT)	Waterra (Peristaltic) Grundfos Bailer		YSI #: 5	
Depth of Well: 20.15 (FT)	Turbidimeter #: 5			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
9:16	6.62	67	—	160	7.25	9.3	1.017	174.6	1.46	
9:21	7.70	63		150	7.34	9.4	1.040	199.7	1.61	
9:26	8.68	59		150	7.37	9.3	1.041	217.6	2.00	
9:31	10.60									
9:37	10.80									
9:45	11.10									
9:50	12.51									
9:55	12.92									
10:00	14.71									
12:01	12.93	46	—	150	~~7.51~~	9.6	1.068	182	~~2.25~~ 6.48	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Drawdown @ 150 not suitable for low flow stabilization. Upping to 450-500 mL/min

4.25 gal

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listen. think. deliver.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/20/23	1) FCN	Y	13:33	
Well ID: MW-15S-87	2) Flouride	Y	1335	
Sampler: JCG & EDP	3) Sulfate	Y	1335	
	4) PCBs	Y	1339	
	5)			

Pre-purge Water Elevation: 4.57 (BTIC)	Final Water Elevation: 4.90 (BTIC)	Temp: 32°	°F
Intake Elevation: 23' (BTIC)	Pump used (Circle one)	Wind: 7	MPH
Screened Interval: -23-33 (BTIC)	Waterra (Peristaltic) Grundfos Bailer	Direction: South West	
TIC Elevation: 248.72 (FT)	Turbidimeter #: 5	YSI #: 5	
Depth of Well: 26.45 (FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
13:01	4.21	67.4	—	150	7.70	6.6	0.779	96.0	5.01	
13:06	4.26	68.1	-0.05	150	7.56	7.2	0.769	95.4	4.00	
13:11	4.31	65.0	-0.05	160	7.51	7.4	0.766	96.7	3.61	
13:16	4.76	67.0	-0.39	150	7.51	7.0	0.766	97.7	3.68	
13:21	4.87	65.0	-0.17	140	7.50	6.9	0.765	98.4	3.17	
13:26	4.87	64.8	0	146	7.50	7.0	0.763	98.6	3.25	
13:31	4.90	63.7		150	7.49	7.0	0.759	98.8	3.58	Sample collected

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Stabilization achieved. Sample @ 13:33

1.25 gal purge

CDM Smith

listen. think. deliver.

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Project: Reynolds Groundwater Sampling	
Date: 12-14-23	
Well ID: MW-16S	
Sampler: Basil COK	

Analyte Collected	(Y/N)	Time	Note
1) FCN	Y	0955	
2) Flouride	Y	0955	
3) Sulfate	Y	0955	
4) PCBs	Y	0955	
5)	Y		

Pre-purge Water Elevation: ~~18.52~~ 18.58 (BTIC)
Intake Elevation: 20.0 (BTIC)
Screened Interval: 15.08-25.08 (BTIC)
TIC Elevation: 228.68 (FT)
Depth of Well: 25.59 (FT)

Final Water Elevation: 18.58 (BTIC)
Pump used (Circle one)
Waterra Peristaltic Grundfos Bailer
Turbidimeter #: 4

Temp: 19 °F
Wind: 10-15 MPH
Direction: SW
YSI #: 5

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
~~0955~~ 0935	18.58	36	0	200	8.31	6.2	0.649	103.5	14.2	
~~0950~~ 0940	18.58	31	0	175	7.81	10.2	0.758	152.6	8.0	
~~0946~~ 0945	18.58	29	0	175	7.22	10.4	0.762	166.3	5.7	
~~0950~~ 0950	18.58	39	0	200	7.78	10.8	0.772	176.4	4.2	
~~0950~~ 0945	18.58	37	0	200	7.78	10.7	0.771	181.5	3.7	
0950	18.58	37	0	200	7.75	10.9	0.777	187.0	3.5	
0955	18.58	35	0	200	7.74	10.8	0.783	189.3	2.5	
1000										

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

-.10

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/19/23	1) FCN	Y	11:42	
Well ID: MW-17S	2) Flouride	Y	11:42	
Sampler: JCG/EDP	3) Sulfate	Y	11:42	
	4) PCBs	Y	11:42	
	5)			

Pre-purge Water Elevation: 9.20 (BTIC)	Final Water Elevation: 10.08 (BTIC)	Temp: 27	°F
Intake Elevation: 15.4 (BTIC)	Pump used (Circle one)	Wind: 11	MPH
Screened Interval: 10.4-20.4 (BTIC)	Waterra ~~Peristaltic~~ Grundfos Bailer	Direction: South East ↘	
TIC Elevation: 226.65 (FT)	Turbidimeter #: 5	YSI #: 5	
Depth of Well: 20.4 (FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
11:09	9.35	56.3	—	150	7.59	3.9	1.281	146.1	2.62	
11:14	9.50	65.4	+0.15	150	7.33	5.5	0.975	144.8	2.66	
11:19	9.18	65.0	+0.32	150	7.27	5.7	0.948	145.1	2.87	
11:24	9.34	68.9	-0.16	150	7.24	5.1	0.937	145.8	1.86	
11:29	9.48	68.4	-0.14	120	7.23	5.0	0.929	145.4	1.89	Battery died
11:34	9.54	66.3	-0.06	130	7.19	4.8	0.917	144.4	2.72	
11:39	9.67	66.4	-0.13	130	7.18	5.0	0.908	142.7	2.00	Sample

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Stabilization achieved, collecting sample @ 11:42

1.5 gall purged

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listen. think. deliver.

Project: Reynolds Groundwater Sampling	
Date: 12-13-23	
Well ID: MW-18S	
Sampler: Basil Cox	

Analyte Collected	(Y/N)	Time	Note
1) FCN	Y	1415	
2) Flouride	Y	1415	
3) Sulfate	Y	1415	
4) PCBs	Y	1415	
5)			

Pre-purge Water Elevation:	18.19	(BTIC)
Intake Elevation:	19.55	(BTIC)
Screened Interval: 14.55-24.55		(BTIC)
TIC Elevation: 226.67		(FT)
Depth of Well: 25.44		(FT)

Final Water Elevation: 18.23 (BTIC)

Pump used (Circle one)
Waterra (Peristaltic) Grundfos Bailer

Turbidimeter #: 4

Temp:	30	°F
Wind:	10-20	MPH
Direction:	WNW	
YSI #:	5	

Time	Water Level (ft btic)	DO (~~mg/L~~ %)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1345	18.23	86	0.04	200	7.79	10.0	0.713	197.5	0.02	
1350	18.23	87	0	205	7.66	10.2	0.719	224.4	0.02	
1355	18.23	91	0	205	7.61	10.2	0.724	232.5	0.02	
1400	18.23	92	0	205	7.67	10.1	0.725	237.3	0.02	
1405	18.23	94	0	205	7.63	10.0	0.741	234.7	0.02	
1410	18.23	103	0	205	7.60	9.9	0.758	235.3	0.02	
1415	18.23	101	0	205	7.59	9.7	0.762	232.1	0.02	
1420										

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Stabilized well. Would not pump below screen.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/19/23	1) FCN		10:23	12/20/23
Well ID: MW-19S	2) Flouride		10:23	
Sampler: JCG / EDP	3) Sulfate		10:23	
	4) PCBs		10:23	
	5)			

Pre-purge Water Elevation:	12.13	(BTIC)	Final Water Elevation:	(BTIC)	Temp: 26 °F
Intake Elevation:	14	(BTIC)	Pump used (Circle one)		Wind: 11 MPH
Screened Interval: 9-19		(BTIC)	Waterra / Peristaltic / Grundfos / Bailer		Direction: South East
TIC Elevation: 226.55		(FT)	Turbidimeter #: 5		YSI #: 5
Depth of Well: 19.4		(FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
14:33	12.54	82.1	–	150	7.56	7.5	0.832	162.1	1.57	
14:38	12.71	84.4	0.17	150	7.40	6.8	0.835	162.5	1.60	
14:43	12.87	84.2	0.16	160	7.34	6.9	0.827	162.8	1.79	
14:48	13.33	90.6	0.46	160	7.32	7.5	0.825	16	1.86	
10:22	13.22	43.7		140	7.47	8.7	0.916	130.7	1.95	12/20/23 sample

Volume Calculation

PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Water level in screen. At 14:48 upped flow to 480 mL/m. 1.5 gal purged

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: ~~12/26/23~~ 12/27/23	1) FCN		8:38	12/28/23
Well ID: MW-20-85S	2) Flouride			
Sampler: JCG/ EDP	3) Sulfate			
	4) PCBs			
	5)			

Pre-purge Water Elevation: ~~10.22~~ 10.52 (BTIC)
Intake Elevation: ~~25.5'~~ 15.5 (BTIC)
Screened Interval: ~~20.5-30.5 (GL)~~ (BTIC)
TIC Elevation: ~~223.1~~ (GL) (FT)
Depth of Well: ~~30.5~~ 18.2 (FT)

Final Water Elevation: 12.31 (BTIC)
Pump used (Circle one)
~~Waterra~~ (Peristaltic) Grundfos Bailer
Turbidimeter #: 5

Temp: 29° °F
Wind: 2 MPH
Direction: west ←
YSI #: Rental 3335

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
11:38	11.32	84.3	—	300	11.91	8.2	3.553	102.6	169	
11:43	12.50	93.4	1.18	140	12.23	9.8	3.909	61.3	107	
11:48	13.40	61.5	0.9	120	12.31	8.0	3.088	48.7	51.8	
08:38	12.31	#1	"	110	12.37	7	1.948	-14.6	263	Sample

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5
1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.				

Comments

~~First drop 10 feet of water above screen~~
Drawdown over 1 ft, upping to 450-500 mL/min
purging to intake elevation. purged 1 gal

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(Page 1 of)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-2/-23	1) FCN		10:40	12/23/23
Well ID: MW-22-85S	2) Flouride		10:40	
Sampler: S. Cox	3) Sulfate		10:40	
	4) PCBs		10:40	
	5)			

Pre-purge Water Elevation: 6.02 (BTIC)
Intake Elevation: 23 (BTIC)
Screened Interval: 20.3-30.3 (GL) (BTIC)
TIC Elevation: 244.5 (GL) (FT)
Depth of Well: 32.88 (FT)

Final Water Elevation: (BTIC)
Pump used (Circle one)
Waterra Peristaltic Grundfos Bailer
Turbidimeter #: 4

Temp: 17 °F
Wind: NW 5-10 MPH
Direction: N
YSI #: 5

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1030	7.53	54	1.51	140	7.51	5.6	1.098	114.5	11.5	
1035	7.95	52	0.41	125	7.45	5.2	1.091	136.9	9.5	
1040	8.41	49	0.46	125	7.47	5.5	1.094	152.7	8.2	
1045	8.85	52	0.44	125	7.41	5.0	1.095	162.4	9.1	
1050	9.0	44	0.15	125	7.39	4.5	1.077	166.5	7.9	
1060	13.41	36.1		140	7.37	3.9	1.723	196.7	17.1	Sample collected 12/23/23

Volume Calculation

PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

pumped to bottom of screen 4.5 gal

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(Page 1 of)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/21/23	1) FCN	Y	0932	
Well ID: MW-23-85S	2) Flouride	Y	0932	
Sampler: JCB & EDP	3) Sulfate	Y	0932	
	4) PCBs	Y	0932	
	5)			

Pre-purge Water Elevation: 4.71 (BTIC)
Intake Elevation: (BTIC)
Screened Interval: 22.8-32.8 (BTIC)
TIC Elevation: 244.7 (FT)
Depth of Well: ~~83.03~~ 33 (FT)

Final Water Elevation: 8.54 (BTIC)
Pump used (Circle one)
Waterra (Peristaltic) Grundfos Bailer
Turbidimeter #: 5

Temp: 21° °F
Wind: 5 MPH
Direction: South
YSI #: 3335

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
13:40	5.07	78.4	–	150	7.60	5.8	1.261	123.1	0.19	
13:45	6.24	55.5	1.17	175	7.33	7.1	1.256	126.2	1.16	
13:50	7.12	53.6	0.88	175	7.27	7.4	1.258	125.5	0.02	
13:55	8.00	51.7	0.88	160	7.25	7.3	1.259	126.4	0.46	Upping purge rate
					475					
0932	8.54	64.6		175	7.25	3.0	1.269	180.3	2.31	Sample collected
										Sampled using
										Waterra pump

Volume Calculation

PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

4.29 gallons were purged (1 volume)
Waterra pump should be used in the future bc peristaltic pump cannot draw enough water to purge

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-14-23	1) FCN	Y	1400	
Well ID: MW-26S	2) Flouride	Y	1400	
Sampler: Basil Cox	3) Sulfate	Y	1400	
	4) PCBs	Y	1400	
	5)			

Pre-purge Water Elevation:	10.22	(BTIC)	Final Water Elevation:	14.50 (BTIC)	Temp: 23 °F
Intake Elevation:	24.5	(BTIC)	Pump used (Circle one)		Wind: 10-15 MPH
Screened Interval: 19.5-29.5		(BTIC)	Waterra Peristaltic Grundfos Bailer		Direction: SW
TIC Elevation: 225.14		(FT)	Turbidimeter #: 4		YSI #: 5
Depth of Well: 30.06		(FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1035	12.08	38	1.88	175	7.38	11.4	0.644	184.5	20.4	
1040	13.11	37	1.03	125	7.39	11.2	0.641	196.2	18.4	
1045	13.55	35	0.44	~~150~~ 125	7.40	10.6	0.650	206.5	16.4	
1050	13.87	32	0.32	125	7.38	10.4	0.650	212.0	14.4	
1055	14.29	37	0.33	125	7.35	10.9	0.657	215.2	13.2	
1100	14.58	36	0.29	125	7.35	11.0	0.641	217.5	12.3	
1105	15.03	34	0.45	125	7.32	11.2	0.646	217.5	11.2	
1110										
1115				~~200~~ 175						
1400		43		200	7.43	7.6	0.646	217.4	4.3	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Increase flow to 350 ml/min to draw down to bottom of screen. 1105

5.5 gal. purged to bottom of screen. 1205

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(Page 1 of)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/19/23	1) FCN		09:45	12/20/23
Well ID: MW-27S	2) Flouride		09:45	
Sampler: JCG & EDI	3) Sulfate		09:45	
	4) PCBs		09:45	
	5)			

Pre-purge Water Elevation: 9.36 (BTIC)			Temp: 27	°F
Intake Elevation: 19.81 (13.8 limit) (BTIC)	Final Water Elevation: (BTIC)		Wind: 11	MPH
Screened Interval: 14.8-24.8 (BTIC)	Pump used (Circle one)		Direction: South east	
TIC Elevation: 229.79 (FT)	Waterra (Peristaltic) Grundfos Bailer		YSI #: Rental 3335	
Depth of Well: 24.91 (FT)	Turbidimeter #: 5			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
10:03	9.78	65.2	—	125	7.20	6.7	7.26	218.9	10.4	
10:08	10.60	76.3	0.82	140	7.20	6.7	7.26	216.3	10.8	
10:13	11.85	77	1.25	140	7.20	7.3	7.25	219.6	11.4	
* 09:45	9.30	45.1		140	7.23	8.3	8.15	186.6	3.70	12/20/23 Sample

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

New peristaltic tubing installed. Less than 10 ft of water above screen. Drawdown greater than 1 ft. Upping to 450-500 mL/min.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-13-23	1) FCN	Y	1103	
Well ID: MW-28S	2) Flouride	Y	1103	
Sampler: Basil Cox	3) Sulfate	Y	1103	
	4) PCBs	Y	1105	
	5)			

Pre-purge Water Elevation:	12.0	(BTIC)	Final Water Elevation:	12.15 (BTIC)	Temp: 30 °F
Intake Elevation:	21.0	(BTIC)	Pump used (Circle one)		Wind: ~~ENE~~ 10-20 MPH
Screened Interval: ---	16-26	(BTIC)	Waterra Peristaltic Grundfos Bailer		Direction: NNW
TIC Elevation: ---		(FT)	Turbidimeter #: 4		YSI #: 5
Depth of Well: 27.56		(FT)			

Time	Water Level (ft btic)	DO (~~mg/L~~ %)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1023	12.15	21	0.15	130	7.93	8.2	0.727	281.5	2.70	
1028	12.15	19	0	130	7.99	8.2	0.727	254.0	0.78	
1033	12.15	17	0	130	8.02	8.6	0.733	238.8	0.02	
1038	12.15	16	0	130	8.05	8.7	0.737	220.0	0.02	
1043	12.15	14	0	130	8.07	8.5	0.729	215.5	0.02	
1048	12.15	14	0	130	8.07	8.5	0.732	211.7	0.02	
1053	12.15	14	0	130	8.07	8.2	0.726	204.7	0.02	
1058	12.15	13	0	130	8.08	8.5	0.731	208.6	0.02	
1103	12.15	13	0	130	8.10	8.5	0.729	209.4	0.02	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

1.5 gal purged

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/13/23	1) FCN	Y	12:05	
Well ID: MW-30S	2) Flouride	Y	12:05	
Sampler: JLG & EDP	3) Sulfate	Y	12:05	
	4) PCBs	Y	12:05	
	5)			

Pre-purge Water Elevation: 7.4' (BTIC)			
Intake Elevation: 15 ft (11 ft into) (BTIC)	Final Water Elevation: 5.80 (BTIC)	Temp: 31	°F
Screened Interval: 10-20 (BTIC)	Pump used (Circle one)	Wind: 11	MPH
TIC Elevation: 235.05 (FT)	Waterra (Peristaltic) Grundfos Bailer	Direction: East →	
Depth of Well: 20 (FT)	Turbidimeter #: 5	YSI #: Rental	

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
11:05	5.75	52.7	—	200	7.07	7.1	1.154	119.5	—	
11:10	5.74	50.3	-0.01	150	6.96	6.5	1.717	119.6	18.2	
11:15	5.74	48.5	0	150	6.94	6.8	1.160	118.7	11.9	
11:20	5.81	47.3	-0.05	150	6.92	6.4	1.057	115.7	5.06	
11:25	5.78	46.3	+0.03	150	6.90	6.2	1.042	115.5	3.72	
11:30	5.78	45.3	0	150	6.89	6.1	0.992	113.9	2.29	
11:35	5.78	44.6	0	150	6.87	6.1	0.925	109.5	3.35	
11:40	5.80	44.5	0.02	150	6.87	6.2	0.578	109.3	2.66	
11:45	5.80	44.8	0	150	6.86	6.1	0.540	108.2	2.81	
11:50	5.80	46.1	0	130	6.87	5.9	0.816	107.6	2.69	
11:55	5.80	46.9	0	130	6.86	6.2	0.795	107.4	1.80	
12:00 ✱	5.80	47.8			6.85	5.9	0.751	107.2	2.38	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5
1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.				

Comments

Stabilization achieved
purge vol 2.6 gal
Sampled @ 12:05
FBW (1216) taken @ 12:15

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/20/23	1) FCN	X	12:57	12/21/23
Well ID: MW-31SR	2) Flouride	X	12:27	↓
Sampler: JCG / EDP	3) Sulfate	X	12:27	
	4) PCBs	X	12:29	
	5)			

Pre-purge Water Elevation: 11.25 (BTIC)	Final Water Elevation: (BTIC)	Temp: 31	°F
Intake Elevation: 21-22' (BTIC)	Pump used (Circle one)	Wind: 3	MPH
Screened Interval: 12.2-22.2 (BTIC)	Waterra Peristaltic Grundfos Bailer	Direction: South east ↓	
TIC Elevation: 224.28 (FT)	Turbidimeter #: 5	YSI #: Rental 3335	
Depth of Well: 29.89 (FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
~~12:14~~ 12:17	12.18	36.2	–	175	7.82	7.4	0.780	120.8	19.6	
12:17	12.9	37.1		150	7.80	7.4	0.780	118.2	10.3	
12:22	13.25	33.1		150	7.81	7.5	0.779	116.2	8.07	upping rate
~~18:~~										
17:50	21.8									
11:40	12.6	30.9	–		7.53	6.3	0.855	113.8	5.35	12/21/23

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

less than 10 ft of water above screen, Draw down into screen, upping purge rate BD-1211 taken

Purge 1.25 gal

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/5/24	1) FCN	Y	12:27	
Well ID: MW-33S	2)			
Sampler: SCG / EDP	3)			
	4)			
	5)			

Pre-purge Water Elevation: 12.93 (BTIC)

Intake Elevation: ~~24.35~~ 22.91 (18.54) (BTIC)

Screened Interval: 18.54-28.54 (BTIC)

TIC Elevation: 225.74 (FT)

Depth of Well: 29.38 (FT)

Final Water Elevation: 22.7 (BTIC)

Pump used (Circle one)

Waterra (Peristaltic) Grundfos Bailer

Turbidimeter #: 4

Temp: 43° °F

Wind: 13 MPH

Direction: NNW East

YSI #: Rental

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
11:01	13.76	62.2	—	100	7.68	9.4	1.769	126.3	5.96	
11:06	14.48	51.0	-0.72	140	7.35	10.4	1.817	128.0	4.49	
11:11	15.40	47.4		146	7.26	10.7	1.821	128.0	3.96	
12:27	22.7	66.2	—	100	7.45	10.4	1.880	116.3	1.07	

Volume Calculation

PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Less than 10 ft above screen. More than 1 ft drawdown

Varying pumping rate to 450-500 mL min until dry

1.5 gal purge

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/20/23	1) FCN	X	8:54	
Well ID: MW-34S	2)			
Sampler: JCG/EDP	3)			
	4)			
	5)			

Pre-purge Water Elevation: 12.56 (BTIC)	Final Water Elevation: 17.1 (BTIC)	Temp: 26°	°F
Intake Elevation: ~~14'~~ 22.5' (BTIC)	Pump used (Circle one)	Wind: 0	MPH
Screened Interval: 17.67-27.67 (BTIC)	Waterra (Peristaltic) Grundfos Bailer	Direction: 0	
TIC Elevation: 225.74 (FT)	Turbidimeter #: 5	YSI #: Rental 3375	
Depth of Well: 31.56 (FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
11:33	13.1	59	–	140	7.64	7.0	2.871	151.8	18.1	
11:38	13.9	48.8	-0.8	125	7.62	7.2	2.876	152.8	16.7	
11:43	14.65	44.8		125	7.62	7.2	2.875	152.9	17.4	upping purge rate
~~8~~ 8:54	16.35	35.9	–	140	7.49	5.8	2.842	159.7	7.44	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5
1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.				

Comments

less than 10 ft of water above screen. Draw down during purge greater than 1ft, upping pumping rate to 450-500 mL/min pumped down to 22.6. 2.25 gallons purged

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/20/23	1) FCN		9:57	
Well ID: MW-35SR	2) Flouride			
Sampler: JC6 + GDP	3) Sulfate			
	4) PCBs			
	5)			

Pre-purge Water Elevation:	17.79	(BTIC)			
Intake Elevation:	22.0	(BTIC)	Final Water Elevation: 19.72	(BTIC)	Temp: 29° °F
Screened Interval: 19.17-29.17		(BTIC)	Pump used (Circle one)		Wind: 5 MPH
TIC Elevation: 213.52		(FT)	(Waterra) Peristaltic Grundfos Bailer		Direction: South West
Depth of Well: 29.17		(FT)	Turbidimeter #: 5		YSI #: Rental 3335

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1521	18.84	83	—	200	6.94	8.8	1.742	144.6	164	
1526	18.89	84.5	+ 0.05	250	6.97	8.9	1.732	141.2	168	
1531	18.81	86.0	- 0.08	125	7.00	7.4	1.724	141.2	127	
1536	19.00	85.1	+ 0.19	150	7.00	7.8	1.720	141.0	128	
1541	19.26	85.3	+ 0.26	140	6.99	7.7	1.722	141.3	149	
15:46	19.30	84.7	-0.04	150	6.98	7.9	1.717	141.7	162	
15:51	19.50	80.1	-0.20	160	6.97	8.1	1.707	141.2	180	
15:56	19.40 X	80.4	+0.10	170	6.97	8.1	1.708	141.4	209	Upped purge rate
09:57	19.72	64.2	-		7.12	3.6	1.814	144.7	136	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

no water could be recovered w/ peristaltic tubing
Drawdown got screen, No Stabilization, upping pumping rate to 460-500.
Ran dry Temp of sample seems off

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/2/23	1) FCN	Y	~~0940~~ 0705	MS/MSD
Well ID: MW-36	2) Flouride	Y		MS/MSD
Sampler: EDS	3) Sulfate	Y		MS/MSD
	4) PCBs	Y		MS/MSD
	5)			

Pre-purge Water Elevation: 7.64 (BTIC)
Intake Elevation: (BTIC)
Screened Interval: 24.06-34.06 (BTIC)
TIC Elevation: 209.36 (FT)
Depth of Well: 34.06 (FT)

Final Water Elevation: (BTIC)
Pump used (Circle one)
(Waterra) Peristaltic Grundfos Bailer
Turbidimeter #: 5

Temp: 24 °F
Wind: 3 MPH
Direction: S
YSI #: 5 Rental

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1621	8.47	101.2	—	100	8.75	0.0	2.700	165.2	22.2	
1626	11.23	53.6	-2.76	125	8.26	6.8	2.467	165.0	454	turning pump up
1631	11.63	54.6	-0.40	125	8.26	3.6	2.468	167.8	579	
1636	12.43	51.5	-0.80	100	8.25	2.6	2.469	169.5	476	
1641	12.90	50.1	-0.47	100	8.25	2.1	2.473	170.3	334	
1646	12.97	53.1	+0.07	100	8.24	1.2	2.486	162.9	299	
0705	13.54	65.8		160	8.37	1.7	2.723	210.0	776	Sample collected

Volume Calculation

PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Well to be purged down to 22'. 2.5 gallons purged

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/26/23	1) FCN		13:47	↑
Well ID: MW-37	2) Flouride		13:47	
Sampler: JCC	3) Sulfate		13:47	
	4) PCBs		13:47	12/26/23
	5)			

Pre-purge Water Elevation: 3.91 (BTIC)
Intake Elevation: 30.31 (BTIC)
Screened Interval: 24.75-34.75 (BTIC)
TIC Elevation: 209.36 (FT)
Depth of Well: 35.31 (FT)

Final Water Elevation: 15.15 (BTIC)
Pump used (Circle one): (Waterra) Peristaltic Grundfos Bailer
Turbidimeter #: 5

Temp: °F
Wind: MPH
Direction:
YSI #: Rental 3335

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
12:28	8.45	32	-	300	7.62	10.3	0.770	197.5	1090	
12:33	9.00	35	0.55	120	7.62	10.2	0.776	199.5	1040	
12:38	9.41	35	0.41	100	7.61	10.3	0.778	200.1	812	
12:43	9.76	35	0.35	100	7.62	10.1	0.774	201.7	753	
12:48	9.97	34	0.21	100	7.73	9.5	0.762	151.9	706	
12:53	10.30	28	0.33	250	7.61	9.5	0.762	186.6	716	
12:58	11.20	26	0.9	160	7.60	9.8	0.786	186.6		
13:25	14.7	13		500	7.49	10.7	0.796	-31.8	802	
13:30	14.84	11		400	7.46	10.8	0.799	-40.4	735	
13:35	14.20	10	+0.54	415	7.45	11.1	0.806	-47.5	703	
13:40	14.20	10		400	7.44	11.2	0.808	-48.2	697	
13:45	~~14.40~~	9		400	7.42	10.9	0.803	-55.5	419	Taking Sample
	15.05									

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Drawdown greater than 1ft Upping pumping rate to 450 - 500 ml/min - Recharge stabilized at 14.6' at 500 ml/min restarted measurments

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/26 - 27/23	1) FCN	Y	0901	12/27/23
Well ID: MW-38	2) Flouride	Y	0901	↓
Sampler:	3) Sulfate	Y	0901	
	4) PCBs	Y	0901	
	5)			

Pre-purge Water Elevation: 6.69 (BTIC)		Final Water Elevation: (BTIC)		Temp: 26	°F
Intake Elevation: ~131 (BTIC)		Pump used (Circle one)		Wind: 3	MPH
Screened Interval: 26.24-36.24 (BTIC)		(Waterra) Peristaltic Grundfos Bailer		Direction: WSW	
TIC Elevation: 202.64 (FT)		Turbidimeter #: 4		YSI #: Rental 3335	
Depth of Well: 36.24 (FT)					

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1230	~~8.63~~	70	–	150	8.08	9.2	0.625	125.5	130	
1235	9.24	52.5	-1.01	150	7.95	9.7	0.612	127.5	947	
1240	10.68	43.7	-1.44	190	7.90	10.1	0.609	127.8	946	
1245	11.42	45.9	-0.74	125	7.89	9.8	0.611	127.7	798	
1250	11.90	48.0	-0.48	100	7.88	9.7	0.611	127.7	666	
1255	12.90	40.0	-1.00	160	7.88	9.4	0.610	131.2	724	
1300	13.20	38.8	-0.30	100	7.86	9.4	0.609	127.1	666	
0901	9.52	63.8		125	7.96	5.2	0.617	137.5	621	Sample collected

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Stabilization was not successful after 30min; well purged at 500mL/min to ~~2.5ft~~ 23.5ft

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/12/23	1) FCN	Y	12:07	
Well ID: MW-39S	2) Flouride	Y	12:07	
Sampler: D.P & J.G B.C	3) Sulfate	Y	12:07	
	4) PCBs	Y	12:07	
	5)			

Pre-purge Water Elevation:	4.44	(BTIC)	Final Water Elevation: 7.69 (BTIC)	Temp: 35	°F
Intake Elevation:	15.25'	(BTIC)	Pump used (Circle one)	Wind: 15.25	MPH
Screened Interval: 10.95-20.95	(9.95 limit)	(BTIC)	Waterra Peristaltic Grundfos Bailer	Direction: SW	
TIC Elevation: 195.87		(FT)	Turbidimeter #: 5	YSI #: 5	
Depth of Well: 20.95		(FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
11:22	5.75	49	-	150	7.53	7.5	0.749	58.6	-	
11:27	6.14	46	0.39	140	7.39	7.3	0.751	109.3	2.37	
11:32	6.6	42	0.46	140	7.34	7.4	0.764	130.8	3.00	
11:37	6.89	40	0.29	140	7.31	7.2	0.791	96.8	2.35	
11:42	7.09	37	0.20	145	7.26	7.6	0.781	50.4	2.57	
11:47	7.3	36	0.21	130	7.24	7.8	0.797	16.3	2.31	
11:52	7.45	34	0.15	130	7.20	7.7	0.803	-1.7	2.32	
11:57	7.6	34	0.25	130	7.15	7.9	0.819	-6.7	2.14	
12:02	7.69	30	0.09	130	7.14	7.8	0.830	-12.2	2.25	

Volume Calculation

PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Stabilization achieved Purged 1.5 gal
BD taken here (1210) ~~1351~~ COC time 13:15

CDM Smith
listen. think. deliver.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/13/23	1) FCN	✓	15:45	
Well ID: MW-40S	2) Flouride	✓	15:45	
Sampler: JCC & EDP	3) Sulfate	✓	15:45	
	4) PCBs	✓	15:45	
	5)			

Pre-purge Water Elevation: 2.21	(BTIC)	Final Water Elevation: 2.30	(BTIC)	Temp: 27	°F
Intake Elevation: ~~14.75~~ 14.00	(BTIC)	Pump used (Circle one)		Wind: 7	MPH
Screened Interval: 9.94-19.94 (8.94) int	(BTIC)	Waterra (Peristaltic) Grundfos Bailer		Direction: East →	
TIC Elevation: 193.75	(FT)	Turbidimeter #: 5		YSI #: Bental	
Depth of Well: 19.94	(FT)				

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
9:43	3.45	86.6	—	200	7.25	7.3	1.196	169.8	1.51	
9:48	3.73	94.3	+0.12	125	7.25	7.8	1.174	161.4	2.13	
9:53	4.20	11.28	-0.47	125	7.26	7.6	1.168	158.1	2.51	
9:58	4.43	10.45	-0.23	125	7.26	7.7	1.168	153.3	2.70	
15:45	2.30	53.0		150	7.02	5.8	1.367	167.4	1.59	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Draw down over 1ft used pump to 500 ml/min
Purged to 14', left to recharge
Purged 5.5 gallons Sampled at 15:45

CDM Smith
listen. think. deliver.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/26/23	1) FCN	Y	9:20	12/27/23
Well ID: MW-41	2) Flouride	Y	9:20	
Sampler: JCG/EDL	3) Sulfate	Y	9:20	
	4) PCBs	Y	9:20	
	5)			

Pre-purge Water Elevation: 23.9 (BTIC)
Intake Elevation: (BTIC)
Screened Interval: 35-45 (GL) (BTIC)
TIC Elevation: 221 (GL) (FT)
Depth of Well: 48.03 (FT)

Final Water Elevation: 38.95 (BTIC)
Pump used (Circle one)
(Waterra) Peristaltic Grundfos Bailer
Turbidimeter #: 5

Temp: °F
Wind: MPH
Direction:
YSI #: Rental 3335

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1043	26.04	70	—	200	7.66	9.1	0.765	143.2	563	
1048	27.61	66	-1.57	160	7.43	9.3	0.777	172.1	581	
1053	28.02	64	-0.41	100	7.41	9.0	0.774	192.7	518	
1058	28.40	69	-0.38	120	7.40	7.9	0.753	209.5	443	
1103	29.20	58	-0.80	200	7.37	8.4	0.760	216.9	518	
1108	29.93	54	-0.73	240	7.38	8.4	0.760	222.3	637	
1113	30.98	52	-1.05	175	7.37	9.0	0.769	226.8	893	
08:42	29.65									
0920		35.7		250	7.40	7.4	1.158	132.6	867	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments
well purged at 400mL/min after stabilization
purged down to 35.5 ft. 1.75 gallons purged

CDM Smith
listen. think. deliver.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/26/23	1) FCN	Y	↑	↑
Well ID: MW-42	2) Flouride	Y		
Sampler: JCG	3) Sulfate	Y		
	4) PCBs	Y	8:04	12/27/23
	5)			

Pre-purge Water Elevation: 21.55 (BTIC)
Intake Elevation: ~~43'~~ 40-42 (BTIC)
Screened Interval: 34-44 (GL) (BTIC)
TIC Elevation: 211.3 (GL) (FT)
Depth of Well: 47.92 (FT)

Final Water Elevation: 30.68 (BTIC)
Pump used (Circle one): (Waterra) Peristaltic Grundfos Bailer
Turbidimeter #: 5

Temp: 38 °F
Wind: 5 MPH
Direction: ←
YSI #: Rental 3335

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
10:28	22.95	53.9	—	75	7.96	9.9	3.839	178.2	34.8	
10:33	23.73	45.9	0.78	100	7.76	9.7	3.852	179.3	491	
10:38	24.7	41.25	0.97	100	7.58	9.7	3.574	176.3	>1100	
07:56	27.20									12/27/23
8:04	27.20	50.9		175	7.59	9.8	3.457	159.5	241	Sample

Volume Calculation

PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Over 10 ft of water above screen.
Drawdown at 100 ml/min over 1 ft. purge to intake

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/14/23	1) FCN		14:51	
Well ID: MW-43	2) Flouride			
Sampler: Dan Posadas & Josh Gheagher	3) Sulfate			
	4) PCBs			
	5)			

Pre-purge Water Elevation:	8.45 (BTIC)	Final Water Elevation:	8.69 (BTIC)	Temp:	31 °F
Intake Elevation:	41' (BTIC)	Pump used (Circle one)		Wind:	7 MPH
Screened Interval: 34.5-44.5 (GL)	(33.5 (limit)) (BTIC)	Waterra (Peristaltic) Grundfos Bailer		Direction:	↗
TIC Elevation: 206.2 (GL)	(FT)	Turbidimeter #: 5		YSI #:	Rental
Depth of Well: 48.13	(FT)				

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
14:01	8.64	54.9		125	7.20	7.4	0.845	113.7	39.4	
14:06	8.55	43.8	+0.09	125	7.02	7.9	0.866	111.5	54.8	
14:11	8.63	42.0	-0.12	150	6.93	8.1	0.883	110.2	58.7	
14:16	8.60	41.6	+0.03	100	6.90	8.1	0.883	109.2	72.0	
14:21	8.62	41.4	-0.02	150	6.89	8.5	0.893	108.2	69.2	
14:26	8.61	39.7	+0.01	150	6.89	8.1	0.897	107.8	64.6	
14:31	8.62	39.8	-0.01	150	6.89	8.1	0.894	106.7	56.7	
14:36	8.64	39.5	-0.02	150	6.89	8.8	0.896	106.4	39.8	
14:41	8.65	38.4	-0.01	150	6.90	8.6	0.900	106.0	38.1	
14:46	8.66	37.7	-0.01	150	6.90	8.6	0.898	106.2	26.0	
14:51	8.69	36.0	-0.03	150	6.91	8.5	0.901	106.7	19.5	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

All stable except turbidity, trend consistent, taking sample.

1.6 gal purged

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listen. think. deliver.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/14/23	1) FCN	X	13:18	12/14/23
Well ID: MW-44	2) Flouride	X	13:18	"
Sampler: JCG & EDP	3) Sulfate	X	13:18	"
	4) PCBs	X	13:18	"
	5)			

Pre-purge Water Elevation: 8.05 (BTIC)
Intake Elevation: 20 ft (BTIC)
Screened Interval: 15-25 (GL) (BTIC)
TIC Elevation: 208.7 (GL) (28 in riser) 2.37 ft (FT)
Depth of Well: 28.77 (28.5) (FT)

Final Water Elevation: 8.71 (BTIC)
Pump used (Circle one)
Waterra (Peristaltic) Grundfos Bailer
Turbidimeter #: 5

Temp: 31 °F
Wind: 9 MPH
Direction: North East
YSI #: Rental

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1249	8.13	5.49	0.13	150	7.01	8.5	0.897	104.6	0.02	
1254	8.13	~~5.5~~ 5.27	0	150	6.91	9.1	0.888	106.1	0.48	
1259	8.21	45.9	0.03	150	6.9	9.2	0.882	107.7	0.02	
1304	8.31	45.7	0	150	6.9	9.1	0.881	108.4	0.02	
1309	8.22	47.8	0.01	150	6.9	9.1	0.881	112.6	0.58	
# 1314	8.71	46.2	0.49	150	6.9	9.2	0.878	109.1	0.02	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Stabilization achieved - 1.25 gal purged
Volume purged (total) was 2.5 gallons

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listen. think. deliver.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/12/23	1) FCN	Y	14:44	
Well ID: MW-45	2) Flouride	Y	14:44	
Sampler: JCG & EDP	3) Sulfate	Y	14:44	
	4) PCBs	Y	14:44	
	5)			

Pre-purge Water Elevation: 4.56' (BTIC)
Intake Elevation: ~~12.73~~ 10.73' (BTIC)
Screened Interval: 5-15 (GL) (BTIC)
TIC Elevation: 195.7 (GL) (FT)
Depth of Well: 17.73 (FT)

Final Water Elevation: 6.51 (BTIC)
Pump used (Circle one)
Waterra (Peristaltic) Grundfos Bailer
Turbidimeter #: 5

Temp: 37 °F
Wind: 16 MPH
Direction: SW
YSI #: 5

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
12:32				150	~~7.02~~					
12:46	6.22	43		150	7.27	6.8	1.151	151.5	2.23	
12:51	6.37	41		150	7.27	6.9	1.162	160.3	2.94	
14:44	6.51	51		180	7.12	7.11	1.295	94.9	3.53	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments
Unable to purge well above screen, up flow rate to 450 mL/min purge to bottom of screen.
Purged 6 gal
~~12~~ Sampled @ 14:44

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listen. think. deliver.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/27/23	1) FCN	Y	0945	↑
Well ID: MW-48	2) Flouride	X	↓	
Sampler: JCG / EDP	3) Sulfate	X		
	4) PCBs	Y	↓	12/28/23
	5)			

Pre-purge Water Elevation: 7.52' (12')	(BTIC)	Final Water Elevation: 22.6	(BTIC)	Temp: 39 °F
Intake Elevation: ~~23'~~ 21'	(BTIC)	Pump used (Circle one)		Wind: 9 MPH
Screened Interval: 13-28	(BTIC)	(Waterra) Peristaltic Grundfos Bailer		Direction: South west
TIC Elevation: ---	(FT)	Turbidimeter #: 4		YSI #: Rental 3335
Depth of Well: 28	(FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
15:55	8.45	82.3	—	175	7.39	7.2	1.148	84.7	23.5	
16:00	9.25	86.3	0.8	100	7.33	7.1	1.141	75.4	537	
16:05	9.84	82.8	0.63	80	7.33	6.6	1.141	68.5	473	
16:10	10.33	80.8	0.45	60	7.33	6.1	1.142	64	437	
16:15	10.65	77.7		50	7.33	5.6	1.144	61.6		
09:32	19.2	48		260	7.85	8.4	0.767	137.1	954	12/28/23

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Less than 10 ft above screen
3.5 gal purged
low recovery recommend 2-3 Day Recharge next event.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/29/23	1) FCN	Y	11:20	
Well ID: MW-49	2) Flouride	Y	11:20	
Sampler: JCG / EDP	3) Sulfate	Y	11:40	
	4) PCBs	Y	11:40	
	5)			

Pre-purge Water Elevation: 6.69 (BTIC)	Final Water Elevation: (BTIC)	Temp: 32	°F
Intake Elevation: 43' (BTIC)	Pump used (Circle one)	Wind: 7	MPH
Screened Interval: 47.5-37.5 (BTIC)	(Waterra) Peristaltic Grundfos Bailer	Direction: South West	
TIC Elevation: --- (FT)	Turbidimeter #: 5	YSI #: 5	
Depth of Well: 50.15 (FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
10:55	6.29	65	-	130	8.26	6.5	0.538	178.2	30.8	
11:00	6.40	56		150	8.06	6.6	0.531	143.7	137.0	
11:05	6.47	48		160	7.98	6.8	0.542	167.2	288.0	
11:10	6.53	43		150	7.94	6.9	0.550	176.8	267.0	
11:15	6.56	39		140	7.90	6.7	0.561	185.9	219	
11:20	6.59	37		140	7.89	6.8	0.561	190.7	191	
11:25	6.57	35		140	7.89	6.8	0.570	194.4	175	
11:30	6.62	41		150	7.88	6.8	0.572	196.8	154	
11:35	6.65	41		150	7.89	6.9	0.575	198.0	129	
11:40	6.69	36		150	7.88	7.0	0.576	197.7	131	sample

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

2.75 gal purged

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-20-23	1) FCN	Y	1420	
Well ID: MW-50	2) Flouride	Y	1420	
Sampler: Basil Cox	3) Sulfate	Y	1420	
	4) PCBs	Y	1420	
	5)	/		

Pre-purge Water Elevation:	1.82	(BTIC)			
Intake Elevation:	20	(BTIC)	Final Water Elevation:	3.25 (BTIC)	Temp: 32 °F
Screened Interval: 15-25		(BTIC)	Pump used (Circle one)		Wind: 5 MPH
TIC Elevation: ---		(FT)	Waterra Peristaltic Grundfos Bailer		Direction: NW
Depth of Well: 25		(FT)	Turbidimeter #: 4		YSI #: 5

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1345	2.51	14	0.69	200	7.61	8.1	1.203	95.8	13.4	
1350	2.65	12	0.14	200	7.56	8.0	1.230	112.8	9.1	
1355	2.79	11	0.14	200	7.57	7.9	1.223	110.4	5.0	
1400	2.89	10	0.10	200	7.57	7.6	1.214	106.9	2.7	
1405	3.00	9	0.11	200	7.57	7.7	1.215	94.6	1.6	
1410	3.09	9	.09	200	7.56	7.5	1.211	76.9	2.2	
1415	3.19	8	0.10	200	7.56	7.7	1.216	61.3	2.5	
1420	3.25	8	.06	200	7.56	7.9	1.218	50.0	2.0	
1425										

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

2.5 gal.

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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/28/23	1) FCN	X	1421	
Well ID: MW-51	2) Flouride	X	1421	
Sampler: JCG + EDP	3) Sulfate	X	1421	
	4) PCBs	X	1921	
	5)			

Pre-purge Water Elevation: 11.7 (BTIC)		Final Water Elevation: (BTIC)		Temp: 39	°F
Intake Elevation: ~34 (BTIC)		Pump used (Circle one)		Wind: 9	MPH
Screened Interval: 29-39 (BTIC)		(Waterra) Peristaltic Grundfos Bailer		Direction: NE	
TIC Elevation: --- (FT)		Turbidimeter #: 5		YSI #: 5	
Depth of Well: 39.3 (FT)					

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1308	12.3	60	–	150	7.39	7.6	1.782	115.5	32.1	
1313	12.43	62	- 0.13	200	7.33	8.0	1.375	-13.9	312	
1318	12.59	30	- 0.16	240	7.36	8.6	1.400	-30.1	672	
1323	12.49	25	+ 0.10	140	7.38	8.1	1.388	-32.3	630	
1328	12.46	25	+ 0.03	100	7.37	7.5	1.382	-33.1	595	
1333	12.46	25	0.0	100	7.39	7.0	1.379	-31.7	565	
1338	12.46	25	0.0	100	7.39	6.5	1.378	-29.2	570	
1343	12.46	25	0.0	100	7.40	6.2	1.376	-30.9	571	
1348	12.46	24	0.0	100	7.40	6.5	1.375	-32.7	574	
1353	12.63	20	- 0.17	180	7.37	7.8	1.367	-37.9	583	Flow stopped
1358	12.60	15	+ 0.03	240	~~pH 2.49~~	8.6	1.355	-46.0	544	Flow stopped
1403	12.98	13	- 0.38	250	7.45	8.7	1.352	-54.9	501	
1408	13.09	12		250	7.40	8.8	1.351	-49.9	473	
1413	13.18	10		250	7.38	6.8	1.355	-46.8	699	
1418	13.24	10		250	7.38	8.8	1.36	-46.8	569	Sampled

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

CDM Smith
listen. think. deliver.

(Page 1 of)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-20-23	1) FCN	Y	1252	12/28/23
Well ID: MW-52	2) Flouride			
Sampler: Basil Cox	3) Sulfate			
	4) PCBs			
	5)			

Pre-purge Water Elevation: 7.6 (BTIC)		Final Water Elevation: (BTIC)		Temp: 32	°F
Intake Elevation: 18 (BTIC)		Pump used (Circle one)		Wind: 5	MPH
Screened Interval: 13-23 (BTIC)		Waterra Peristaltic Grundfos Bailer		Direction: NW	
TIC Elevation: --- (FT)		Turbidimeter #: 4		YSI #: 5	
Depth of Well: 23.1 (FT)					

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1237	10.09	23	2.49	125	7.70	8.0	0.934	104.4	7.4	
1242	10.87	21	0.78	125	7.646	7.9	0.935	122.0	6.3	
1247	11.93	19	1.06	125	7.466	8.2	0.940	131.7	5.9	
1252	12.78	17		125	7.64	8.3	0.942	138.4	5.9	
1257										
1302										
1307										
1312										
12-21-23	19.2									
0755	19.11									
1252	8.20	51		150	7.53	7.9	1.406	220.1	6.42	12/28/23

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Draw down to bottom of screen @ 400 ml/min 1252
4 gallons purged

~~Sampled on 12-21-23~~

JCB 12/28/23

(Page 1 of)

CDM Smith
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Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/27/22	1) FCN	X	17:49	
Well ID: MW-54	2) Flouride	↓	↓	
Sampler: SCG/EDP	3) Sulfate			
	4) PCBs	↓	↓	
	5)			

Pre-purge Water Elevation:	26.72	(BTIC)	Final Water Elevation: 27.80' (BTIC)	Temp: 39° °F
Intake Elevation:	40	(BTIC)	Pump used (Circle one)	Wind: 8 MPH
Screened Interval: 35-45		(BTIC)	(Waterra) Peristaltic Grundfos Bailer	Direction: ↙ South west
TIC Elevation: —		(FT)	Turbidimeter #: 4	YSI #: Rental 3335
Depth of Well: 47.9		(FT)		

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
17:19	27.27	74.6	—	200	8.08	7.4	0.656	48.6	35.5	
17:24	27.34	50.9	0.07	190	7.94	7.3	0.714	52.8	102	
17:29	27.45	45.1	0.11	200	7.9	7.4	0.747	53.8	162	
17:34	27.54	41.2	0.19	180	7.88	7.4	0.764	54.2	140	
17:39	27.60	38.3	0.06	170	7.89	7.4	0.764	54.4	117	
17:44	27.65	35.8	0.05	165	7.88	7.3	0.760	54.9	104	
17:49	27.66	33.8	0.01	155	7.89	7.2	0.754	54.8	99.5	Sample

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

8.28' feet of water above Screen. Stabilization except turbidity
1.5 gal purged

CDM Smith
listen. think. deliver.

(Page 1 of)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/27/23	1) PCBs	Y	14:42	12/29/23
Well ID: MW-55	2)			
Sampler: JCG / EDP	3)			
	4)			
	5)			

Pre-purge Water Elevation: 16.31 (BTIC)	Final Water Elevation: (BTIC)	Temp: 38	°F
Intake Elevation: 25' (BTIC)	Pump used (Circle one)	Wind: 8	MPH
Screened Interval: 15-30 (BTIC)	(Waterra) Peristaltic Grundfos Bailer	Direction: ↙	
TIC Elevation: --- (FT)	Turbidimeter #: 4	YSI #: Rental 3335	
Depth of Well: 32.97 (FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1:13	17.4	46			7.91	6.5	—	90.7		Old YSI #5
1:18	18.5	104		450	7.68	6.5	0.0044	9.1	115	New YSI Rental
1:23	19.54	108		~~230~~ 350	7.78	6.4	0.0033	30.8	38.4	Pumping rate inconsistent
14:02	21.93	105		450	8.00	5.8	0.0021	-21.3	30.9	wrong YSI
14:07	21.74									
14:12	21.60	23.7		210	7.70	8.1	0.778	53.8	20.8	
14:17	21.43	18.4		210	7.64	8.0	0.779	50.5	19.4	
14:22	21.28	16.2		200	7.69	7.9	0.782	47.5	15.2	
14:27	21.13	13.8		200	7.68	8.1	0.781	43.7	14.4	
14:32	21.2	12.8		200	7.69	8.1	0.781	39.3	12.7	
14:37	21.1	11.6		200	7.69	8.1	0.781	35.3	11.1	
14:42	20.95	10.6		200	7.68	8.2	0.780	32.1	10.2	Sample

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Struggling to regulate flow. Less than 1 ft above screen. Drawdown greater than 1 ft upping rate

CDM Smith
listen. think. deliver.

(Page 1 of 1)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/19/23	1) FCN	X	16:34	12/19/23
Well ID: MW-56	2) Fluoride	X	16:34	"
Sampler: JCG/EDP	3) Sulfate	X	16:34	"
	4)			
	5)			

Pre-purge Water Elevation: 3.51 (BTIC)
Intake Elevation: 20 (BTIC)
Screened Interval: 15-25 (14' limit) (BTIC)
TIC Elevation: --- (FT)
Depth of Well: 25 (FT)

Final Water Elevation: 10.10 (BTIC)
Pump used (Circle one): Waterra, (Peristaltic), Grundfos, Bailer
Turbidimeter #: 5

Temp: 27 °F
Wind: 11 - MPH
Direction: South east
YSI #: 5

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
15:24	4.00	41.3	—	180	7.15	7.2	1.451	168.2	61.8	
15:29	4.50	19.6	-0.50	125	7.15	6.2	1.492	163.7	55.5	
15:34	4.97	18.6	-0.47	150	7.18	6.5	1.491	162.4	48.9	
15:39	5.43	17.5	-0.46	150	7.24	6.8	1.497	161.2	38.9	uppmg to 450-500
15:44										
15:50	8.65	33.6		480	7.39	9.0	1.493	152.6	33.0	
16:34	10.10	12.2			7.17	7.3	1.440	82.6	670	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments:
Water build up within inner casing, using other pump to de water. Greater than 10 ft above screen purged 6 gal

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(Page 1 of)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-20-23	1) FCN	Y	1047	
Well ID: PZ-44	2) Fluoride	Y	1047	
Sampler: Basil Cox	3) Sulfate	Y	1047	
	4) PCBs	Y	1047	
	5)			

Pre-purge Water Elevation:	4.55	(BTIC)			
Intake Elevation:	11.00	(BTIC)	Final Water Elevation: 4.75	(BTIC)	Temp: 27 °F
Screened Interval: ---	2-12	(BTIC)	Pump used (Circle one)		Wind: 5-10 MPH
TIC Elevation: 225 (GL)		(FT)	Waterra (Peristaltic) Grundfos Bailer		Direction: WNW
Depth of Well: 16.69		(FT)	Turbidimeter #: 4		YSI #: 5

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1007	4.70	9	0.15	160	7.22	5.8	1.291	120.1	77.7	
1012	4.70	11	0	160	7.26	5.4	1.239	-0.2	11.6	
1017	4.75	34	0.08	160	7.39	3.9	0.991	16.2	5.6	
1022	4.75	44	0.03	160	7.48	3.5	0.858	39.1	3.3	
1027	4.75	46	0.00	160	7.51	3.3	0.787	76.3	1.2	
1032	4.75	47	0.00	160	7.51	3.2	0.771	86.1	1.5	
1037	4.75	46	0	160	7.52	3.2	0.762	97.8	1.0	
1042	4.75	48	0	160	7.51	3.2	0.749	107.1	1.0	
1047	4.75	48	0	160	7.53	3.1	0.738	114.7	0.6	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

2.25 gal.

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(Page 1 of)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-14-23	1) FCN	Y	0919	12/20/23
Well ID: PZ-45	2) Fluoride	Y	0919	↓
Sampler: Basil Cox	3) Sulfate	Y	0919	
	4) PCBs	~~Y~~	0919	
	5)			

Pre-purge Water Elevation: 5.101' (BTIC)	Final Water Elevation: (BTIC)	Temp: 33	°F
Intake Elevation: (BTIC)	Pump used (Circle one)	Wind: 10-15	MPH
Screened Interval: --- (BTIC)	Waterra Peristaltic Grundfos Bailer	Direction: SW	
TIC Elevation: 223.2 (GL) (FT)	Turbidimeter #: 4	YSI #: 4	
Depth of Well: 14.83 (FT)			

Time	Water Level (ft btic)	DO (mg/L)	~~Drawdown~~ (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
0919	5.15	42	12-20-23	150	7.32	5.3	1.520	222.0	6.6	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Well purged dry @ 300 ml/min 0.75 gal recovered.

Sampled on 12-20-23.

CDM Smith
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(Page 1 of)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-14-23	1) FCN	Y	0855	12/20 ↓
Well ID: PZ-46	2) Fluoride	Y	0855	
Sampler: Basil Cox	3) Sulfate	Y	0855	
	4) PCBs	Y	0855	1 bottle
	5)			

Pre-purge Water Elevation: 6.44 (BTIC)					Final Water Elevation: (BTIC)			Temp: 32	°F		
Intake Elevation: (BTIC)					Pump used (Circle one)			Wind: 10-15	MPH		
Screened Interval: --- (BTIC)					Waterra	Peristaltic	Grundfos Bailer	Direction: SW			
TIC Elevation: 223.2 (GL) (FT)					Turbidimeter #: 4			YSI #: 5			
Depth of Well: 10.37 (FT)											
Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note	
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU		
0855	5.62'	5.4	12-20-23	125	7.38	3.8	1.645	214.3	12.6		

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Purged dry @ 300 ml/min 0.25 gal recovered

Sampled on 12-20-23

CDM Smith
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(Page 1 of 1)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12/13/23	1) FCN	Y	8:45	
Well ID: SLPWETE	2) Fluoride	Y	8:45	
Sampler: JCG & EDP	3) Sulfate	Y	8:45	
	4) PCBs	Y	8:45	
	5)			

Pre-purge Water Elevation: (BTIC)			
Intake Elevation: — NA (BTIC)	Final Water Elevation: (BTIC)	Temp: 27	°F
Screened Interval: --- (BTIC)	Pump used (Circle one)	Wind: 7	MPH
TIC Elevation: --- (FT)	Waterra (Peristaltic) Grundfos Bailer	Direction: East →	
Depth of Well: --- (FT)	Turbidimeter #:	YSI #:	

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
	—	5.49	—	—	6.9	1.5	0.499	201.6	4.54	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

CDM Smith
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(Page 1 of 1)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 12-12-23	1) FCN	Y	1101	
Well ID: SLPWETW	2) Fluoride	Y	1101	
Sampler: DP/JG	3) Sulfate	Y	1101	
	4) PCBs	Y	1101	
	5)			

Pre-purge Water Elevation:	NA	(BTIC)	Final Water Elevation: NA (BTIC)	Temp: 35	°F
Intake Elevation:	NA	(BTIC)	Pump used (Circle one)	Wind: 15-25	MPH
Screened Interval: ---	NA	(BTIC)	Waterra (Peristaltic) Grundfos Bailer	Direction: SW	
TIC Elevation: ---	NA	(FT)	Turbidimeter #: 5	YSI #: 5	
Depth of Well: ---	NA	(FT)			

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1101	NA	63	NA	NA	7.44	2.8	0.1744	98.9	3.70	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Wetlands grab sample

CDM Smith
listen. think. deliver.

(Page 1 of 1)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 10-14-23	1) FCN	Y	1225	
Well ID: FDRAIN	2) Fluoride	Y	1225	
Sampler: Basil Cox	3) Sulfate	Y	1225	
	4)			
	5)			

Pre-purge Water Elevation:	(BTIC)	Final Water Elevation: 16.05	(BTIC)	Temp: 80	°F
Intake Elevation:	(BTIC)	Pump used (Circle one)		Wind: 10-15	MPH
Screened Interval: ---	(BTIC)	Waterra Peristaltic Grundfos Bailer		Direction: SW	
TIC Elevation: ---	(FT)	Turbidimeter #: 4		YSI #: 5	
Depth of Well: ---	(FT)				

Time	Water Level (ft btic)	DO (mg/L)	Drawdown (ft)	Flow Rate (mL/min)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		± 10 %	< 0.3 foot	± 3 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1225		55		~~5.30~~ BL	8.30	8.8	0.707	282.2	2.5	

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments: Grab sample

LOCV DP

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab

ALPHA Job #

Client Information
Client: CDM Smith
Address: 4 Highland Road
Suite 1 Massena NY 12662
Phone: 315-296-9003
Fax:
Email: glosengerjc@cdmsmith.com

Project Information
Project Name: Reynold Groundwater Sampling
Project Location: Massena NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time
Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8082	F-300 SO4	Sub TCN	TCN					Sample Specific Comments	Total Bottle
	MW-105-1223	12/12/23	13:30	water	JCG	X	X								
	MW-105-1223-MS	12/12/23	13:30	water	JCG	X	X								
	MW-105-1223-MSD	12/12/23	13:30	water	JCG	X	X								
	~~MW~~ SLPWETW-1223	12/12/23	11:01	water	JCG	X	X								
	MW-395-1223	12/12/23	12:07	water	JCG	X	X								
	MW-45-1223	12/12/23	14:44	water	JCG	X	X								
	MW-1215-1223-FBW	12/12/23	13:48	water	JCG	X	X								
	MW-1210-1223-BD	12/12/23	13:15	water	JCG	X	X								
	SLPWETE-1223	12/13/23	08:45	water	JCG	X	X								
	MW-305-1223	12/13/23	12:05	water	JCG	X	X								

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Josh Glosenger	12/13/23 14:00		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

COC ✓ DP

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road
Suite 1 Massena NY 13662
Phone: 315-296-9003
Fax:
Email: gioseryjc@cdmsmith.com

Project Information

Project Name: Reynoid Groundwater Sampling
Project Location: Massena NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

NYTCL 8082 / TF-300 / 504

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL 8082	TF-300 / 504	Sample Specific Comments
	MW-28S-1223	12/13/23	11:03	Water	B.C	X	X	
	MW-1216-1223-FBlvd	12/13/23	12:15	Water	J.C.G	X	X	

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Josh Gioseryjc	12/13/23 14:00		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

COC v DF

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road Suite 1 Massena NY 13662
Phone: 315-296-9003
Fax:
Email: gloseagerjc@cdmsmith.com

Project Information

Project Name: Reynolds Groundwater Sampling
Project Location: Massena NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

NYTCL-8082 | E-300 / SO4 | SVOC + CW

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8082	E-300 / SO4	SVOC + CW	Sample Specific Comments
	MW-11SR-1223	12/14/23	15:31	Water	JCG	X	X		
	MW-16S-1223	12/14/23	09:55	Water	B.C	X	X		
	MW-26S-1223	12/14/23	14:00	water	B.C	X	X		
	MW-43-1223	12/14/23	14:51	water	JCG	X	X		
	MW-44-1223	12/14/23	13:18	water	JCG	X	X		
	Fbrain-1223	12/14/23	12:25	Water	B.C		X		
	MW-1213-1223-FBW	12/14/23	15:49	water	JCG	X	X		
	MW-18S-1223	12/13/23	14:15	Water	B.C	X	X		
	MW-40S-1223	12/13/23	15:45	water	J.C.G	X	X		
	~~MW-33S-1223~~	~~12/15/23~~	~~12:27~~	~~water~~	~~JCG~~				No Sample

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Josh Gloseager	12/15/23 13:30		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

COCV DP

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road Suite 1 Massena NY 13662
Phone: 315-296-9003
Fax:
Email: glosenger jc@cdmsmith.com

Project Information

Project Name: Reynolds Groundwater Sampling
Project Location: Massena NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8082	F-300/504	TCN	SUB TCN					Total Bottle
	MW-12S-1223	12/15/23	09:51	JLG	water	X	X	X	X					
	MW-12S-1223-MS	12/15/23	09:51	JCG	water	X	X	X	X					
	MW-12S-1223-MSD	12/15/23	09:51	JCG	water	X	X	X	X					
	MW-1209-1223-BD	12/15/23	13:00	JCG	water	X	X	X	X					
	MW-1214-1223-FBW	12/15/23	12:30	JCG	water	X	X	X	X					

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Sample Specific Comments

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative									

Relinquished By:	Date/Time	Received By:	Date/Time
Josh Glosenger	12/15/23 13:30		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
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Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road
Suite 1 Massena NY 13662
Phone: (315) 296-9003
Fax:
Email: glosengerjc@cdmsmith.com

Project Information

Project Name: Reynold Ground water sampling
Project Location: Massena NY
Project # 110087
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

NYTCL-8082
F-300 / 504

Sample Filtration
☐ **Done**
☐ **Lab to do**
Preservation
☐ **Lab to do**
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8082	F-300 / 504	Sample Specific Comments
	MW-13S-1223	12/18/23	11:10	water	JCG	X	X	
	MW-14S-1223	12/18/23	12:01	water	JCG	X	X	
	MW-121R-1223	12/18/23	12:15	water	JCG	X	X	
	MW-121R-1223	12/19/23	12:30	water	JCG	X	X	
	MW-17S-1223	12/19/23	11:42	water	JCG	X	X	

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Josh Glosenger	12/19/23 13:40		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

COC J

BC

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 1 Winners Circle Albany NY
Suite 1 Massena NY 13662
Phone: 315-296-9503
Fax:
Email: glossaccio@cdmsmith.com

Project Information

Project Name: Brownfield Cleveland NY
Project Location: Massena NY
Project #
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☐ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

NYTAL-8082 | E.300/504

Sample Filtration
☐ **Done**
☐ **Lab to do**
Preservation
☐ **Lab to do**
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTAL-8082	E.300/504	Sample Specific Comments
	MW-27c-1223	12/19/23	09:45	WW	JLG	X	X	
	MW-19c-1223	12/20/23	10:23	GW	JLG	X	X	
	MW-15-X7-1223	12/20/23	12:35	WW	DP	X	X	
	MW-03S-1223	12/20/23	08:14	GW	JLG	X	X	
	MW-56-1223	12/19/23	16:34	WW	JLG		X	
	MW-50-1223	12/20/23	14:20	GW	BC	X	X	
	DZ-44-1223	12/20/23	10:49	GW	BC	X	X	
	DZ-45-1223	12/20/23	09:19	GW	BC	X	X	
	DZ-46-1223	12/20/23	08:55	GW	BC	X	X	1 BOD bottle
	MW-1219-1223	12/20/23	17:10	GW	DP	X	X	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type								
Preservative								

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	12.21.23 1345		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: [illegible]
Address: [illegible]
Phone: [illegible]
Fax:
Email: [illegible]

Project Information

Project Name: [illegible]
Project Location: [illegible]
Project #
(Use Project name as Project #) ☐
Project Manager: [illegible]
ALPHAQuote #:

Turn-Around Time

Standard ☐ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

NYTCL 8082
TCL 8260 / 504

Sample Filtration
☐ **Done**
☐ **Lab to do**
Preservation
☐ **Lab to do**
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL 8082	TCL 8260 / 504						Sample Specific Comments
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	X	X						
	MW-35SR-1223	12/21/23	09:57	WATER	JCG	X	X						
	MW-21SR-1223	12/21/23	12:57	WATER	JCG	X	X						
	MW-32II-1223-BD	12/21/23	13:15	WATER	JCG	X	X						

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	12-21-23 1345		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Cat. B

NEW YORK CHAIN OF CUSTODY

Page 1 of 2

Date Rec'd in Lab

ALPHA Job #

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Client Information

Client: CDM Smith
Address: 4 Highland Rd
Suite 1 Massena NY 13662
Phone: 315 296 9006
Fax:
Email: rosadasmiliaefox@cdmsmith.com

Project Information

Project Name: Reynolds Groundwater Sampling
Project Location: Massena NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8082	F-300/SO4	Total Bottle	Sample Specific Comments
	MW-36-1223	12/23/23	0705	EDP	Water	x	x		
	MW-36-1223-MS	12/23/23	0705	EDP	Water	x	x		
	MW-36-1223-MSD	12/23/23	0705	EDP	Water	x	x		
	MW-23-855-1223	12/23/23	0932	EDP	Water	x	x		
	MW-22-855-1223	12/23/23	1040	EDP	water	x	x		
	MW-1220-1223FBW	12/22/23	1534	EDP	water	x	x		
	MW-1221-1223FBW	12/23/23	0950	EDP	water	x	x		

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Daniel Rosadas	12/23/23 1300		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Lab ID 23C

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page / of /

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road
Suite 1 Massena NY 13662
Phone: (315) 296-9003
Fax: —
Email: glosenzerjc@cdmsmith.com

Project Information

Project Name: Reynolds Groundwater Sampling
Project Location: Massena NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL 8082	E-300/300.4	Sample Specific Comments
	MW-37-1223	12/26/23	13:47	water	JCG	X	X	
	MW-38-1223	12/27/23	09:01	water	EDP	X	X	
	MW-41-1223	12/27/23	09:20	water	JCG	X	X	
	MW-42-1223	12/27/23	08:04	water	JCG	X	X	
	MW-54-1223	12/27/23	17:49	water	JCG	X	X	
	MW-55-1223	12/27/23	14:42	water	JCG	X		
	MW-1222-1223	12/26/23	14:01	water	JCG	X	X	
	MW-1223-1223	12/27/23	17:52	water	JCG	X	X	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
Jcf Cof	12-28-23 1300		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

COC ✓ DP

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road
Suite 1 Massena NY 13662
Phone: (315) 296-9003
Fax:
Email: glosengerjc@cdmsmith.com

Project Information

Project Name: Reynolds Groundwater
Project Location: Massena NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

NYTCL-8082
F-300/504

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8082	F-300/504	Total Bottle	Sample Specific Comments
	MW-20-85S-1223	12/28/23	08:38	water	JCG	X	X		
	MW-48-1223	12/28/23	09:45	water	JCG	X	X		
	MW-49-1223	12/28/23	11:40	water	JCG	X	X		
	MW-51-1223	12/28/23	14:21	water	JCG	X	X		
	MW-52-1223	12/28/23	12:22	water	JCG	X	X		
	MW-1224-1223-FBV	12/28/23	14:30	water	JCG	X	X		

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Josh Glosenger	12/28/23 15:14		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

COC / DP

370472

HARRISBURG PA

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Phone (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Josh Glosenger	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-94690-17369.1
Client Contact: Joshua Glosenger	Phone: (315) 296-9003	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: ~~Page 1 of 2~~ 1 of 2
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: ~~140005~~ 110437			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

1677_Free - Free Cyanide by 1677

Preservation Codes:

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BTBTissue, AAir)	1677_Free	Special Instructions/Note:
MW-10S-1223	12/12/23	13:30	G	Water	X	
MW-10S-1223-MS	12/12/23	13:30	G	Water	X	
MW-10S-1223-MSD	12/12/23	13:30	G	Water	X	
~~MW~~ SLPWETW-1223	12/12/23	11:01	G	Water	X	
MW-39S-1223	12/12/23	12:07	G	Water	X	
MW-45-1223	12/12/23	14:44	G	Water	X	
MW-1215-1223-FBW	12/12/23	13:48	G	Water	X	
MW-1210-1223-BD	12/12/23	13:15	G	Water	X	
SLPWETE-1223	12/13/23	08:45	G	Water	X	
MW-30S-1223	12/13/23	12:05	G	Water	X	
MW-28S-1223	12/13/23	11:03	G	Water	X	

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Josh Glosenger	12/13/23 14:28	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

COCV DP

370472

HARRISBURG PA

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Phone (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Josh Glosenger	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-94690-17369.1
Client Contact: Joshua Glosenger	Phone: 315-296-9003	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: ~~Page 1 of 3~~ 2 of 2
Company: CDM Smith Inc	PWSID:	Analysis Requested		Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			Preservation Codes:
City: Massena	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: ~~4500005~~ 110437			Other:
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	1677_Free - Free Cyanide by 1677	Special Instructions/Note:
MW-1216-1223-FBW	12/13/23	12:15	G	Water	X	
				Water		
				Water		
				Water		
				Water		
				Water		
				Water		
				Water		
				Water		
				Water		
				Water		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Josh Glosenger	12/13/23 14:28	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

CoC v DP

eurofins | Environment Testing

Client Information	Sampler: JCG / EDP	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-97234-17752.7
Client Contact: Joshua Glosenger	Phone: 315-296-9007	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page ~~7 of 7~~ 1 of 2
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days): 7 Days			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide by 1677	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-115R-1223	12/14/23	15:31	G	Water			X		
MW-12s-1223	12/15/23	09:51	G	Water			X		
MW-12s-1223-MS	12/15/23	09:51	G	Water		X	X		
MW-12s-1223-MSD	12/15/23	09:51	G	Water		X	X		
MW-16s-1223-	12/14/23	09:55	G	water			X		
MW-18s-1223	12/13/23	14:15	G	water			X		
MW-26s-1223	12/14/23	14:00	G	water			X		
MW-40s-1223	12/13/23	15:45	G	water			X		
MW-43-1223	12/14/23	14:51	G	water			X		
MW-44-1223	12/14/23	13:18	G	water			X		
MW-1209-1223-BD	12/15/23	13:00	G	water			X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Josh Glosenger	Date/Time: 12/15/23 14:44	Company: CDM Smith	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax 412-963-2468

Chain of Custody Record

COC v DP

eurofins | Environment Testing

Client Information	Sampler:	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-97234-17752.7
Client Contact: Joshua Glosenger	Phone:	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: ~~Page 7 of 7~~ 2 of 2
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Fros - Free Cyanide by 1677	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
FDraw - 1223	12/14/23	12:25	G	Water			X		
MW - 1213 - 1223 - FBW	12/14/23	15:49	G	Water			X		
MW - 1214 - 1223 - FBW	12/15/23	12:30	G	Water			X		
MW - 335 - 1223	12/15/23	12:27	G	Water			X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Josh Glosenger	12/15/23 14:44	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Josh Glosenger	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-97234-17752.7
Client Contact: Joshua Glosenger	Phone: 315-296-9003	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page ~~2 of 2~~ 1 of 1
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days): 7 Day			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide by 1677	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-13S-1223	12/18/23	11:10	G	Water			X		
MW-14S-1223	12/18/23	12:01	G	Water			X		
MW-12D-1223	12/18/23	12:15	G	Water			X		
MW-12D-1223	12/19/23	12:30	G	Water			X		
MW-17S-1223	12/19/23	11:42	G	water			X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Josh Glosenger	Date/Time: 12/19/23 13:46	Company: CDM Smith	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

COC 1 of 2

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: JCG / D.C / EDP	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-97234-17752.7
Client Contact: Joshua Glosenger	Phone: 315-296-9003	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page 7 of 7 1 of 2
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days): 7			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide by 1677	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-27S-1223	12/20/23	09:45	G	Water			X		
MW-19S-1223	12/20/23	10:23	G	Water			X		
MW-15S-87-1223	12/20/23	13:33	G	Water			X		
MW-03S-1223	12/20/23	08:18	G	Water			X		
MW-56-1223	12/19/23	16:34	G	water			X		
MW-50-1223	12/20/23	14:20	G	water			X		
PZ-44-1223	12/20/23	10:47	G	water			X		
PZ-45-1223	12/20/23	09:19	G	water			X		
PZ-46-1223	12/20/23	08:55	G	water			X		
MW-1219-1223	12/20/23	17:20	G	water			X		
MW-34S-1223	12/21/23	08:54	G	water			X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Basil Cox	Date/Time: 12-21-23 1401	Company: CDM	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 215 2527	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: JLG/DC/E.D.D	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-97234-17752.7
Client Contact: Joshua Glosenger	Phone:	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: ~~Page 7 of 7~~ 2 of 2
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide by 1677	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-355R-1223	12/21/23	09:57	G	Water		X			
MW-316R-1223	12/21/23	12:57	G	Water		X			
MW-1211-1223-BD	12/21/23	13:15	G	Water		X			
				Water					

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
David Cay	12-21-23 1400	CDM			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 2152527	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

COC v 3L

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Dan Posadas	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-97234-17752.7
Client Contact: Joshua Glosenger	Phone: (315) 296 9006	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page 7 of 7
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days):			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide by 1677	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-36-1223	12/23/23	0705	G	Water			X		
MW-36-1223-MS	12/23/23	0705	G	Water		X	X		
MW-36-1223-MSD	12/23/23	0705	G	Water		X	X		
MW-23-85S-1223	12/23/23	0932	G	Water			X		
MW-22-85S-1223	12/23/23	1040	G	Water			X		
MW-1220-1223 F BW	12/22/23	1534	G	Water			X		
MW-1221-1223 F BW	12/23/23	0950	G	Water			X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Dan Posadas	12/23/23 1200	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 1257938	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

COCV DP

eurofins | Environment Testing

Client Information	Sampler: Josh Glosenger	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-97039-17369.2
Client Contact: Joshua Glosenger	Phone: (315) 296-9003	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: CDM Smith Inc	PWSID:			Job #:
Address: 4 Highland Road Suite 1	Due Date Requested:			
City: Massena	TAT Requested (days): 7			
State, Zip: NY, 13662	Compliance Project: Δ Yes Δ No			
Phone: 315-296-9012(Tel)	PO #: ~~113893~~ 110837			
Email: glosengerjc@cdmsmith.com	WO #:			
Project Name: Reynolds Facility	Project #: 18026950			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1677_Free - Free Cyanide by 1677	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-20-856-1223	12/28/23	08:38	G	Water			X		
MW-48-1223	12/28/23	09:45	G	Water			X		
MW-49-1223	12/28/23	11:40	G	Water			X		
MW-51-1223	12/28/23	14:21	G	Water			X		
MW-52-1223	12/28/23	12:22	G	Water			X		
MW-1224-1223-FBV	12/28/23	14:30	G	Water			X		
				Water					

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Joshua Glosenger	12/28/23 16:00	CDM Smith			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: ~~2211788~~ 2211789
Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Location: Reynolds Metals Date: 12/12/23

Project / Client: Alcoa

Personnel: Basil Cox, Daniel Posadas, Josh Gbesego
Weather: sunny 31°F wind: 10 mph ↗
Purpose: GW sampling
PPE: Lvl D
On site: 9:30 Off site: 15:15
MW-10S MS/MSD Not enough volume.
Purged and returned to sample @ 13:30
SLPWETW - Sampled at 11:01
MW-39S - Sampled at 12:07 BD-1210
MW-4S - Not viable for low flow
took two sets of readings. upped to 45 gpm
to return for sample
Returned to 10S for sample
sampled @ 13:30 - FDW 1215 @ 13:48
sampled MW-4S @ 14:44
Returned to office

Location: Reynolds Sampling Calibration Date: 12/13/23

Project / Client: Alcoa

YSI # 5 Turbidity Meter #5

pH	4	-4.12	-4.00
	7	-7.11	-7.02
	10	-9.98	-10.06
ORP	220	-215.9	-220
Spec Cond	1.413	-1.437	-1.413
DO%	~~100~~	103.6	-100.6
Turbidity	<0.10		Pass
	20		Pass
	100		Pass
	800		Pass

YSI Rental # 3335 Turbidity Meter #4

pH	4	-4.03	-4.00
	7	-7.01	-7.02
	10	-9.93	-10.02
ORP	220	-219.4	-220
Spec Cond	1.413	-1.433	-1.413
DO%	103.0	-100.7	
Turbidity	<0.10		Pass
	20		Pass
	100		Pass
	800		Pass

Rite in the Rain

Location: Reynolds Metal Date: 12/13/23

Project / Client: Alcoa - Reynolds Groundwater

December 2023

Personnel: Daniel Posadas & Joshua Gbenger

weather: Cloudy 27°F wind: 7 mph →

Purpose: collect groundwater sampling at Reynolds metal facility

PPE: level D

On site: 8:30 off site:

SLPWETE grab sample @ 8:45

10:48 - Purged MW-40S to intake and left to recharge.

10:55 set up at 30S

12:05 Sampled 30S

12:30 Return to TQC to pack samples

2:00 Samples shipped for Alpha

3:00 Samples shipped to Eurofins (Fedex)

4:15 sample collected at MW-40

4:30 samples stored at 7QC

Location: Date:

Project / Client:

Location: Reynolds metals Date: 12/14/23

Project / Client: Alcoa - Reynolds Groundwater sampling December 2023

Personnel: Daniel Posadas, Josh Glasgow

Basil Cox — Weather: 17° cloudy Wind: 6mph ↗

Purpose: Reynolds Groundwater sampling

PPE: Lvl D On site: 8:25 Off site: 4:15

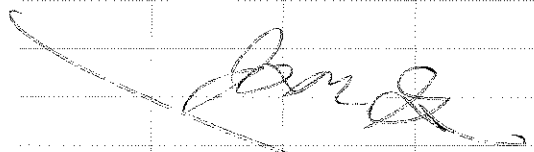
YSI & Turbidimeter calibrated at office

8:30 - Install new tubing @ MW-16 & 26

8:45 - Set up @ MW-125. To collect MS/MSD and Blind Dup here. Rental YSI # 3335 or model: 22B106618

9:45 - Drawdown at 125 too much for low flow stabilization upped to 500 mL/min - Purge to intake and collect sample after recharge.

10:25 - Set up at 115R



Location: Date:

Project / Client:

Rite in the Rain

Location: Reynolds Metal Date: 12/15/23

Project / Client: Alcoa Reynolds Groundwater

December

Personnel: Josh Glosenger, Daniel Rosadas

Weather: Sunny 38° wind: 13 mph ↗

Purpose: Reynolds groundwater sampling

PPE: Lvl D On site: 07:51 off site

YSI & Turbidimeter calibrated at office

8:09 - Pumping 12s to Blind Dupe Bucket

9:51 - Sampled 12s / MS/MSD / BD 12:09

10:20 - Replace tubing @ 33sft

11:01 - Set up at 33sft and begin purge

12:27 - collect sample and packed up the equipment, Back to 79C

1:00 - Begin sample pack at 79C

1:46 - Sample Ready

1:50 - Headed Back to office

Location: Date:

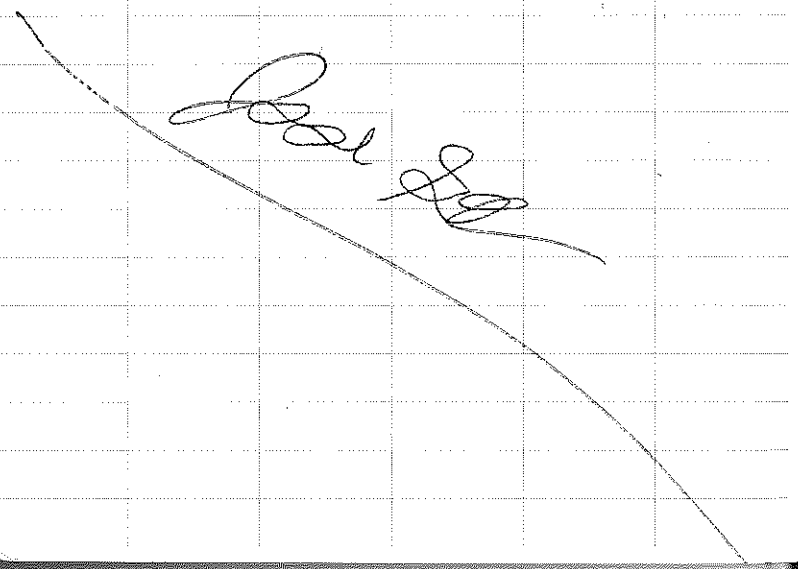
Project / Client:

Location: Reynolds Metals Date: 12/18/23

Project / Client: Alcoa - Reynolds GW sampling
December 2023

Personnel: Daniel Posadas, Josh Glosenger
Weather: Overcast/Rain 46°F wind: 10mph W
Purpose: Ground water sampling at Reynolds
PPE: lvl D On site: 8:50 OFF SITE: 12:30
YSI #5 & Turbidimeter #5 have been calibrated at office prior to mobilization, see calibration log.

9:00 - Set up @ MW-14S
10:00 - Finished purge moving to 13S
10:00 - Begin purge @ 13S
11:10 - Collect Sample
12:01 - Collect Sample at 14S
FBW collected at 14S



4.21

Location: Date:

Project / Client:

Location: Reynolds Metals Date: 12/19/23

Project / Client: Alcoa - Reynolds GW Samp

December 2023

Personnel: Josh G, Dan P

Weather: Snow 28°F Wind: lo ↓

Purpose: GW Sampling at Reynolds

PPE: LVL D On site: 8:30 Offsite: 16:44

All field equipment calibrated at office

8:58 - Set up at 3S, Begin purge

MW-3S drawdown greater than 1Ft @ 150 ml/min

No good for low flow

9:49 - Set up @ MW-27, Need to change tubing first.

10:03 - Begin Purge at MW-27S

11:09 - Set up at 17S, begin Purge

11:39 - Sample collected

12:15 - Not sufficient recovery at 3S or 27S - return ~~tomorrow~~ tomorrow

12:30 - FBW - 1218 collected

12:40 - Return to office for shipping

13:40 - Samples shipped

14:16 - Set up @ 19S

14:58 - location purge return for sample tomorrow

15:10 Both MW-3S & 27 didn't recover enough, Sample tomorrow.

15:29 - Set up at MW-26

16:34 - Sample collected

Dan P

Location: Date:

Project / Client:

Rite in the Rain

Location Reynolds metals Date 12/20/23

Project / Client Alcoa- Reynolds GW sampling December 2023

Personnel: Daniel Posadas, Josh Clevenger

Weather:

Purpose: collect GW samples @ Reynolds facility

PPE: LVL D Onsite: 07:45 Offsite: 17:50

All field equipment was calibrated in the office prior to mobilizing to site see calibration log for 12/20/23

8:00: set up @ MW-3s very little recharge still taking sample. Started sample @ 8:16

~~8:16~~ 8:20 - returned to office ~~to~~ to get car

~~10:03~~ 9:45 Set up at 27s

~~10:22~~ - collecting sample at 19s

10:45 - set up at 34s and purge

12:45 - set up at MW15s and purge

13:37 - Sample collected

14:15 - Set up at 35 - Needed to figure out how to sample with waterra

15:56 - MW 35 purge complete

16:15 - get to 31sh

17:12 - Set up complete begin purge

17:50 purge complete return to office

Location Date

Project / Client

Location Reynold Metals Date 12/21/23

Project / Client Alcoa - Reynolds ground water

Calibration Log

YSI #5 Turbidimeter #5

Cond: 1.413 - 1.415 - 1.413

pH 4:	4.03 - 4	<0.10	Pass
7:	7.10 - 7	20	Pass
10:	10.06 - 10	100	Pass
ORP:	226.4 - 220	800	Pass
DO %:	106.3 - 100		

YSI Rental 3335 Turbidimeter #4

Cond: 1.413 - 1.422 - 1.413

pH 4:	3.98 - 4		
7:	7.02 - 7	<0.10	Pass
10:	9.97 - 10	20	Pass
ORP:	229.1 - 220	100	Pass
DO%:	103.9 - 100	800	Pass

Location Date

Project / Client

Rite in the Rain

Location Reynolds Metals Date 12/21/23

Project / Client Alcoa - Reynolds ground water sampling December 2023

Personnel: Josh Glosenger & David Posadas

Weather: 17° sunny wind: 5 mph ↓

Purpose: Reynolds groundwater sampling

PRE: lvl D onsite: 6:00 am offsite:

All field equipment calibrated prior to sampling - See calibration log for 12/24/23

5:00 - 5:30 - load truck, drive to plant

5:50 - Arrive at plant take Dan to do water and will calibrate equipment there

6:30 - 7:30 : Calibrate equipment

7:45 set up at 34

8:49 - Sample taken

8:57 - set up at 35

9:57 - Collecting sample at 35

11:26 - MW-52 Poor recovery continue pump.

11:40 - Set up at 31SR begin sample at 11:45 (BD collected at 31SR)

~~11:30~~ 12:53 Samples sent to TPC for shipment

13:01 set up at 23-25S. Used Peristaltic tubing but could not appropriately purge well. Used waterra tubing to purge well.

Location Date

Project / Client

1359 Left site to drop off JCG at office.

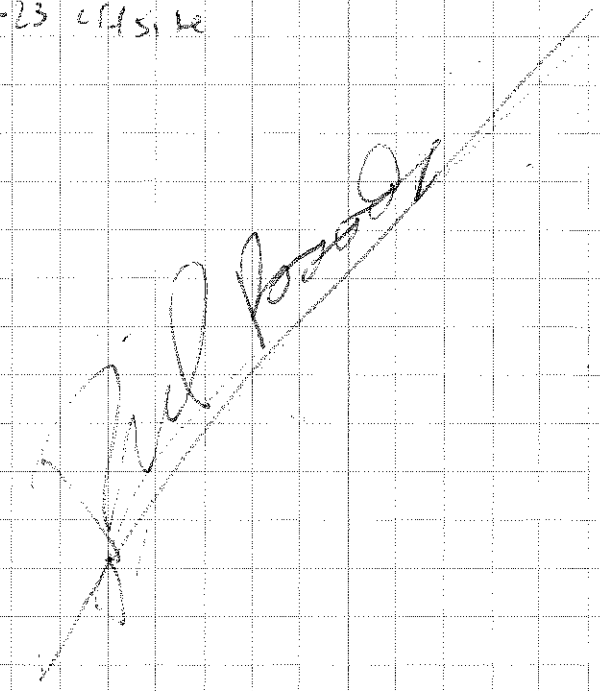
1530 EDT back to East plant

1540 set up at MW-36

1616 Began Pumping 36

1646 No stabilization, well to be purged at 500mL/min until water level reaches 2ft above screen top

1723 Off site



Rite in the Rain

Location Reynolds Metals Date 12/26/23

Project / Client Alcoa - Reynold Groundwater
December 2023

Personnel: Daniel Posadas, Josh Gloseger
Weather: 36°F overcast wind: 5 mph ←
Purpose: GW sampling at Reynolds
PPE: LVL D Onsite: 7:30 ORP:
All field equipment calibrated prior to sampling - see cal log for 12/26/23
8:01 attempt to sample MW-20-85-S well depth inaccurate retry tomorrow
9:55 - begin set up at mw-41 & 42
12:20 - begin set up at MW 36 - MW 37
sample collect at MW-37 @ 13:47
14:15 - gator truck stuck in mud.
15:05 - off site

Location Date

Project / Client

Location: Reynolds metals Date: 12/27/23

Project / Client: Alcoa - Reynolds Groundwater December 2023

Personnel: Daniel posadas, Josh Grosenger

weather: 29°F cloudy wind: 2 ←

Purpose: GW sampling at Reynolds

PPE: LVL D Onsite: 6:50 offsite: 18:05

All field equipment calibrated prior to sampling - see cal log for 12/27/23

8:04 - Sample collected at MW-42

9:20 - Sample at MW-41

9:01 - Sample at MW-38

14:42 - Sample at MW-55

17:49 - Sample at MW-54

19:52 - Sample at MW-1227 17:52 (FB)

offsite @ 18:07

Location: Date:

Project / Client:

Rey Samp 12/15/23

YSI #5 Turbidity Meter #5

pH 4 - ~~4.06 4.00~~ DP 3.98-4.00

7 - 6.99 - 7.02

10 - 9.98 - 10.04

ORP 220 - 220 - 220

Spec Cond 1.413 - 1.401 - 1.413

DO% - 102.7 - 100.7

Turbidity <0.10 Pass

20 pass

100 Pass

800 Pass

YSI Rental #3335 Turbidity Meter #4

pH 4 - 4.06 - 4.00

7 - 7.02 - 7.02

10 - 10.02 - 10.05

ORP 220 - 216.5 - 220

Spec Cond 1.413 - 1.398 - 1.413

DO% - 100.6 - 100.2

Turbidity <0.10 pass

20 pass

100 pass

800 pass

Rey Samp 12/18/23

YSI #5 Turbidity Meter #5

ORP 220 - 220.6 - 220

Spec cond - 1.413 - 1.412 - 1.413

pH 4 - 3.97 - 4

7 - 7.00 - 7.02

10 - 10.01 - 10.05

Turbidity <0.10 Pass

20 Pass

100 Pass

800 Pass

Rey Samp 12/19/23

YSI #5 Turbidimeter #5

Spec conductivity: 1.413 - 1.460 - 1.413

pH: 4 - 4.06 - 4

7 - 7.05 - 7

10 - 9.99 - 10

ORP - 219.5 - 220

DO%: 94.7 ~~100~~ 98.7

Turbidity

<0.10 - Pass

20 - Pass

100 - Pass

800 - Pass

YSI Rental # 3335 Turbidimeter #4

Spec conductivity: 1.413 - 1.438 - 1.413

pH: 4 - 3.94 - 4

7 - 6.96 - 7

10 - 9.99 - 10

ORP: 221.5 - 220

DO %: 100.1 - 98.7

Turbidity

< 0.10 - Pass

< 20 - Pass

< 100 - Pass

< 800 - Pass

Rey Samp 12/20/23

YSI #5 Turbiditymeter #5

Spec Cond	1.413 - 1.387 - 1.413	
pH	4 - 3.95 - 4.00	
	7 - 7.09 - 7.02	
	10 - 9.99 - 10.06	
ORP	220 - 221.3 - 220	
DO%	99.7 - 100.7	
Turbidity	<0.10	Pass
	20	Pass
	100	Pass
	800	Pass

YSI # Rental # 3335 Turbidity Meter #4

Spec Cond	1.413 - 1.390 - 1.413	
pH	4 - 4.08 - 4.00	
	7 - 7.06 - 7.02	
	10 - 10.03 - 10.06	
ORP	220 - 220.8 - 220	
DO%	102.1 - 100.8	
Turbidity	<0.10	Pass
	20	Pass
	100	Pass
	800	Pass

Rey Samp 12/22/23

YSI #5 Turbidity Meter #5

Spec Cond	1.413	
pH	4	
	7	
	10	
ORP	220	
DO%		
Turb	<0.10	pass
	20	pass
	100	pass
	800	pass

YSI Rental #3335 Turbidity Meter #4

Spec Cond	1.413 - 1.421 - 1.413	
pH	4 - 4.03 - 4.01	
~~ORP~~	7 - 7.03 - 6.99	
	10 - 9.95 - 9.96	
ORP	220 - 189.6 - 220	
DO%	103.1 - 105.3	
Turb	<0.10	pass
	20	pass
	100	pass
	800	pass

Rey Samp 12/22/23

Onsite 0650

0651 - MW-36 will be sampled (MS/MSD) here

Rey Samp 12/26/23

YSI #5 Turbidity Meter #5

Spec Cond 1.413 - 1.420 - 1.413

pH 4 - 3.92 - 4.00

7 - 6.95 - 7.02

10 - 9.90 - 10.06

ORP 220 - 208.8 - 220

DO % 100.1 - 100.4

Turb <0.10 Pass

20 pass

100 pass

800 Pass

YSI Rental # 3335 Turbidity Meter #4

spec cond 1.413 - 1.394 - 1.413

pH 4 - 3.94 - 4.00

7 - 7.04 - 7.02

10 - 10.04 - 10.06

ORP 220 - 234.7 - 220

DO % 96.3 - 100.5

Turb <0.10 Pass

20 Pass

100 Pass

800 Pass

Rey Samp 12/27/23

YSI #5 Turbidity Meter #5

Spec Cond 1.413 - 1.424 - 1.413

pH 4 - 4.03 - 4.00

7 - 7.08 - 7.02

10 - 9.98 - 10.06

ORP 220 - 219.6 - 220

DO % 101.3 - 101.1

Turb <0.10 Pass

20 Pass

100 Pass

800 Pass

YSI Rental # 3335 Turbidity Meter #4

Spec Cond 1.413 - 1.429 - 1.413

pH 4 - 3.98 - 4.00

7 - 7.03 - 7.02

10 - 9.97 - 10.06

ORP 220 - 219.6 - 220

DO % 100.8 - 100.0

Turb <0.10 Pass

20 Pass

100 Pass

800 Pass

Rey Samp 12/28/23

YSI #5 Turbidimeter #5

Spec Cond - 1.413 - 1.395 - 1.413

pH 4 - 4.01 - 4

7 - 7.06 - 7

10 - 10.0 - 10

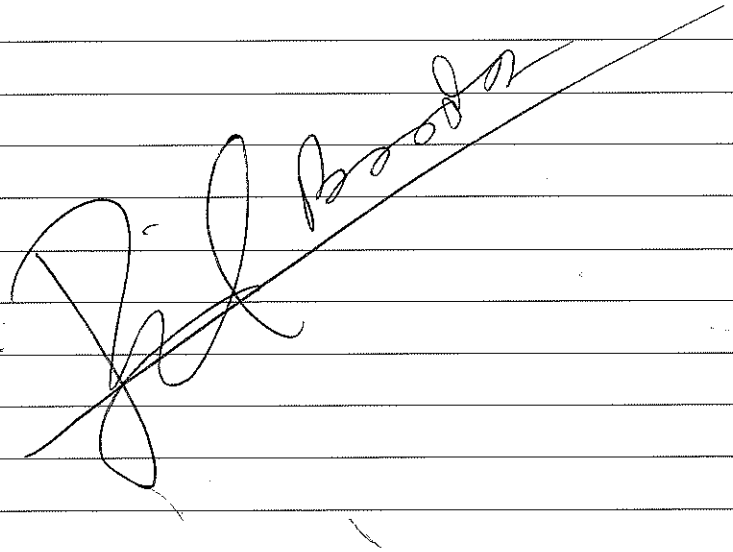
ORP - 220 - 219.4 - 220

~~DO %~~ < 0.10 - Pass DO % - 99.1 - 101.2

20 - Pass

100 - Pass

800 - Pass



Reynolds Resample

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: CDM Smith
Address: 4 Highland Road, Suite 1
Massena, NY 13662
Phone: 315-296-9003
Fax:
Email: glosengerjc@cdmsmith.com

Project Information

Project Name: Reynolds ~~September Groundwater Sampling 2023~~
Project Location: NY
Project # 110081
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

TCN
WD CN

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCN	WD CN							Sample Specific Comments	Total Bottle
	MW-125-0224	2-9-24	0845	water	BC	✓	✓								
	MW-125-0224 MS	2-9-24	0845	water	BC	✓	✓								
	MW-125-0224 MSD	2-9-24	0845	water	BC	✓	✓								
	MW-2024-FB	2-9-24	0950	water	BC	✓	✓								
	MW-2024-BD	~~2-9-24~~ 2-9-24	0940	water	BC	✓	✓								

Container Type: A P P
Preservative: A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Brad Cox	2-9-24 0930		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

CDM Smith
listen. think. deliver.

(Page 1 of)

Project: Reynolds Groundwater Sampling	Analyte Collected	(Y/N)	Time	Note
Date: 2-8-24 / 2-9-24	1) FCN	Y	0845	
Well ID: MW-12S	2) Flouride	N		
Sampler: Jas. / Cox	3) Sulfate	N		
	4) PCBs	N		
	5)WAD/TCN	Y	0845	

Pre-purge Water Elevation:	5.42	(BTIC)			
Intake Elevation:	14	(BTIC)	Final Water Elevation:	5.41 (BTIC)	Temp: 41 °F
Screened Interval: 9-19		(BTIC)	Pump used (Circle one)		Wind: 2-5 MPH
TIC Elevation: 247.08		(FT)	Waterra	Peristaltic Grundfos Bailer	Direction: SE - W
Depth of Well: 18.72		(FT)	Turbidimeter #: 4		YSI #: 4

Time	Water Level (ft btic)	Drawdown (ft)	Flow Rate (mL/min)	DO (mg/L)	pH (SU)	Temperature (ºC)	Specific Conductivity (ms/cm)	ORP (mV)	Turbidity (NTU)	Note
Stabilization Criteria		< 0.3 foot	± 3 %	± 10 %	± 10 %	± 3 %	± 3 %	±10 mV	± 1 NTU	
1135	5.42		350						~~6.95~~	
1140	8.23	2.81	~~200~~ 250	72.9	7.57	5.8	2.045	136.5	6.9	
1145	9.13	0.9	150	71.8	7.59	5.6	2.026	133.1	3.5	
1150	9.32	0.19	150	70.0	7.56	5.7	2.027	132.4	4.0	
~~1155~~										
~~1200~~										
~~1205~~										
2-9-24	5.41		200	79.8	7.47	4.8	1.733	191.8	13.4	
0845										

Volume Calculation				
PIPE SIZE	1.25"	2"	4"	6"
C.F.	0.08	0.17	0.66	1.5

1 VOLUME = (INTAKE ELEVATION - WATER ELEVATION) X C.F.

Comments

Resample Increase flow rate to 500 mL/min for drawdown
5.5 gallons purged.
Sampled on 2-9-24

Appendix C Historical Analytical Results

Table C-1
East Plant BMP
Historical Analytical Results Through 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
East Plant BMP																	
MW-11SR	99Q1	0.39	< 0.01 U	--	--	0.4	--	--	--	--	--	--	--	--	--	< 0.065 U	3200
MW-11SR	99Q2	0.42	< 0.01 U	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	2900
MW-11SR	99Q3	0.22	< 0.01 U	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	3100
MW-11SR	99Q4	0.64	< 0.01 U	--	--	0.4	--	--	--	--	--	--	--	--	--	< 0.065 U	1900
MW-11SR	00Q1	2.3	< 0.01 U	--	--	0.4	--	--	--	--	--	--	--	--	--	< 0.065 U	2600
MW-11SR	00Q2	0.58	< 0.01 U	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	2200
MW-11SR	00Q3	0.49	< 0.01 U	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	2200
MW-11SR	00Q4	< 0.01 U	< 0.01 U	--	< 0.01 U	0.294	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1860
MW-11SR	01Q1	0.12	< 0.01 U	--	< 0.01 U	0.336	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1710.19
MW-11SR	01Q2	0.94	0.222	--	< 0.01 U	< 0.2 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1859.77
MW-11SR	01Q3	2.51	< 0.01 U	--	< 0.01 U	< 0.2 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	201.74
MW-11SR	01Q4	0.33	< 0.01 U	--	< 0.01 U	0.379	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1570.9
MW-11SR	02Q1	0.1	< 0.01 U	--	< 0.01 U	0.308	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1665.55
MW-11SR	02Q2	0.16	< 0.01 U	--	< 0.01 U	0.286	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1518.64
MW-11SR	02Q3	0.16	< 0.01 U	--	< 0.01 U	0.391	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1622.13
MW-11SR	02Q4	0.16	< 0.01 U	--	< 0.01 U	0.372	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1179.98
MW-11SR	03Q1	1.082	< 0.01 U	--	< 0.01 U	0.354	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1487.37
MW-11SR	03Q2	0.273	< 0.01 U	--	< 0.01 U	0.348	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1562.88
MW-11SR	03Q3	4.552	< 0.01 U	--	< 0.01 U	0.344	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1322.15
MW-11SR	03Q4	0.052	< 0.01 U	--	< 0.01 U	0.358	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1314.33
MW-11SR	04Q1	3.233	< 0.01 U	--	< 0.01 U	0.295	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1322.56
MW-11SR	04Q2	0.581	< 0.01 U	--	< 0.01 U	0.316	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1105.91
MW-11SR	04Q3	0.672	< 0.01 U	--	< 0.01 U	0.376	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1200.76
MW-11SR	04Q4	6.464	< 0.01 U	--	< 0.01 U	0.41	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1032.48
MW-11SR	05Q1	9.085	< 0.01 U	--	< 0.01 U	0.4429	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	943.35
MW-11SR	05Q2	0.931	< 0.01 U	--	< 0.01 U	0.3766	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1090.35
MW-11SR	05Q3	2.331	< 0.01 U	--	< 0.01 U	0.3713	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	995.67
MW-11SR	05Q4	0.963	< 0.01 U	--	< 0.01 U	0.3459	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	572.92
MW-11SR	06Q1	0.314	< 0.01 U	--	< 0.01 U	0.26	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	748.1
MW-11SR	06Q2	0.186 J	< 0.01 U	--	< 0.01 U	0.3144	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	148.52
MW-11SR	06Q3	1.507	< 0.01 U	--	< 0.01 U	0.3402	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	928.55
MW-11SR	06Q4	1.333	< 0.01 U	--	< 0.01 U	0.3401	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	602.79
MW-11SR	07Q1	0.391	< 0.01 U	--	< 0.01 U	0.341	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	913.9
MW-11SR	07Q2	0.48	< 0.01 U	--	< 0.01 U	0.3366	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	892.04
MW-11SR	07Q3	4.898	< 0.01 U	--	< 0.01 U	0.3818	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	827.31
MW-11SR	07Q4	1.656	< 0.005 U	--	< 0.005 U	0.3022	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	700
MW-11SR	08Q1	7.57	< 0.01 U	--	< 0.01 UJ	0.3745	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	592
MW-11SR	08Q2	2.917 R	< 0.005 U	--	< 0.01 U	0.4099	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	786
MW-11SR	08Q3	2.713	< 0.005 U	--	< 0.01 U	0.3552	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	694
MW-11SR	08Q4	6.22	< 0.005 U	--	< 0.01 U	0.4102	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	698
MW-11SR	09Q1	11.9	< 0.01 UJ	--	< 0.01 UJ	0.33	--	--	--	< 0.505 U	< 0.505 U	< 0.505 U	< 0.505 U	--	--	--	488

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CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-11SR	09Q2	7.74	< 0.01 U	--	< 0.01 U	0.4009	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	561
MW-11SR	09Q3	8.11	< 0.01 U	--	< 0.01 U	0.3126	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	585
MW-11SR	09Q4	3.251	< 0.01 U	--	< 0.01 U	0.3936	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	579
MW-11SR	10Q1	2.29	< 0.01 U	--	< 0.01 U	0.2855	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	556
MW-11SR	10Q2	1.39	< 0.01 U	--	< 0.01 U	0.284	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	564
MW-11SR	10Q3	3.181 J	< 0.01 U	--	< 0.01 U	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	534
MW-11SR	10Q4	10.42	< 0.01 U	--	< 0.01 U	0.3474	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	497
MW-11SR	11Q1	3.99	< 0.01 U	--	< 0.01 U	0.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	624
MW-11SR	11Q2	0.94	< 0.01 U	--	< 0.01 U	0.41	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	611
MW-11SR	11Q3	12.7	0.12	--	0.017	1.9	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	--	--	110
MW-11SR	11Q4	7.49	< 0.01 U	--	< 0.01 UJ	0.38	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	482
MW-11SR	12Q1	1.57	< 0.01 U	--	< 0.01 U	0.38 J	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	--	--	729
MW-11SR	12Q3	1.83 J	< 0.01 U	--	< 0.01 U	0.56	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	600
MW-11SR	12Q3	1.34	< 0.01 U	--	< 0.01 UJ	0.32	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	469
MW-11SR	12Q4	2.77	< 0.01 U	--	< 0.01 UJ	0.41	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	522
MW-11SR	13Q2	5.68	< 0.01 U	--	< 0.01 U	0.32 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	590
MW-11SR	13Q4	7.84 J	< 0.01 U	--	< 0.01 U	0.34	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	355
MW-11SR	14Q2	1.97	< 0.01 U	--	< 0.01 U	0.3	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	502
MW-11SR	14Q4	2.68	< 0.01 U	--	< 0.01 U	0.3	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	314
MW-11SR	15Q3	0.32	< 0.01 U	--	--	0.33 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	453
MW-11SR	15Q3	--	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-11SR	15Q4	0.24	< 0.01 U	--	< 0.01 U	0.37	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	349
MW-11SR	16Q2	0.415	< 0.005 U	--	--	0.39	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	480
MW-11SR	16Q4	0.386	0.002 J	--	< 0.01 U	0.315	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	433
MW-11SR	17Q2	0.162	< 0.005 U	--	< 0.01 U	0.25	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	483
MW-11SR	17Q4	1.28	< 0.005 U	--	< 0.01 U	0.312	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	355
MW-11SR	18Q2	0.508	< 0.005 U	--	< 0.01 U	0.304	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	458
MW-11SR	19Q1	0.44	< 0.005 U	--	< 0.01 U	0.308	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	309
MW-11SR	19Q2	0.81	< 0.005 U	--	< 0.01 UJ	0.288	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	300 J
MW-11SR	19Q4	0.456	0.004 J	--	< 0.01 UJ	0.47	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	303
MW-11SR	20Q2	0.189	< 0.005 U	--	< 0.01 U	0.473	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	--	--	424
MW-11SR	20Q4	0.274	< 0.005 U	--	< 0.01 U	< 0.5 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	231
MW-11SR	21Q2	0.338	0.056	--	0.013	2.64	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2920
MW-11SR	21Q4	0.279	< 0.005 U	--	< 0.01 U	0.336	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	232
MW-11SR	22Q2	0.141	0.002 J	--	< 0.01 U	0.258	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	344
MW-11SR	22Q4	0.208	< 0.005 U	--	< 0.01 U	0.264	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	235
MW-11SR	23Q2	--	--	< 0.002 U	--	0.301	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	461
MW-11SR	23Q4	--	--	< 0.006 U	--	0.29	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	258
MW-12S	99Q2	0.46	0.05	--	--	6.5	--	--	--	--	--	--	--	--	--	< 0.065 U	220
MW-12S	99Q3	5.7	0.05	--	--	7.5	--	--	--	--	--	--	--	--	--	< 0.065 U	340
MW-12S	99Q4	1	0.05	--	--	8.2	--	--	--	--	--	--	--	--	--	< 0.065 U	290
MW-12S	00Q1	2.2	0.06	--	--	8.2	--	--	--	--	--	--	--	--	--	< 0.065 U	290

Table C-1
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Massena East, Massena, New York
Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-12S	00Q2	0.34	0.05	--	--	7	--	--	--	--	--	--	--	--	--	< 0.065 U	330
MW-12S	00Q3	0.8	0.05	--	--	7.5	--	--	--	--	--	--	--	--	--	< 0.065 U	420
MW-12S	00Q4	0.12	< 0.01 U	--	< 0.01 U	8.468	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	357
MW-12S	01Q1	0.39	0.049	--	< 0.01 U	8.233	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	319.53
MW-12S	01Q2	2.44	0.069	--	< 0.01 U	6.227	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	406.56
MW-12S	01Q3	0.71	0.062	--	0.01	6.69	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	406.77
MW-12S	01Q4	0.23	0.0855	--	0.013	11.01	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	424.67
MW-12S	02Q1	0.28	0.044	--	< 0.01 U	10.19	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	461.09
MW-12S	02Q2	0.29	0.073	--	< 0.01 U	9.073	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	456.15
MW-12S	02Q3	0.3	0.063	--	< 0.01 U	11.97	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	466.44
MW-12S	02Q4	0.286	0.063	--	< 0.01 U	10.69	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	495.65
MW-12S	03Q1	55.65	0.0575	--	0.013	9.798	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	400.184
MW-12S	03Q2	0.103	0.0685	--	0.0135	8.556	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	353.27
MW-12S	03Q3	0.212	0.07	--	0.0135	10.55	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	382.08
MW-12S	03Q4	5.777	0.0615	--	0.011	11.69	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	285.99
MW-12S	04Q1	13.39	0.058	--	0.0185	9.071	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	370.14
MW-12S	04Q2	10.103	0.0705	--	0.019	10.8	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	346.07
MW-12S	04Q3	13.91	0.0605	--	0.0465	8.83	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	315
MW-12S	04Q4	7.731	0.0175	--	0.0165	12.88	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	409.32
MW-12S	05Q1	17.01	0.0435	--	0.014	7.345	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	363.82
MW-12S	05Q2	8.279	0.0615	--	0.016	12.52	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	370.07
MW-12S	05Q3	4.883	0.0155	--	0.0125	12.87	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	418.69
MW-12S	05Q4	6.791	0.072	--	0.0135	16.05	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	376.77
MW-12S	06Q1	12.35	0.0425	--	0.012	8.77	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	446.59
MW-12S	06Q2	8.01	0.0445	--	0.015	14.68	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	457.2
MW-12S	06Q3	4.477	0.0545	--	< 0.01 U	1.26 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	499.18
MW-12S	06Q4	1.317	0.0735	--	0.0205	13.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	362.88
MW-12S	07Q1	15.64	0.055	--	0.016	9.006	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	413.57
MW-12S	07Q2	16.03	0.057 J	--	0.019	13.66	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	570.22
MW-12S	07Q3	14.55 J	0.066	--	0.019 J	14.32 R	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	572.08
MW-12S	07Q4	3.26	0.049	--	< 0.005 U	10.39	--	--	--	< 0.065 U	0.143	< 0.065 U	< 0.065 U	--	--	--	380
MW-12S	08Q1	30.3	0.113	--	< 0.01 UJ	10.13	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	383
MW-12S	08Q2	12.01 R	0.035	--	< 0.01 U	12.29	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	595
MW-12S	08Q3	70.01 J	0.043 R	--	< 0.01 U	13.42	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	639
MW-12S	08Q4	15.1 J	0.047 R	--	< 0.01 U	13.75	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	593
MW-12S	09Q1	31.1	0.026 J	--	< 0.01 UJ	11.8	--	--	--	< 0.485 U	< 0.485 U	< 0.485 U	< 0.485 U	--	--	--	497
MW-12S	09Q2	25.9	0.0346	--	< 0.01 U	9.997	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	483
MW-12S	09Q3	26.9	0.0331 R	--	0.0115 J	13.7	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	570
MW-12S	09Q4	13.28	0.0686	--	< 0.01 U	15.44	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	628
MW-12S	10Q1	13.52	0.0508	--	< 0.01 U	13.93	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	395
MW-12S	10Q2	2.5	0.051	--	< 0.01 U	12.88	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	660
MW-12S	10Q3	47.89	0.034	--	< 0.01 U	11.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	690

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-12S	10Q4	18.95	0.059	--	< 0.01 U	13.75	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	686
MW-12S	11Q1	1.01	0.06	--	< 0.02 U	13.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	670
MW-12S	11Q2	6.01	0.044	--	< 0.01 U	11.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	794
MW-12S	11Q3	12.7	0.059	--	< 0.01 U	12.3	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	832
MW-12S	11Q4	13.3	0.046	--	< 0.01 UJ	11.8	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	625
MW-12S	12Q1	16.7	0.04	--	< 0.01 U	10.8 J	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	--	--	594
MW-12S	12Q3	19 J	0.044	--	< 0.01 U	11.8	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	787
MW-12S	12Q4	16	0.04	--	< 0.01 U	13.8	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	797
MW-12S	12Q4	4.89	0.04	--	< 0.01 UJ	9.54	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	481
MW-12S	13Q2	22	0.037	--	< 0.01 U	11.3 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	703
MW-12S	13Q4	4.2	0.039	--	< 0.01 U	10.1	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	804
MW-12S	14Q2	18.3	0.04	--	< 0.01 U	10.7	--	--	--	< 0.068 U	< 0.068 U	< 0.068 U	< 0.068 U	--	--	--	887
MW-12S	14Q4	13.2	0.041	--	< 0.01 U	12.3	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	822
MW-12S	15Q3	4.91	0.043	--	--	12.6	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	888
MW-12S	15Q3	--	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-12S	15Q4	1.28	0.039	--	< 0.01 U	14.5	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	775
MW-12S	16Q2	3.04	0.027	--	0.004 J	13.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1030
MW-12S	16Q4	5.87	0.018	--	0.012	13.7	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	777
MW-12S	17Q2	1.55	0.032	--	0.0097 J	9.38	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	806
MW-12S	17Q4	5.44	0.021	--	0.0083 J	11.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	946
MW-12S	18Q2	3.83	0.029	--	0.013	11	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1020
MW-12S	19Q1	3.2	0.039	--	0.0064 J	12.5	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	955
MW-12S	19Q2	7.09	0.011	--	< 0.01 UJ	10.6	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1040 J
MW-12S	19Q4	0.5	0.011	--	< 0.01 UJ	11.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	958
MW-12S	20Q2	0.445	0.028	--	< 0.01 U	11.5	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	1000
MW-12S	20Q4	0.306	0.027	--	< 0.01 U	11.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	943
MW-12S	21Q2	0.549	0.044	--	< 0.01 U	11.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1010
MW-12S	21Q4	0.165	0.031	--	< 0.01 U	13.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	865
MW-12S	22Q2	0.625	0.044	--	0.01 J	8.73	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	872
MW-12S	22Q4	0.339	0.018	--	< 0.01 U	14.3 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1030
MW-12S	23Q2	--	0.039	--	< 0.01 U	8.86	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	987
MW-12S	23Q3	--	--	< 0.002 UJ	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--	--	--
MW-12S	23Q4	--	0.014 J	< 0.006 U	--	9.54	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	724
MW-13S	99Q1	2.1	0.18	--	--	10	--	--	--	--	--	--	--	--	--	< 0.065 U	1300
MW-13S	99Q2	2.8	0.33	--	--	5.3	--	--	--	--	--	--	--	--	--	0.094	2000
MW-13S	99Q3	2	0.41	--	--	4.1	--	--	--	--	--	--	--	--	--	< 0.065 U	3500
MW-13S	99Q4	1.9	0.1	--	--	17	--	--	--	--	--	--	--	--	--	0.23	310
MW-13S	00Q1	1.6	0.23	--	--	9.2	--	--	--	--	--	--	--	--	--	< 0.065 U	1200
MW-13S	00Q2	0.48	0.06	--	--	13	--	--	--	--	--	--	--	--	--	0.094	270
MW-13S	00Q3	1.9	0.09	--	--	11	--	--	--	--	--	--	--	--	--	< 0.065 U	880
MW-13S	00Q4	0.22	0.289	--	0.0175	4.507	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	3680
MW-13S	01Q1	0.19	0.341	--	0.013	6.37	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2531.55

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-13S	01Q2	0.27	0.235	--	0.013	7.978	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	974.43
MW-13S	01Q3	2.48	0.536	--	0.054	0.788	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	4132.9
MW-13S	01Q4	0.24	0.631	--	0.063	6.666	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	3153.12
MW-13S	02Q1	0.12	0.399	--	0.022	7.777	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1452.18
MW-13S	02Q2	0.23	0.268	--	0.041	9.637	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1867.8
MW-13S	02Q3	0.15	0.418	--	0.0425	4.768	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	3812.14
MW-13S	02Q4	0.216	0.142	--	0.013	11.48	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	967.85
MW-13S	03Q1	< 0.011 U	0.31	--	0.0365	7.089	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1621.1
MW-13S	03Q2	< 0.01 U	0.244	--	0.0225	7.732	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1649.91
MW-13S	03Q3	0.084	0.312	--	0.0735	8.38	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1717.19
MW-13S	03Q4	0.1	0.161	--	0.0175	7.738	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2075.19
MW-13S	04Q1	2.762	0.176	--	0.0325	5.153	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1130.18
MW-13S	04Q2	2.814	0.025	--	< 0.01 U	11.2	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	347.31
MW-13S	04Q3	0.562	0.343	--	0.054	7.892	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	3192.21
MW-13S	04Q4	1.228	0.0435	--	0.0655	5.339	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	3110.15
MW-13S	05Q1	1.83	0.017	--	0.0645	11.89	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2260.85
MW-13S	05Q2	1.846	0.053	--	< 0.01 U	8.765	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	377.6
MW-13S	05Q3	1.19	0.484	--	< 0.01 U	5.903	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	3964.72
MW-13S	05Q4	0.561	0.212	--	0.0325	8.573	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	762.98
MW-13S	06Q1	1.163	0.0685	--	0.0115	8.763	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1541.67
MW-13S	06Q2	2.153	0.0475	--	< 0.01 U	10.88	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.067	< 0.065 U	< 0.065 U	--	--	--	466.56
MW-13S	06Q3	1.2	0.231	--	0.0415	4.629	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	537.94
MW-13S	06Q4	0.449	0.224 J	--	0.0315 J	7.099 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1411.93 J
MW-13S	07Q1	1.085	0.13	--	0.021	9.811	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1203.62
MW-13S	07Q2	2.797	0.069	--	0.011	10.97	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	578.77
MW-13S	07Q3	0.612	0.4	--	0.367	3.486	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	267.84
MW-13S	07Q4	0.499	0.2	--	0.016	10.56	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	610
MW-13S	08Q1	1.71	0.331	--	< 0.01 UJ	8.82	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	57
MW-13S	08Q2	3.338 R	0.17 R	--	0.018 R	9.618	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2110
MW-13S	08Q3	4.799	0.14 R	--	< 0.01 U	3.796	--	--	--	< 0.065 U	0.107	0.073	< 0.065 U	--	--	--	639
MW-13S	08Q4	1.494	0.12	--	< 0.01 U	4.101	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2540
MW-13S	09Q1	1.56 J	0.211	--	0.0239 J	4.52 J	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	2430 J
MW-13S	09Q2	2.8	0.159	--	0.0207	5.714	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2170
MW-13S	09Q3	2.8	0.132	--	0.0143	6.771	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2540
MW-13S	09Q4	2.072	0.124	--	< 0.01 U	8.087	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1330
MW-13S	10Q1	2.823	0.102 J	--	< 0.01 U	3.271	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2650
MW-13S	10Q2	1.209	0.29	--	0.018	3.127 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	806
MW-13S	10Q3	1.211	0.191	--	< 0.01 U	4.885	--	--	--	< 0.065 U	0.068 AE	< 0.065 U	< 0.065 U	--	--	--	2770
MW-13S	10Q4	1.922	0.107	--	< 0.01 U	6.731	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1540
MW-13S	11Q1	1.66	0.067	--	< 0.01 U	8.63	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	754
MW-13S	11Q2	4.79	0.16	--	< 0.01 U	4.66	--	--	--	< 0.0739 U	0.18 AE	< 0.0739 U	< 0.0739 U	--	--	--	2580
MW-13S	11Q3	0.88	0.271	--	0.029	12	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	--	--	1440

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-13S	11Q4	2.3	0.106	--	< 0.01 UJ	11.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	510
MW-13S	12Q1	1.4	0.102	--	< 0.01 U	12.1	--	--	--	< 0.061 U	0.098 J	< 0.061 U	< 0.061 U	--	--	--	900
MW-13S	12Q3	1.16 J	0.194	--	< 0.01 U	7.96	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	2250
MW-13S	12Q3	0.46	0.198	--	< 0.01 UJ	15	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	1140
MW-13S	12Q4	0.76	0.097	--	< 0.01 UJ	11.3	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	485
MW-13S	13Q2	3.2	0.084	--	< 0.01 U	4.62	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	3200
MW-13S	13Q4	0.66	0.072	--	< 0.01 U	10	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	852
MW-13S	14Q2	0.58	0.088	--	< 0.01 U	3.84	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	--	--	3930
MW-13S	14Q4	0.28 J	0.142	--	< 0.01 U	9.71	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	2270
MW-13S	15Q3	0.72	0.064	--	--	2.29	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	3760
MW-13S	15Q3	--	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-13S	15Q4	0.56	0.218	--	< 0.01 U	14.8	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	1640
MW-13S	16Q2	0.23	0.099	--	0.02	9.64	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2710
MW-13S	17Q1	4.13	0.04	--	< 0.01 U	9.68	--	--	--	< 0.065 U	0.062	< 0.065 U	< 0.065 U	--	--	--	758
MW-13S	17Q2	0.363	0.063	--	0.018	6.99	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2080
MW-13S	17Q4	1.1 J	0.039	--	< 0.01 U	9.71	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1420
MW-13S	18Q2	1.16	0.061	--	0.0074 J	4.75	--	--	--	< 0.065 U	< 0.065 U	0.039	< 0.065 U	--	--	--	3000
MW-13S	18Q4	0.422	0.045	--	0.0076 J	12.5	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	738
MW-13S	19Q2	0.157	0.036	--	< 0.01 UJ	2.67	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	3280 J
MW-13S	19Q4	0.185	0.018	--	< 0.01 U	8.6	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	0.014 J	--	--	--	687
MW-13S	20Q2	0.259	0.069	--	0.013	6.56	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	--	--	2540
MW-13S	20Q4	0.218	0.01	--	< 0.01 U	7.76	--	--	--	< 0.065 U	< 0.065 U	0.116	< 0.065 U	--	--	--	1710
MW-13S	21Q2	0.266	< 0.005 U	--	< 0.01 U	< 1.25 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	439
MW-13S	21Q4	0.18	0.002 J	--	< 0.01 U	9.69	--	--	--	0.015 J	< 0.065 U	0.019 JP	< 0.065 U	--	--	--	228
MW-13S	22Q2	0.0663	0.03	--	< 0.01 U	4.59 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1880
MW-13S	22Q4	0.18	0.022	--	< 0.01 U	10.5	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	582
MW-13S	23Q2	--	--	--	--	2.84	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	2910
MW-13S	23Q3	--	--	< 0.002 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13S	23Q4	--	--	< 0.006 U	--	12	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	504
MW-14S	06Q4	0.964	< 0.01 U	--	< 0.01 U	0.6145	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	460.39
MW-14S	07Q1	15.8 J	< 0.01 U	--	< 0.01 U	0.62	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	413.27
MW-14S	07Q2	8.069	< 0.01 U	--	< 0.01 U	0.5861	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	455.94
MW-14S	07Q3	31.99	< 0.01 U	--	< 0.01 U	0.6506	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	454.06
MW-14S	07Q4	6.008	< 0.005 U	--	< 0.005 U	0.6059	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	390
MW-14S	08Q1	9.66	0.228	--	< 0.01 UJ	0.5933	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	365
MW-14S	08Q2	7.2 R	< 0.005 U	--	< 0.01 U	0.581	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	390
MW-14S	08Q3	3.805 R	< 0.005 U	--	< 0.01 U	0.6261	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	382 J
MW-14S	08Q4	22.23	< 0.005 R	--	< 0.01 U	0.6249	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	526
MW-14S	09Q1	10.1	< 0.01 U	--	< 0.01 UJ	0.55	--	--	--	< 0.485 U	< 0.485 U	< 0.485 U	< 0.485 U	--	--	--	368
MW-14S	09Q2	2.02	< 0.01 U	--	< 0.01 U	0.5691	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	355
MW-14S	09Q3	22.2	< 0.01 U	--	< 0.01 U	0.5244	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	364
MW-14S	09Q4	2.909	< 0.01 U	--	< 0.01 U	0.5664	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	392

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-14S	10Q1	2.577	< 0.01 U	--	< 0.01 U	0.4448	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	375
MW-14S	10Q2	4.03	< 0.01 U	--	< 0.01 U	0.4679	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	320
MW-14S	10Q3	1.31	< 0.01 U	--	< 0.01 U	0.5269	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	371
MW-14S	10Q4	4.544	< 0.01 U	--	< 0.01 U	0.4893	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	345
MW-14S	11Q1	5.74	< 0.01 U	--	< 0.01 U	0.58	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	273
MW-14S	11Q2	3.76	< 0.01 U	--	< 0.01 U	0.63	--	--	--	< 0.0663 U	< 0.0663 U	< 0.0663 U	< 0.0663 U	--	--	--	281
MW-14S	11Q3	14.2	< 0.01 U	--	< 0.01 U	0.65	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	--	--	310
MW-14S	11Q4	3.06	< 0.01 U	--	< 0.01 UJ	0.58	--	--	--	--	--	--	--	--	--	--	305
MW-14S	12Q1	3.19	< 0.01 U	--	< 0.01 U	0.46	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	--	--	317
MW-14S	12Q3	10.6 J	< 0.01 U	--	< 0.01 U	0.77	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	297
MW-14S	12Q3	3.41	< 0.01 U	--	< 0.01 UJ	0.25	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	368
MW-14S	12Q4	9.83	< 0.01 U	--	< 0.01 UJ	0.53	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	278
MW-14S	13Q2	11	< 0.01 U	--	< 0.01 U	0.52	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	340
MW-14S	13Q4	1.36	< 0.01 U	--	< 0.01 U	0.5	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	251
MW-14S	14Q2	1.93	< 0.01 U	--	< 0.01 U	0.52	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.066 U	--	--	--	292
MW-14S	14Q4	14.8 J	< 0.01 U	--	< 0.01 U	0.46	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	287
MW-14S	15Q3	4.27	< 0.01 U	--	--	0.46	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	340
MW-14S	15Q3	--	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-14S	15Q4	< 0.1 U	< 0.01 U	--	< 0.01 U	0.49	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	368
MW-14S	16Q2	2.43	< 0.005 U	--	--	0.5	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	357
MW-14S	17Q1	1.62	< 0.005 U	--	< 0.01 U	0.374	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	327
MW-14S	17Q2	0.205	0.002 J	--	< 0.01 U	0.35	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	363
MW-14S	17Q4	0.289	< 0.005 U	--	< 0.01 U	0.498	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	325
MW-14S	18Q2	0.712	< 0.005 U	--	< 0.01 U	0.519	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	390
MW-14S	18Q4	0.128	< 0.005 U	--	< 0.01 U	0.411	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	276
MW-14S	19Q2	1.25	< 0.005 U	--	< 0.01 UJ	0.461	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	418 J
MW-14S	19Q4	0.106	< 0.005 U	--	< 0.01 U	0.45	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	324
MW-14S	20Q2	0.06 J	< 0.005 U	--	< 0.01 U	0.766	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	--	--	330
MW-14S	20Q4	0.044 J	< 0.005 U	--	< 0.01 U	0.389 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	403
MW-14S	21Q2	0.0195	< 0.005 U	--	< 0.01 U	0.701	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	393
MW-14S	21Q4	0.0383	< 0.005 U	--	< 0.01 U	0.434	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	287
MW-14S	22Q2	0.0195	< 0.005 U	--	--	0.352	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	313
MW-14S	22Q4	0.0168	< 0.005 U	--	< 0.01 U	0.373	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	311
MW-14S	23Q2	--	--	< 0.002 U	--	0.366	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	414
MW-14S	23Q4	--	--	< 0.006 U	--	0.48	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	417
MW-15S-87	99Q1	1	< 0.01 U	--	--	1.3	--	--	--	--	--	--	--	--	--	< 0.065 U	560
MW-15S-87	99Q2	0.53	< 0.01 U	--	--	1	--	--	--	--	--	--	--	--	--	< 0.065 U	640
MW-15S-87	99Q3	0.37	< 0.01 U	--	--	1.2	--	--	--	--	--	--	--	--	--	< 0.065 U	1800
MW-15S-87	99Q4	0.31	< 0.01 U	--	--	1.4	--	--	--	--	--	--	--	--	--	< 0.065 U	900
MW-15S-87	00Q1	0.44	< 0.01 U	--	--	1.5	--	--	--	--	--	--	--	--	--	< 0.065 U	900
MW-15S-87	00Q2	0.81	< 0.01 U	--	--	1.3	--	--	--	--	--	--	--	--	--	< 0.065 U	1100
MW-15S-87	00Q3	0.33	< 0.01 u	--	--	1.3	--	--	--	--	--	--	--	--	--	0.082	900

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Massena East, Massena, New York
Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-15S-87	00Q4	0.18	< 0.01 U	--	< 0.01 U	1.268	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	732
MW-15S-87	01Q1	0.3	< 0.01 U	--	< 0.01 U	1.232	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	849.75
MW-15S-87	01Q2	0.11	< 0.01 U	--	< 0.01 U	1.123	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	855.3
MW-15S-87	01Q3	0.44	< 0.01 U	--	< 0.01 U	1.106	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	930.81
MW-15S-87	01Q4	0.13	< 0.01 U	--	< 0.01 U	1.021	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	888.43
MW-15S-87	02Q1	< 0.01 U	< 0.01 U	--	< 0.01 U	1.011	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	797.08
MW-15S-87	02Q2	0.1	< 0.01 U	--	< 0.01 U	1.021	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.151	0.082	< 0.065 U	--	--	--	868.27
MW-15S-87	02Q3	0.11	0.0265	--	< 0.01 U	1.241	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	891.51
MW-15S-87	02Q4	0.044	< 0.01 U	--	< 0.01 U	1.089	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	972.17
MW-15S-87	03Q1	0.022	< 0.01 U	--	< 0.01 U	1.054	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	840.077
MW-15S-87	03Q2	0.014	< 0.01 U	--	< 0.01 U	0.901	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	876.29
MW-15S-87	03Q3	0.097	< 0.01 U	--	< 0.01 U	1.263	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	896.45
MW-15S-87	03Q4	0.066	< 0.01 U	--	< 0.01 U	1.142	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	964.35
MW-15S-87	04Q1	4.509	< 0.01 U	--	< 0.01 U	1.104	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	716.83
MW-15S-87	04Q2	6.142	< 0.01 U	--	< 0.01 U	1.327	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	339.49
MW-15S-87	04Q3	10.19	< 0.01 U	--	< 0.01 U	1.304	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	728.36
MW-15S-87	04Q4	3.116	< 0.01 U	--	< 0.01 U	1.481	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	819.62
MW-15S-87	05Q1	4.407	< 0.01 U	--	< 0.01 U	1.413	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	373.92
MW-15S-87	05Q2	4.587	< 0.01 U	--	< 0.01 U	1.338	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	177.72
MW-15S-87	05Q3	8.314	< 0.01 U	--	< 0.01 U	1.654	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	340.25
MW-15S-87	05Q4	3.39	< 0.01 U	--	< 0.01 U	1.841	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	148.66
MW-15S-87	06Q1	3.968	< 0.01 U	--	< 0.01 U	1.697	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	89.43
MW-15S-87	06Q2	2.404	< 0.01 U	--	< 0.01 U	1.337	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	107.92
MW-15S-87	06Q3	5.163	< 0.01 U	--	< 0.01 U	1.417	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	201.02
MW-15S-87	06Q4	1.26	< 0.01 U	--	< 0.01 U	2.02	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	220.55
MW-15S-87	07Q1	3.45	< 0.01 U	--	< 0.01 U	1.578	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	86.5
MW-15S-87	07Q2	1.698	< 0.01 U	--	< 0.01 U	2.103	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	76.63
MW-15S-87	07Q3	9.59	< 0.01 U	--	< 0.01 U	1.68	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	284.74
MW-15S-87	07Q4	2.97	0.031	--	< 0.005 U	1.795	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	390
MW-15S-87	08Q1	24	< 0.01 U	--	< 0.01 U	1.786	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	170
MW-15S-87	08Q2	13.51 R	< 0.005 U	--	< 0.01 U	1.858	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	156
MW-15S-87	08Q3	17.76	< 0.005 U	--	< 0.01 U	1.898	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	238
MW-15S-87	08Q4	28.93	< 0.005 U	--	< 0.01 U	1.445	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	391
MW-15S-87	09Q1	7.85	< 0.005 R	--	< 0.006 U	1.25	--	--	--	< 0.196 U	< 0.196 U	< 0.278 U	< 0.278 U	--	--	--	230 J
MW-15S-87	09Q2	1.84 J	< 0.01 U	--	< 0.01 U	1.507	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	242
MW-15S-87	09Q3	19.8	< 0.01 U	--	< 0.01 U	1.683	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	243
MW-15S-87	09Q4	7.313	< 0.01 U	--	< 0.01 U	1.584	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	230
MW-15S-87	10Q1	11.91	< 0.01 U	--	< 0.01 U	1.793	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	165
MW-15S-87	10Q2	3.683	< 0.01 U	--	< 0.01 U	1.597	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	167
MW-15S-87	10Q3	4.6	< 0.01 U	--	< 0.01 U	1.524	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	214
MW-15S-87	10Q4	7.048	< 0.01 U	--	< 0.01 U	1.504	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	51.4
MW-15S-87	11Q1	9.16	< 0.01 U	--	< 0.01 U	1.55	--	--	--	< 0.0657 U	< 0.0657 U	< 0.0657 U	< 0.0657 U	--	--	--	122

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-15S-87	11Q2	12	< 0.01 U	--	< 0.01 U	1.6	--	--	--	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	--	--	--	110
MW-15S-87	11Q3	29.6	< 0.01 U	--	< 0.01 U	1.63	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	--	--	336
MW-15S-87	11Q4	3.54	< 0.01 U	--	< 0.01 UJ	1.85	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	193
MW-15S-87	12Q1	2.25	< 0.01 U	--	< 0.01 U	1.63 J	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	--	--	139
MW-15S-87	12Q3	5.34 J	< 0.01 U	--	< 0.01 U	2.14	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	240
MW-15S-87	12Q3	--	--	--	--	--	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	--	--	--
MW-15S-87	12Q4	1.1	< 0.01 U	--	< 0.01 UJ	2.06	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	247
MW-15S-87	13Q2	2.08	< 0.01 U	--	< 0.01 U	2.51 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	146
MW-15S-87	13Q4	1.35	< 0.01 U	--	< 0.01 U	2.43	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	83.9
MW-15S-87	14Q2	4.08	< 0.01 U	--	< 0.01 U	2.61	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	172
MW-15S-87	14Q4	7.49	< 0.01 U	--	< 0.01 U	2.28	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	258
MW-15S-87	15Q3	1.65	< 0.01 U	--	--	2.42	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	248
MW-15S-87	15Q3	--	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-15S-87	15Q4	7.98	< 0.01 U	--	< 0.01 U	2.54	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	248
MW-15S-87	16Q2	0.762 R	< 0.005 U	--	--	2.66	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	201
MW-15S-87	16Q4	0.226	0.002 J	--	< 0.01 U	4.25	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	55.8
MW-15S-87	17Q2	0.466	0.007	--	< 0.01 U	2.46	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	99.5
MW-15S-87	17Q4	1.16	< 0.005 U	--	< 0.01 U	2.91	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	73.8
MW-15S-87	18Q2	3.37	< 0.005 U	--	< 0.01 U	3.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	131
MW-15S-87	19Q1	2.48	< 0.005 U	--	< 0.01 U	3.09	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	122
MW-15S-87	19Q2	3.41	< 0.005 U	--	< 0.01 UJ	2.87	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	131 J
MW-15S-87	19Q4	3.41	< 0.005 U	--	< 0.01 UJ	3.26	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	68.7
MW-15S-87	20Q2	6.24	< 0.005 U	--	< 0.01 U	3	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	--	--	121
MW-15S-87	20Q4	0.713	< 0.005 U	--	< 0.01 U	3.62	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	106
MW-15S-87	21Q3	--	< 0.005 U	--	< 0.01 U	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
MW-15S-87	21Q4	0.348	< 0.005 U	--	< 0.01 U	3.56	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	36.7
MW-15S-87	22Q2	0.693	< 0.005 U	--	< 0.01 U	3.03	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	113
MW-15S-87	22Q4	1.07	< 0.005 U	--	< 0.01 U	4.54 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	99.3
MW-15S-87	23Q2	--	--	< 0.002 U	--	3.96	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	138
MW-15S-87	23Q4	--	--	< 0.006 U	--	4.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	77.1
MW-20-85-S	06Q4	0.282	0.0105	--	< 0.01 U	0.4874	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	164.99
MW-20-85-S	07Q1	0.151	< 0.01 U	--	< 0.01 U	0.2892	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	241.39
MW-20-85-S	07Q2	2.414	< 0.01 U	--	< 0.01 U	0.3412	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	277.66
MW-20-85-S	08Q4	1.174	< 0.005 U	--	< 0.01 U	0.3372	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	284
MW-20-85-S	09Q1	0.544	< 0.005 R	--	< 0.006 U	< 0.085 U	--	--	--	< 0.168 U	< 0.168 U	< 0.238 U	< 0.238 U	--	--	--	307 J
MW-20-85-S	09Q2	< 0.2 UJ	< 0.01 U	--	< 0.01 U	0.3321	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	270
MW-20-85-S	09Q3	< 0.2 U	< 0.01 U	--	< 0.01 U	0.245	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	256
MW-20-85-S	09Q4	0.037	< 0.01 U	--	< 0.01 U	0.3042	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	321
MW-20-85-S	10Q1	0.125	0.028	--	< 0.01 U	0.2278	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	189
MW-20-85-S	10Q2	--	< 0.01 U	--	< 0.01 U	0.2192	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	225
MW-20-85-S	10Q3	0.924	< 0.01 U	--	< 0.01 U	0.2379	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	298
MW-20-85-S	10Q4	0.132	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	233

Table C-1
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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-20-85-S	11Q1	< 0.1 U	< 0.01 U	--	< 0.01 U	0.21	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	216
MW-20-85-S	11Q2	< 0.1 U	< 0.01 U	--	< 0.01 U	0.28	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	230
MW-20-85-S	11Q3	< 0.1 U	< 0.01 U	--	< 0.01 U	0.2	< 0.047 U	< 0.047 U	< 0.047 U	< 0.047 U	< 0.047 U	< 0.047 U	< 0.047 U	--	--	--	204
MW-20-85-S	11Q4	< 0.1 U	< 0.01 U	--	< 0.01 UJ	0.2	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.066 U	--	--	--	226
MW-20-85-S	12Q1	< 0.1 U	< 0.01 U	--	< 0.01 U	0.2	--	--	--	< 0.063 UJ	< 0.063 UJ	< 0.063 UJ	< 0.063 UJ	--	--	--	248
MW-20-85-S	12Q3	< 0.1 U	< 0.01 U	--	< 0.01 U	0.18	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	224
MW-20-85-S	12Q3	< 0.1 U	< 0.01 U	--	< 0.01 UJ	0.33	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	--	--	216
MW-20-85-S	12Q4	< 0.1 U	< 0.01 U	--	< 0.01 UJ	0.21	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	229
MW-20-85-S	13Q2	< 0.1 U	< 0.01 U	--	< 0.01 U	0.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	262
MW-20-85-S	13Q4	5.32	< 0.01 U	--	< 0.01 U	0.19	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	260
MW-20-85-S	14Q2	2.95	< 0.01 U	--	< 0.01 U	0.19	--	--	--	< 0.068 U	< 0.068 U	< 0.068 U	< 0.068 U	--	--	--	217
MW-20-85-S	14Q4	2.35 J	< 0.01 U	--	< 0.01 U	0.2	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	213
MW-20-85-S	15Q3	0.15	< 0.01 U	--	--	0.13	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	240
MW-20-85-S	15Q3	--	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-20-85-S	15Q4	< 0.1 U	< 0.01 U	--	< 0.01 U	0.24	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	216
MW-20-85-S	16Q2	0.026 J	< 0.005 U	--	--	0.147	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	300
MW-20-85-S	17Q1	0.156	< 0.005 U	--	< 0.01 U	0.139	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	218
MW-20-85-S	17Q2	0.079 J	< 0.005 U	--	< 0.01 U	0.797	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	224
MW-20-85-S	17Q4	< 0.1 U	< 0.005 U	--	< 0.01 U	0.128	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	277
MW-20-85-S	18Q2	< 0.1 U	< 0.005 U	--	< 0.01 UJ	0.13	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	289
MW-20-85-S	18Q4	0.067 J	< 0.005 U	--	< 0.01 U	0.126	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	296
MW-20-85-S	19Q2	< 0.1 U	< 0.005 U	--	< 0.01 UJ	0.124	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	312 J
MW-20-85-S	19Q4	< 0.1 U	< 0.005 U	--	< 0.01 UJ	0.158	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	270
MW-20-85-S	20Q2	< 0.1 U	< 0.005 U	--	< 0.01 U	0.567	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	281
MW-20-85-S	20Q4	< 0.1 U	< 0.005 U	--	< 0.01 U	< 0.5 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	268
MW-20-85-S	21Q2	0.0799	< 0.005 U	--	< 0.01 U	< 0.5 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	289
MW-20-85-S	21Q4	0.0966	< 0.005 U	--	< 0.01 U	0.176	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	249
MW-20-85-S	22Q2	0.00756 J	< 0.005 U	--	< 0.01 U	0.119	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	266
MW-20-85-S	22Q4	0.0647	< 0.005 U	--	< 0.01 U	0.167	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	285
MW-20-85-S	23Q2	--	--	< 0.002 U	--	0.128	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	323
MW-20-85-S	23Q4	--	--	0.027 J	--	0.157	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	271
MW-22-85-S	08Q4	10.17	< 0.005 R	--	< 0.01 U	0.2591	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	614
MW-22-85-S	09Q1	3.54	< 0.005 R	--	< 0.006 U	< 0.085 U	--	--	--	< 0.173 U	< 0.173 U	< 0.245 U	< 0.245 U	--	--	--	505 J
MW-22-85-S	09Q2	5.45 J	< 0.01 U	--	--	0.2426	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	365
MW-22-85-S	09Q3	3.42	< 0.01 U	--	< 0.01 U	0.2521	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	441 J
MW-22-85-S	09Q4	8.555	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	436
MW-22-85-S	10Q1	11.7	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	491
MW-22-85-S	10Q2	3.782	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	437
MW-22-85-S	10Q3	10.58	< 0.01 U	--	< 0.01 U	0.2108	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	427
MW-22-85-S	10Q4	4.605	< 0.01 U	--	< 0.01 U	0.2414	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	469
MW-22-85-S	11Q1	4.73	< 0.01 U	--	< 0.01 U	0.29	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	461
MW-22-85-S	11Q2	1.63	< 0.01 U	--	< 0.01 U	0.28	--	--	--	< 0.0691 U	< 0.0691 U	< 0.0691 U	< 0.0691 U	--	--	--	492

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-22-85-S	11Q3	3	< 0.01 U	--	< 0.01 U	0.18	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	--	--	443
MW-22-85-S	11Q4	8.28	< 0.01 U	--	< 0.01 UJ	0.27	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	453
MW-22-85-S	12Q1	8.83	< 0.01 U	--	< 0.01 U	0.24 J	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	--	--	442
MW-22-85-S	12Q3	3.46	< 0.01 U	--	< 0.01 UJ	0.3	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	448
MW-22-85-S	12Q4	4.52	< 0.01 U	--	< 0.01 U	< 0.1 U	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	425
MW-22-85-S	12Q4	0.65	< 0.01 U	--	< 0.01 UJ	0.23	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	429
MW-22-85-S	13Q2	4.96	< 0.01 U	--	< 0.01 U	0.21	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	458
MW-22-85-S	13Q4	3.02	< 0.01 U	--	< 0.01 U	0.22	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	433
MW-22-85-S	14Q2	2.2	< 0.01 U	--	< 0.01 U	0.21	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	452
MW-22-85-S	14Q4	1.48 J	< 0.01 U	--	< 0.01 U	0.21	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	414
MW-22-85-S	15Q3	1.95	< 0.01 U	--	< 0.01 U	0.23	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	440
MW-22-85-S	15Q4	0.92	< 0.01 U	--	< 0.01 U	0.27	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	423
MW-22-85-S	16Q2	0.918	0.003 J	--	--	0.221	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	463
MW-22-85-S	17Q1	0.992	0.002 J	--	< 0.01 U	0.209	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	412
MW-22-85-S	17Q2	0.564	0.002 J	--	< 0.01 U	0.88	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	424
MW-22-85-S	18Q1	0.524	< 0.005 U	--	< 0.01 U	0.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	425
MW-22-85-S	18Q2	0.673	< 0.005 U	--	< 0.01 U	0.208	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	439
MW-22-85-S	18Q4	3.07	< 0.005 U	--	< 0.01 U	0.213	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	450
MW-22-85-S	19Q2	1.24	< 0.005 U	--	< 0.01 UJ	0.226	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	490 J
MW-22-85-S	19Q4	0.377	< 0.005 U	--	< 0.01 U	0.221	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	421
MW-22-85-S	20Q2	0.275	< 0.005 U	--	< 0.01 U	0.699	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	--	--	404
MW-22-85-S	20Q4	0.315	< 0.005 U	--	< 0.01 U	< 0.5 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	402
MW-22-85-S	21Q3	0.822	< 0.005 U	--	< 0.01 U	0.417 J	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	416
MW-22-85-S	21Q4	0.383	< 0.005 U	--	< 0.01 U	0.286	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	401
MW-22-85-S	22Q2	1.22	0.002 J	--	< 0.01 U	0.172	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	397
MW-22-85-S	22Q4	0.396	< 0.005 U	--	< 0.01 U	0.217	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	402
MW-22-85-S	23Q2	--	--	< 0.002 U	--	0.238	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	400
MW-22-85-S	23Q4	--	--	< 0.006 U	--	0.225	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	412
MW-23-85-S	06Q4	0.425	< 0.01 U	--	< 0.01 U	0.3201	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	145.09
MW-23-85-S	07Q1	0.06 J	< 0.01 U	--	< 0.01 U	0.2141	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	188.46
MW-23-85-S	07Q2	0.646	< 0.01 U	--	< 0.01 U	0.2538	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	245.2
MW-23-85-S	07Q3	2.792	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	288.42
MW-23-85-S	07Q4	2.36	< 0.005 U	--	< 0.005 U	0.3022	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	250
MW-23-85-S	09Q1	26.7	< 0.01 UJ	--	< 0.01 UJ	0.42	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	351
MW-23-85-S	09Q2	0.493 J	< 0.01 U	--	< 0.01 U	0.3406	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	378
MW-23-85-S	09Q3	4.81	< 0.01 U	--	< 0.01 U	0.3662	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	365 J
MW-23-85-S	09Q4	11.72	< 0.01 U	--	< 0.01 U	0.3724	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	417
MW-23-85-S	10Q1	8.419	< 0.01 U	--	< 0.01 U	0.3549	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	439
MW-23-85-S	10Q2	11.78	< 0.01 U	--	< 0.01 U	0.3305	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	380
MW-23-85-S	10Q3	84.45	< 0.01 U	--	< 0.01 U	0.3775	--	--	--	< 0.0663 U	< 0.0663 U	< 0.0663 U	< 0.0663 U	--	--	--	386
MW-23-85-S	10Q4	6.766	< 0.01 U	--	< 0.01 U	0.3362	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	361
MW-23-85-S	11Q1	5.2	< 0.01 U	--	< 0.01 U	0.42	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	372

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-23-85-S	11Q2	4.16	< 0.01 U	--	< 0.01 U	0.43	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	362
MW-23-85-S	11Q3	5.75	< 0.01 U	--	< 0.01 U	0.44	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	395
MW-23-85-S	11Q4	10.6	< 0.01 U	--	< 0.01 UJ	0.42	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	376
MW-23-85-S	12Q1	10.8	< 0.01 U	--	< 0.01 U	0.4	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	--	--	397
MW-23-85-S	12Q3	6.78 J	< 0.01 U	--	< 0.01 U	0.63	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	383
MW-23-85-S	12Q3	4.91	< 0.01 U	--	< 0.01 UJ	0.26	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	388
MW-23-85-S	12Q4	3.37	< 0.01 U	--	< 0.01 UJ	0.39	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	353
MW-23-85-S	13Q2	2.11	< 0.01 U	--	< 0.01 U	0.34	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	363
MW-23-85-S	13Q4	2.4	< 0.01 U	--	< 0.01 U	0.36	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	358
MW-23-85-S	14Q2	2.3	< 0.01 U	--	< 0.01 U	0.35	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	363
MW-23-85-S	14Q4	2.64 J	< 0.01 U	--	< 0.01 U	0.36	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	339
MW-23-85-S	15Q3	2.9	< 0.01 U	--	--	0.35	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	363
MW-23-85-S	15Q3	--	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-23-85-S	15Q4	0.81	< 0.01 U	--	< 0.01 U	0.4	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	372
MW-23-85-S	16Q2	0.942	0.002 J	--	--	0.37	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	371
MW-23-85-S	17Q1	0.472	< 0.005 U	--	< 0.01 U	0.357	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	340
MW-23-85-S	17Q2	0.25	< 0.005 U	--	< 0.01 U	0.272	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	334
MW-23-85-S	18Q1	1.34	< 0.005 U	--	< 0.01 U	0.328	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	364
MW-23-85-S	18Q2	1.74	< 0.005 U	--	< 0.01 U	0.304	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	382
MW-23-85-S	18Q4	0.687	< 0.005 U	--	< 0.01 U	0.288	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	355
MW-23-85-S	19Q2	1.53	< 0.005 U	--	< 0.01 UJ	0.305	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	418 J
MW-23-85-S	19Q4	2.57	< 0.005 U	--	< 0.01 U	0.356	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	388
MW-23-85-S	20Q2	1.02	< 0.005 U	--	< 0.01 U	0.81	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	358
MW-23-85-S	20Q4	1.27	< 0.005 U	--	< 0.01 U	0.398 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	389
MW-23-85-S	21Q2	2.34	< 0.005 U	--	< 0.01 U	< 0.5 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	376
MW-23-85-S	21Q4	0.504	< 0.005 U	--	< 0.01 U	0.387	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	356
MW-23-85-S	22Q2	1.18	< 0.005 U	--	< 0.01 U	0.289	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	359
MW-23-85-S	22Q4	1.42	< 0.005 U	--	< 0.01 U	0.324	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	391
MW-23-85-S	23Q2	--	--	--	--	0.313	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	459
MW-23-85-S	23Q3	--	--	< 0.002 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-23-85-S	23Q4	--	--	< 0.006 U	--	0.374	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	372
MW-30S	06Q4	17.03	< 0.01 U	--	< 0.01 U	4.986	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	143.04
MW-30S	07Q1	28.57	< 0.01 U	--	< 0.01 U	6.998	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	79.6
MW-30S	07Q2	78.91	< 0.01 U	--	< 0.01 U	7.249	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	66.44
MW-30S	07Q3	74.87	< 0.01 U	--	< 0.01 U	6.23	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	112.41
MW-30S	07Q4	104.7	< 0.005 U	--	< 0.005 U	6.898	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	150
MW-30S	08Q1	49.1	0.115	--	< 0.01 UJ	7.66	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	101
MW-30S	08Q2	17.96 R	< 0.005 U	--	< 0.01 U	7.301	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	78.7
MW-30S	08Q3	122.3	< 0.005 U	--	< 0.01 U	9.117	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	--	--	77.2
MW-30S	08Q4	22.19	< 0.005 U	--	< 0.01 UJ	4.926	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	158 J
MW-30S	09Q1	112	< 0.01 U	--	0.0358 J	6.38	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	119
MW-30S	09Q2	140	< 0.01 U	--	< 0.01 U	8.279	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	92.9

Table C-1
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Massena East, Massena, New York
Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-30S	09Q3	107	< 0.01 U	--	< 0.01 U	6.121	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	66.7
MW-30S	09Q4	308.3	< 0.01 U	--	< 0.01 U	5.187	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	84.1
MW-30S	10Q1	49.74	< 0.01 UJ	--	< 0.01 UJ	5.377	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	127
MW-30S	10Q2	150.6	< 0.01 U	--	< 0.01 U	6.057	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	--	--	87.3
MW-30S	10Q3	21.56	< 0.01 U	--	< 0.01 U	6.024	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	77.9
MW-30S	10Q4	171.7	< 0.01 U	--	< 0.01 U	6.444	--	--	--	< 0.065 U	0.073	< 0.065 U	< 0.065 U	--	--	--	61.8
MW-30S	11Q1	48.1	< 0.01 U	--	< 0.01 U	6.02	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	46
MW-30S	11Q2	32.1 J	< 0.01 U	--	< 0.01 U	5.75	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	65.6
MW-30S	11Q3	44.3	< 0.01 U	--	< 0.01 U	5.53	< 0.048 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.048 U	--	--	--	147
MW-30S	11Q4	67.5	< 0.01 U	--	< 0.01 UJ	5.53	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	103
MW-30S	12Q1	54	< 0.01 U	--	< 0.01 U	5.45	--	--	--	< 0.061 UJ	< 0.061 UJ	< 0.061 UJ	< 0.061 UJ	--	--	--	128
MW-30S	12Q3	112 J	< 0.01 U	--	< 0.01 U	4.26	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	160
MW-30S	12Q3	28	< 0.01 U	--	< 0.01 UJ	5.36	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	342
MW-30S	12Q4	28.2	< 0.01 U	--	< 0.01 UJ	5.75	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	143
MW-30S	13Q2	60.2	< 0.01 U	--	< 0.01 U	6.85	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	91.8
MW-30S	13Q4	113	< 0.01 U	--	< 0.01 U	5.95	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	95.3
MW-30S	14Q2	42.5	< 0.01 U	--	< 0.01 U	54.2	--	--	--	< 0.067 U	< 0.067 U	< 0.067 U	< 0.067 U	--	--	--	136
MW-30S	14Q4	38.5 J	< 0.01 U	--	< 0.01 U	5.49	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	76.9
MW-30S	15Q3	15.9	< 0.01 U	--	--	5.43	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	119
MW-30S	15Q3	--	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-30S	15Q4	4.86	< 0.01 U	--	< 0.01 U	6.58	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	72.1
MW-30S	16Q2	4.01	< 0.005 U	--	--	6.68	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	76.6
MW-30S	17Q1	3.48	< 0.005 U	--	< 0.01 U	6.74	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	123
MW-30S	17Q2	2.32	0.003 J	--	0.0062 J	4.6	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	96
MW-30S	17Q4	9.61	< 0.005 U	--	< 0.01 U	6.35	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	69.2
MW-30S	18Q2	11.5	< 0.005 U	--	< 0.01 U	6.22	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	77.5
MW-30S	18Q4	4.02	< 0.005 U	--	< 0.01 U	6.21	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	145
MW-30S	19Q2	15.8	< 0.005 U	--	< 0.01 UJ	5.32 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	98.6
MW-30S	19Q4	2.55	< 0.005 U	--	< 0.01 U	6.74	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	75.1
MW-30S	20Q2	0.222	0.004 J	--	< 0.01 U	6.03	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	--	--	89.7
MW-30S	20Q4	0.558	< 0.005 U	--	< 0.01 U	4.78	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	273
MW-30S	21Q2	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
MW-30S	21Q4	0.626	< 0.005 U	--	< 0.01 U	5.72	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	77.1
MW-30S	22Q2	1.64	< 0.005 U	--	< 0.01 U	5.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	66.1
MW-30S	22Q4	0.606	< 0.005 U	--	< 0.01 U	5.62 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	201
MW-30S	23Q2	--	--	< 0.002 U	--	5.28	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	258
MW-30S	23Q4	--	--	< 0.006 U	--	6.35	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	72.7
MW-31SR	99Q2	5.3	2	--	--	0.9	--	--	--	--	--	--	--	--	--	< 0.065 U	140
MW-31SR	99Q3	4.35	0.03	--	--	3.7	--	--	--	--	--	--	--	--	--	--	167
MW-31SR	99Q4	0.97	0.01	--	--	1.3	--	--	--	--	--	--	--	--	--	< 0.065 U	240
MW-31SR	00Q1	4.825	1.015	--	--	2.3	--	--	--	--	--	--	--	--	--	< 0.065 U	153.5
MW-31SR	00Q2	2.3	0.04	--	--	1.1	--	--	--	--	--	--	--	--	--	< 0.065 U	150

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-31SR	00Q3	0.64	0.02	--	--	0.8	--	--	--	--	--	--	--	--	--	< 0.065 U	170
MW-31SR	00Q4	< 0.01 U	< 0.01 U	--	< 0.01 U	0.622	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	170
MW-31SR	01Q1	0.26	< 0.01 U	--	< 0.01 U	0.77	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	174.06
MW-31SR	01Q2	3.01	0.011	--	< 0.01 U	0.744	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	189.5
MW-31SR	01Q3	2.18	< 0.01 U	--	< 0.01 U	0.579	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	174.27
MW-31SR	01Q4	0.78	< 0.01 U	--	< 0.01 U	0.58	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	168.51
MW-31SR	02Q1	0.12	0.048	--	< 0.01 U	0.863	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	325.29
MW-31SR	02Q2	< 0.01 U	< 0.01 U	--	< 0.01 U	0.836	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	221.8
MW-31SR	02Q3	0.15	< 0.01 U	--	< 0.01 U	0.964	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	176.95
MW-31SR	02Q4	0.212	< 0.01 U	--	< 0.01 U	0.666	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	186.2
MW-31SR	03Q1	0.047	0.012	--	< 0.01 U	0.706	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	205.75
MW-31SR	03Q2	0.045	0.0375	--	0.011	1.717	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	417.47
MW-31SR	03Q3	0.076	< 0.01 U	--	< 0.01 U	0.687	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	186.41
MW-31SR	03Q4	0.076	< 0.01 U	--	< 0.01 U	0.608	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	187.64
MW-31SR	04Q1	12.3	0.0245	--	< 0.01 U	1.363	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	242.79
MW-31SR	04Q2	33.41	0.0415	--	0.0165	2.332	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.083	< 0.065 U	< 0.065 U	--	--	--	277.35
MW-31SR	04Q3	4.11	< 0.01 U	--	< 0.01 U	0.665	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	188.26
MW-31SR	04Q4	4.796	< 0.01 U	--	< 0.01 U	0.73	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	172.05
MW-31SR	05Q1	16.82	0.031	--	0.011	0.9683	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	206.76
MW-31SR	05Q2	6.704	0.036	--	0.0115	2.462	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	229.22
MW-31SR	05Q3	4.775	< 0.01 U	--	< 0.01 U	0.6742	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	181.8
MW-31SR	05Q4	6.264	0.0695	--	0.0175	3.621	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	257.8
MW-31SR	06Q1	6.375	0.0385	--	0.012	3.15	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	224.08
MW-31SR	06Q2	13.43	0.0125	--	< 0.01 U	1.565	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	180.91
MW-31SR	06Q3	10.45	< 0.01 U	--	< 0.01 U	0.7745	--	--	--	< 0.065 U	0.078	< 0.065 U	< 0.065 U	--	--	--	188.77
MW-31SR	06Q4	2.191	0.0155	--	< 0.01 U	1.03	--	--	--	< 0.065 U	0.117	< 0.065 U	< 0.065 U	--	--	--	167.46
MW-31SR	07Q1	5.265	0.044	--	0.014	2.747	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	172.4
MW-31SR	07Q2	8.768 J	0.022 J	--	0.01	1.508	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	186.75
MW-31SR	07Q3	3.893	< 0.01 U	--	< 0.01 U	0.6158	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	191.9
MW-31SR	07Q4	4.888	< 0.005 U	--	< 0.005 U	0.5877	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	190
MW-31SR	08Q1	6.1	0.023	--	< 0.01 UJ	1.71	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	201
MW-31SR	08Q2	15.68 R	< 0.005 U	--	< 0.01 U	1.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	186
MW-31SR	08Q3	6.135	< 0.005 U	--	< 0.01 U	0.6965	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	179 J
MW-31SR	08Q4	11.74	< 0.005 U	--	< 0.01 U	0.5851	--	--	--	< 0.065 U	0.107	< 0.065 U	< 0.065 U	--	--	--	180
MW-31SR	09Q1	24.6	< 0.01 U	--	0.0145 J	0.79	--	--	--	< 0.495 U	< 0.495 U	< 0.495 U	< 0.495 U	--	--	--	184
MW-31SR	09Q2	9.1	< 0.01 U	--	< 0.01 U	1.422	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	182
MW-31SR	09Q3	22	< 0.01 U	--	< 0.01 U	0.5853	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	168 J
MW-31SR	09Q4	17.82	< 0.01 U	--	< 0.01 U	0.6539	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	198
MW-31SR	10Q1	15.86	0.01 J	--	< 0.01 UJ	1.142	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	186
MW-31SR	10Q2	2.173	< 0.01 U	--	< 0.01 U	0.6839	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	176
MW-31SR	10Q3	10.49	< 0.01 U	--	< 0.01 U	0.6116	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	177
MW-31SR	10Q4	12.51	0.028	--	< 0.01 U	1.691	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	169

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-31SR	11Q1	2.73	< 0.01 U	--	< 0.01 U	1.7	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	171
MW-31SR	11Q2	4.09	< 0.01 U	--	< 0.01 U	1.39	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	172
MW-31SR	11Q3	6.73	< 0.01 U	--	< 0.01 U	0.59	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	--	--	--	182
MW-31SR	11Q4	4.78	< 0.01 U	--	< 0.01 UJ	0.92	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	--	--	189
MW-31SR	12Q1	15.5	< 0.01 U	--	< 0.01 U	0.55	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	--	--	200
MW-31SR	12Q3	7.5 J	< 0.01 U	--	< 0.01 U	0.73	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	180
MW-31SR	12Q3	5.54	< 0.01 U	--	< 0.01 UJ	0.51	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	185
MW-31SR	12Q4	3.34	< 0.01 U	--	< 0.01 UJ	0.99	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	194
MW-31SR	13Q2	6.11	0.019	--	< 0.01 U	1.8	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	219
MW-31SR	13Q4	1.74	0.018	--	< 0.01 U	1.53	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	188
MW-31SR	14Q2	2.16	< 0.01 U	--	< 0.01 U	1.16	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.066 U	--	--	--	190
MW-31SR	14Q4	1.4 J	< 0.01 U	--	< 0.01 U	0.6	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	183
MW-31SR	15Q3	0.84	< 0.01 U	--	--	0.75	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	192
MW-31SR	15Q3	--	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-31SR	15Q4	1.62	< 0.01 U	--	< 0.01 U	0.58	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	206
MW-31SR	16Q2	0.662	0.004 J	--	0.003 J	0.726	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	201
MW-31SR	17Q1	0.516	0.013	--	< 0.01 U	1.61	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	178
MW-31SR	17Q2	0.404	0.015	--	< 0.01 U	1.15	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	180
MW-31SR	18Q1	0.438	0.013	--	0.0066 J	1.68	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	198
MW-31SR	18Q2	1.8	0.004 J	--	< 0.01 U	1.08	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	204
MW-31SR	18Q4	1.34	0.004 J	--	< 0.01 U	1.49	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	189
MW-31SR	19Q2	3.96	0.007	--	< 0.01 UJ	0.696	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	218 J
MW-31SR	19Q4	1.08	0.011	--	< 0.01 U	1.43	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	189
MW-31SR	20Q2	1.49	0.002 J	--	< 0.01 U	0.998	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	193
MW-31SR	20Q4	1.65	< 0.005 U	--	< 0.01 U	0.913	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	178
MW-31SR	21Q2	1.36	< 0.005 U	--	< 0.01 U	0.585	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	199
MW-31SR	21Q4	0.62	0.011	--	< 0.01 U	1.42	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	180
MW-31SR	22Q2	0.736	0.008	--	< 0.01 U	1.07	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	187
MW-31SR	22Q4	0.611	0.002 J	--	< 0.01 U	0.695	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	197
MW-31SR	23Q2	--	--	< 0.002 U	--	0.893	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	218
MW-31SR	23Q4	--	--	< 0.006 U	--	0.68	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	191
PZ-32	06Q2	--	1.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-33	06Q2	5.255 J	4.47	--	0.19	8.425	--	--	--	--	--	--	--	--	--	--	--
PZ-34	06Q2	--	0.092	--	0.0355	4.473	--	--	--	--	--	--	--	--	--	--	--
PZ-35	06Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-36	06Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-37	06Q2	--	< 0.01 U	--	--	4.25	--	--	--	--	--	--	--	--	--	--	--
PZ-38	06Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-39	06Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-40	06Q2	--	< 0.01 U	--	--	6.514	--	--	--	--	--	--	--	--	--	--	--
PZ-41	06Q2	5.818 J	< 0.01 U	--	< 0.01 U	6.077	--	--	--	--	--	--	--	--	--	--	--
PZ-42	06Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PZ-43	06Q2	0.501 J	< 0.01 U	--	< 0.01 U	3.194	--	--	--	--	--	--	--	--	--	--	--
PZ-44	06Q2	0.992 J	< 0.01 U	--	< 0.01 U	4.156	--	--	--	--	--	--	--	--	--	--	--
PZ-44	08Q4	1.101	< 0.005 R	--	0.04	5.74	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1660
PZ-44	09Q2	1.53	< 0.01 U	--	--	4.65	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	304
PZ-44	09Q3	3.11	< 0.01 U	--	< 0.01 U	4.809	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	745
PZ-44	09Q4	1.34	< 0.01 U	--	< 0.01 U	5.024	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	774
PZ-44	10Q2	1.299	< 0.01 U	--	< 0.01 U	2.994	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	815
PZ-44	10Q3	13.24	< 0.01 U	--	< 0.01 U	4.392	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	22.6
PZ-44	11Q2	9.85	< 0.01 U	--	< 0.01 U	3.95	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	792
PZ-44	11Q3	34.8	< 0.01 U	--	< 0.01 U	1.18	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	--	--	--	811
PZ-44	11Q4	0.56	< 0.01 U	--	< 0.01 UJ	4.45	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	999
PZ-44	12Q1	1.7	< 0.01 U	--	< 0.01 U	4.51 J	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	--	--	747
PZ-44	12Q3	19.1	< 0.01 U	--	< 0.01 U	2.55	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	957
PZ-44	12Q3	9.16	< 0.01 U	--	< 0.01 UJ	4.8	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	1100
PZ-44	12Q4	6.42	< 0.01 U	--	< 0.01 UJ	4.69	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	1050
PZ-44	13Q2	1.42	< 0.01 U	--	< 0.01 U	4.54	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	774
PZ-44	13Q4	1.2	< 0.01 U	--	< 0.01 U	3.73	--	--	--	< 0.068 U	< 0.068 U	< 0.068 U	< 0.068 U	--	--	--	918
PZ-44	14Q2	--	< 0.01 U	--	< 0.01 U	3.15	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	997
PZ-44	14Q4	3.91	< 0.01 U	--	< 0.01 U	3.68	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	769
PZ-44	15Q3	2.82	< 0.01 U	--	< 0.01 U	4.46	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	907
PZ-44	15Q4	0.13	< 0.01 U	--	< 0.01 U	4.56	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	968
PZ-44	16Q2	37.3	0.002 J	--	--	3.64	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1060
PZ-44	16Q4	0.559	0.002 J	--	< 0.01 U	1.23	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1270
PZ-44	17Q2	2.76	< 0.005 U	--	< 0.01 U	2.63	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	964
PZ-44	17Q4	2.19	< 0.005 U	--	< 0.01 U	4.29	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	781
PZ-44	18Q2	25.7	< 0.005 U	--	< 0.01 U	3.83	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1190
PZ-44	18Q4	8.12	< 0.005 U	--	< 0.01 U	3.65	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1040
PZ-44	19Q2	12.6	< 0.005 U	--	< 0.01 UJ	3.35	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	915 J
PZ-44	19Q4	1.48	< 0.005 U	--	< 0.01 U	4.48	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	919
PZ-44	20Q2	11.7	< 0.005 U	--	< 0.01 U	4.15	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	1100
PZ-44	20Q4	0.397	< 0.005 U	--	< 0.01 U	3.32	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1000 J
PZ-44	21Q3	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
PZ-44	21Q3	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-44	21Q4	1.13	< 0.005 U	--	< 0.01 U	3.92	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	787
PZ-44	22Q2	5.74	< 0.005 U	--	< 0.01 U	2.92	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1000
PZ-44	22Q4	0.619	< 0.005 U	--	< 0.01 U	3.46	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1260
PZ-44	23Q2	--	--	< 0.002 U	--	4.01	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	963
PZ-44	23Q4	--	--	< 0.006 UJ	--	4.43	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	335

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East Plant BMP
Historical Analytical Results Through 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PZ-45	06Q2	--	< 0.01 U	--	--	0.9584	--	--	--	--	--	--	--	--	--	--	--
PZ-45	08Q4	3.264	< 0.005 R	--	0.027	1.299	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	803
PZ-45	09Q1	4.58	< 0.005 R	--	< 0.006 U	0.5	--	--	--	--	--	--	--	--	--	--	581 J
PZ-45	09Q2	--	< 0.01 U	--	--	0.967	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-45	09Q3	10.9	< 0.01 U	--	< 0.01 U	1.234	--	--	--	--	--	--	--	--	--	--	646
PZ-45	09Q4	2.626	< 0.01 U	--	< 0.01 U	1.335	--	--	--	--	--	--	--	--	--	--	676
PZ-45	10Q2	2.867	< 0.01 U	--	< 0.01 U	1.201	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	767
PZ-45	10Q3	1.672	< 0.01 U	--	< 0.01 U	1.281	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	66
PZ-45	11Q2	2.44	< 0.01 U	--	< 0.01 U	1.28	--	--	--	< 0.0722 U	< 0.0722 U	< 0.0722 U	< 0.0722 U	--	--	--	775
PZ-45	11Q3	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	--
PZ-45	11Q4	34.5	--	--	--	--	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	--	--	--
PZ-45	12Q3	--	< 0.01 U	--	< 0.01 U	1.09	--	--	--	< 0.047 U	< 0.047 U	< 0.047 U	< 0.047 U	--	--	--	899
PZ-45	12Q3	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-45	13Q2	15.8	< 0.01 U	--	< 0.01 U	1.53	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	1290
PZ-45	13Q4	21.8	< 0.01 U	--	< 0.01 U	1.25	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1400
PZ-45	14Q2	24.6	< 0.01 U	--	< 0.01 U	1.23	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	1190
PZ-45	14Q4	8.59	< 0.01 U	--	< 0.01 U	1.04	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	998
PZ-45	15Q3	9.01	< 0.01 U	--	< 0.01 U	1.38 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	969
PZ-45	15Q4	13.8	< 0.01 U	--	< 0.01 U	1.84	--	--	--	--	--	--	--	--	--	--	1180
PZ-45	16Q1	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	--
PZ-45	16Q2	5.94	0.002 J	--	0.003 J	1.22	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1040
PZ-45	16Q4	6.95	0.002 J	--	< 0.01 U	3.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	933
PZ-45	17Q2	18.8	0.002 J	--	< 0.01 U	1.12	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1230
PZ-45	17Q4	5.24	< 0.005 U	--	< 0.01 U	1.32	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1270
PZ-45	18Q2	8.91	< 0.005 U	--	0.066	1.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1210
PZ-45	18Q4	6.37	< 0.005 U	--	< 0.01 U	1.41	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1320
PZ-45	19Q2	4.2	< 0.005 U	--	< 0.01 UJ	1.48	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1240
PZ-45	19Q4	1.28	< 0.005 U	--	< 0.01 U	1.55	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1960
PZ-45	20Q2	0.65	< 0.005 U	--	--	2.34	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	1240
PZ-45	20Q4	2.52	< 0.005 U	--	< 0.01 U	1.19 J	--	--	--	--	--	--	--	--	--	--	1180 J
PZ-45	21Q2	--	--	--	--	1.1 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1140
PZ-45	21Q4	1.38	0.004 JR	--	< 0.01 U	1.24	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1170
PZ-45	22Q2	2.61	< 0.005 U	--	< 0.01 U	1.09	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	961
PZ-45	22Q4	2.01	< 0.005 U	--	< 0.01 U	0.957	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	924
PZ-45	23Q2	--	--	< 0.002 UJ	--	1.62	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1060
PZ-45	23Q4	--	--	< 0.006 U	--	1.99	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1410

Table C-1
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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PZ-46	06Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-46	08Q4	--	< 0.005 R	--	--	1.517	--	--	--	--	--	--	--	--	--	--	709
PZ-46	09Q1	--	< 0.005 R	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-46	09Q2	--	< 0.01 U	--	--	1.187	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	09Q3	--	--	--	--	1.187	--	--	--	--	--	--	--	--	--	--	--
PZ-46	09Q4	11.32	< 0.01 U	--	< 0.01 U	2.495	--	--	--	--	--	--	--	--	--	--	718
PZ-46	10Q2	--	< 0.01 U	--	< 0.01 U	2.009	--	--	--	--	--	--	--	--	--	--	1030
PZ-46	10Q3	5.373	< 0.01 U	--	< 0.01 U	1.308	--	--	--	--	--	--	--	--	--	--	17
PZ-46	11Q2	--	--	--	--	--	--	--	--	< 0.0707 U	< 0.0707 U	< 0.0707 U	< 0.0707 U	--	--	--	--
PZ-46	11Q3	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--
PZ-46	11Q4	--	--	--	--	--	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.066 U	--	--	--	--
PZ-46	13Q2	--	--	--	--	--	--	--	--	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	--	--	--	--
PZ-46	13Q4	--	--	--	--	--	--	--	--	< 0.072 U	< 0.072 U	< 0.072 U	< 0.072 U	--	--	--	--
PZ-46	14Q2	--	< 0.01 U	--	--	1.56	--	--	--	--	--	--	--	--	--	--	--
PZ-46	15Q4	2.25	< 0.01 U	--	< 0.01 U	2.93	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	1680
PZ-46	16Q4	2.72	0.003 J	--	< 0.01 U	3.92	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1060
PZ-46	17Q2	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	17Q4	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	18Q2	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	18Q4	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	19Q2	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	19Q4	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	20Q2	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	1480
PZ-46	20Q4	6	< 0.005 U	--	< 0.01 U	2.11	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1040 J
PZ-46	21Q2	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	21Q4	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	22Q2	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	22Q4	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	--
PZ-46	23Q2	--	--	< 0.002 U	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-46	23Q4	--	--	< 0.006 U	--	3.22	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	1540

Notes:
µg/L = micrograms per liter
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample
mg/L = milligrams per liter
PCB = polychlorinated biphenyl
R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
U = The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ = The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
WAD = weak acid dissociable
WDCN = weak dissociable cyanide

Table C-2
East Plant Landfill
Historical Analytical Results Through 2023
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Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
East Plant Landfill																	
MW-10S	97Q1	0.47	0.03	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	170
MW-10S	97Q2	0.43	< 0.01 U	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	180
MW-10S	97Q3	1.1	< 0.01 U	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	160
MW-10S	97Q4	1.1	< 0.01 U	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	190
MW-10S	98Q1	2.3	0.02	--	--	0.2	--	--	--	--	--	--	--	--	--	< 0.065 U	170
MW-10S	98Q2	1.9	< 0.01 U	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	120
MW-10S	98Q3	0.75	< 0.01 U	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	170
MW-10S	98Q4	0.96	< 0.01 U	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	150
MW-10S	99Q1	0.83	< 0.01 U	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	550
MW-10S	99Q2	0.36	< 0.01 U	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	150
MW-10S	99Q3	1.6	0.01	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	230
MW-10S	99Q4	1.5	0.02	--	--	< 0.02 U	--	--	--	--	--	--	--	--	--	< 0.065 U	150
MW-10S	00Q1	3.8	< 0.01 U	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	140
MW-10S	00Q2	0.23	< 0.01 U	--	--	0.2	--	--	--	--	--	--	--	--	--	< 0.065 U	160
MW-10S	00Q3	0.96	< 0.01 U	--	--	0.2	--	--	--	--	--	--	--	--	--	< 0.065 U	170
MW-10S	00Q4	< 0.01 U	< 0.01 U	--	< 0.01 U	0.237	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	154
MW-10S	01Q1	0.82	< 0.01 U	--	< 0.01 U	< 0.2 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	176.74
MW-10S	01Q2	0.67	< 0.01 U	--	< 0.01 U	< 0.2 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	149.17
MW-10S	01Q3	3	< 0.01 U	--	< 0.01 U	< 0.2 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	166.25
MW-10S	01Q4	0.11	< 0.01 U	--	< 0.01 U	0.198	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	174.89
MW-10S	02Q1	0.1	< 0.01 U	--	< 0.01 U	< 0.2 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	161.93
MW-10S	02Q2	< 0.01 U	< 0.01 U	--	< 0.01 U	< 0.2 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	154.31
MW-10S	02Q3	0.2	< 0.01 U	--	< 0.01 U	0.378	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	149.17
MW-10S	02Q4	0.19	< 0.01 U	--	< 0.01 U	0.256	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	180.03
MW-10S	03Q1	0.558	< 0.01 U	--	< 0.01 U	0.254	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	167.069
MW-10S	03Q2	< 0.01 U	< 0.01 U	--	< 0.01 U	0.219	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	165.63
MW-10S	03Q3	3.079	< 0.01 U	--	< 0.01 U	0.21	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	167.89
MW-10S	03Q4	< 0.01 U	< 0.01 U	--	< 0.01 U	0.25	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	180.03
MW-10S	04Q1	3.878	< 0.01 U	--	< 0.01 U	0.423	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	154.72
MW-10S	04Q2	1.999	< 0.01 U	--	< 0.01 U	0.68	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	135.59
MW-10S	04Q3	1.344	< 0.01 U	--	< 0.01 U	0.338	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	169.13
MW-10S	04Q4	2.564	< 0.01 U	--	< 0.01 U	0.494	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	158
MW-10S	05Q1	10.41	< 0.01 U	--	< 0.01 U	1.52	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	142.48
MW-10S	05Q2	13.91	< 0.01 U	--	< 0.01 U	1.073	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	145.06
MW-10S	05Q3	2.966	< 0.01 U	--	< 0.01 U	0.4308	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	185.2
MW-10S	05Q4	2.911	0.0175	--	< 0.01 U	1.604	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	122.57
MW-10S	06Q1	1.709 J	< 0.01 U	--	< 0.01 U	1.846	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	124.9
MW-10S	06Q2	0.112	< 0.01 U	--	< 0.01 U	0.6968	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	149.01
MW-10S	06Q3	1.537	< 0.01 U	--	< 0.01 U	0.8895	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	142.47
MW-10S	06Q4	0.311	< 0.01 U	--	< 0.01 U	0.3994	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	170.44
MW-10S	07Q1	0.666	< 0.01 U	--	< 0.01 U	0.2885	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	174.62
MW-10S	07Q2	2.737	< 0.01 U	--	< 0.01 U	0.3366	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	179.72
MW-10S	07Q3	0.247	< 0.01 U	--	< 0.01 U	0.2415	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	185.6

Table C-2
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Massena East, Massena, New York
Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-10S	07Q4	0.892	< 0.005 U	--	< 0.005 U	0.2934	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	220
MW-10S	08Q1	4.23	< 0.01 U	--	< 0.01 U	0.3492	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	186
MW-10S	08Q2	3.272	< 0.005 U	--	< 0.01 UJ	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	178 J
MW-10S	08Q3	4.768	< 0.005 U	--	< 0.01 U	0.2596	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	296
MW-10S	08Q4	2.522	< 0.005 U	--	< 0.01 U	0.2707	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	204
MW-10S	09Q1	1.57	< 0.01 U	--	< 0.01 UJ	0.2	--	--	--	< 0.481 U	< 0.481 U	< 0.481 U	< 0.481 U	--	--	--	197
MW-10S	09Q2	5.07 J	< 0.01 U	--	< 0.01 U	0.2887	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	199
MW-10S	09Q3	5.68 J	< 0.01 U	--	< 0.01 U	0.2054	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	187
MW-10S	09Q4	2.444	< 0.01 U	--	< 0.01 U	0.2209	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	229
MW-10S	10Q1	3.551	0.0243	--	0.239	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	174
MW-10S	10Q2	2.062	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	201
MW-10S	10Q3	1.06	< 0.01 U	--	< 0.01 U	0.2103	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	190
MW-10S	10Q4	3.647 J	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	181
MW-10S	11Q1	2.62	< 0.01 U	--	< 0.01 U	0.22	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	211
MW-10S	11Q2	2.21	< 0.01 U	--	< 0.01 U	0.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	200
MW-10S	11Q3	68.7	< 0.01 U	--	< 0.01 U	0.24	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	249
MW-10S	11Q4	7.55	< 0.01 U	--	0.016 J	0.2	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.066 U	--	--	--	256
MW-10S	12Q1	1.22	< 0.01 U	--	< 0.01 U	0.17	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	--	--	245
MW-10S	12Q3	1.93 J	< 0.01 U	--	< 0.01 U	0.14	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	211
MW-10S	12Q3	1.24	< 0.01 U	--	< 0.01	0.14	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	327
MW-10S	12Q4	9.43	< 0.01 U	--	< 0.01 UJ	0.18	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	233
MW-10S	13Q1	2.45	< 0.01 U	--	< 0.01 U	0.14	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	198
MW-10S	13Q2	1.7	< 0.01 U	--	< 0.01 U	< 0.1 U	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	199
MW-10S	13Q3	1.16	< 0.01 U	--	< 0.01 U	0.18	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	193
MW-10S	13Q4	2.53	< 0.01 U	--	< 0.01 U	0.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	179
MW-10S	14Q1	6.35	< 0.01 U	--	< 0.01 U	0.15	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	208
MW-10S	14Q2	1.13	< 0.01 U	--	< 0.01 U	0.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	155
MW-10S	14Q3	1.74 J	< 0.01 U	--	< 0.01 U	0.18	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	173
MW-10S	14Q4	1.81 J	< 0.01 U	--	< 0.01 U	0.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	158
MW-10S	15Q1	2.37	< 0.01 U	--	< 0.01 U	0.18	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	189
MW-10S	15Q3	0.63 J	< 0.01 U	--	< 0.01 U	0.14	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	199
MW-10S	15Q3	4.08 J	< 0.01 U	--	< 0.01 U	0.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	174
MW-10S	15Q4	2.65	< 0.01 U	--	< 0.01 U	0.17	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	225
MW-10S	16Q1	0.72	< 0.005 U	--	< 0.005 U	0.141	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	124
MW-10S	16Q2	0.787	0.002 J	--	0.003 J	0.178	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	121
MW-10S	16Q3	1.25 J	0.002 J	--	< 0.01 U	< 0.05 U	--	--	--	< 0.02 U	< 0.02 U	< 0.021 U	< 0.021 U	--	--	--	168
MW-10S	17Q1	1.36	< 0.005 U	--	< 0.01 U	0.107	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	127
MW-10S	17Q1	0.504	< 0.005 U	--	< 0.01 U	0.101	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	128
MW-10S	17Q2	0.189	< 0.005 U	--	< 0.01 U	0.162	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	111
MW-10S	17Q3	0.55	< 0.005 U	--	< 0.01 U	0.15	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	162
MW-10S	17Q4	1.02	< 0.005 U	--	< 0.01 U	0.134	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	136
MW-10S	18Q1	0.79	< 0.005 U	--	< 0.01 U	0.127	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	122
MW-10S	18Q2	3.12	< 0.005 U	--	--	0.132	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	145
MW-10S	18Q4	1.25	< 0.005 U	--	< 0.01 U	0.134	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	175

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-10S	18Q4	4.53	< 0.005 U	--	< 0.01 U	0.136	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	144
MW-10S	19Q1	7	< 0.005 U	--	< 0.01 U	0.112	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	142
MW-10S	19Q3	4.38	< 0.005 U	--	< 0.01 U	0.15	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	146
MW-10S	19Q4	0.26	< 0.005 U	--	< 0.01 U	0.157	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	103
MW-10S	20Q1	0.0665	0.004 J	--	< 0.01 U	0.14	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	86.4
MW-10S	20Q2	0.135	< 0.005 U	--	< 0.01 U	0.18	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	--	--	93.4
MW-10S	20Q3	0.437	< 0.005 U	--	< 0.01 U	0.171	--	--	--	< 0.021 U	< 0.021 U	< 0.021 U	< 0.021 U	--	--	--	158
MW-10S	20Q4	0.175	< 0.005 U	--	< 0.01 U	< 0.25 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	110 J
MW-10S	21Q1	0.0579	< 0.005 U	--	--	0.142 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	71.5
MW-10S	21Q2	0.0426	< 0.005 U	--	< 0.01 U	0.14	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	148
MW-10S	21Q3	0.0302	< 0.005 R	--	--	0.189	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	81.4
MW-10S	21Q4	0.0838	< 0.005 U	--	< 0.01 U	0.25	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	70.3
MW-10S	22Q1	0.0578	< 0.005 UJ	--	< 0.01 U	0.129	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	70
MW-10S	22Q2	0.0169	< 0.005 U	--	0.011 J	0.106	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	69.9
MW-10S	22Q3	0.119	< 0.005 U	--	< 0.01 U	0.105	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	119 J
MW-10S	22Q4	0.0602	< 0.005 U	--	< 0.01 U	0.14	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	84.1
MW-10S	23Q1	--	--	0.00088 J	--	0.079	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	78
MW-10S	23Q2	--	--	< 0.002 U	--	0.124	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	80.5
MW-10S	23Q3	--	--	0.0011 J	--	0.138	--	--	--	< 0.065 U	< 0.065 U	0.041	0.036	--	--	--	111
MW-10S	23Q4	--	--	< 0.006 U	--	0.115	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	106
MW-39S	99Q2	0.44	0.25	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	120
MW-39S	99Q3	0.64	0.2	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	100
MW-39S	99Q4	0.17	0.26	--	--	0.4	--	--	--	--	--	--	--	--	--	< 0.065 U	140
MW-39S	00Q1	5.2	0.3	--	--	0.4	--	--	--	--	--	--	--	--	--	< 0.065 U	97
MW-39S	00Q2	0.4	0.29	--	--	0.4	--	--	--	--	--	--	--	--	--	< 0.065 U	130
MW-39S	00Q3	0.4	0.29	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	110
MW-39S	00Q4	< 0.01 U	0.228	--	0.0275	0.467	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	88
MW-39S	01Q1	2.44	0.244	--	< 0.01 U	1.366	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	112.34
MW-39S	01Q2	5.12	0.233	--	0.0155	0.238	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	118.92
MW-39S	01Q3	14.4	0.192	--	0.0395	1.625	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.087	--	--	--	98.55
MW-39S	01Q4	0.43	0.266	--	0.0325	0.714	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	111.11
MW-39S	02Q1	0.19	0.375	--	0.0675	0.629	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	122.83
MW-39S	02Q2	0.9	0.382	--	0.0645	0.886	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	132.91
MW-39S	02Q3	1.02	0.426	--	0.0565	0.668	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	130.24
MW-39S	02Q4	0.253	0.297	--	0.051	0.573	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	124.48
MW-39S	03Q1	12.19	0.318	--	0.087	0.793	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	121.804
MW-39S	03Q2	64.28	0.312	--	0.0735	2.762	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	132.09
MW-39S	03Q3	0.098	0.379	--	0.067	0.436	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	131.47
MW-39S	03Q4	12.44	0.294	--	0.061	0.424	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	122.01
MW-39S	04Q1	8.646	0.26	--	0.067	0.524	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	117.48
MW-39S	04Q2	13.063	< 0.01 U	--	0.0665	1.06	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	98.76
MW-39S	04Q3	11.82	0.169	--	0.0315	1.546	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	79.42
MW-39S	04Q4	24.04	0.177	--	0.0655	2.396	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	77.19
MW-39S	05Q1	34.11	0.149	--	0.0595	1.918	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	87.81

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Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-39S	05Q2	5.41	0.124	--	0.0365	2.126	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	52.43
MW-39S	05Q3	14.18	0.189	--	0.066	1.409	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	82.41
MW-39S	05Q4	29.79	0.11	--	0.037	2.51	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	84.04
MW-39S	06Q1	19.12	0.0765	--	0.0265	3.988	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	68.33
MW-39S	06Q2	7.91	0.0855	--	0.031	2.903	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	71.45
MW-39S	06Q3	9.547	0.111	--	0.043	2.134	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	79.31
MW-39S	06Q4	0.522	0.12	--	0.035	1.759	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	87.92
MW-39S	07Q1	1.93	0.162	--	0.049	1.691	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	94.77
MW-39S	07Q2	4.115	0.159	--	0.071	1.618	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	110.21
MW-39S	07Q3	10.94	0.15	--	0.066	1.311	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	109.74
MW-39S	07Q4	0.934	0.16	--	0.017	1.346	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	140
MW-39S	08Q1	98.7	0.134	--	0.013	1.786	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	119
MW-39S	08Q2	299.5	0.22	--	0.021 J	1.187	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	132 J
MW-39S	08Q3	63.02	--	--	< 0.01 U	1.04	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	145
MW-39S	08Q4	418.9	0.19	--	< 0.01 U	0.91	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	175
MW-39S	09Q1	101	0.237	--	< 0.01 UJ	0.96	--	--	--	< 0.513 U	< 0.513 U	< 0.513 U	< 0.513 U	--	--	--	207
MW-39S	09Q2	22.4	0.206	--	< 0.01 U	1.207	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	197 R
MW-39S	09Q3	43	0.123 J	--	0.0127	2.119	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	112
MW-39S	09Q4	28.565	0.168	--	0.0103	1.017	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	159
MW-39S	10Q1	41.84	0.0688	--	< 0.01 U	2.426	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	131
MW-39S	10Q2	9.402	0.068	--	< 0.01 U	2.606	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	91.4
MW-39S	10Q3	4.244	0.055	--	< 0.01 U	2.774	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	83.2
MW-39S	10Q4	10.43	0.057	--	< 0.01 U	2.693	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	74
MW-39S	11Q1	35.2	0.053	--	< 0.01 U	2.75	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	70
MW-39S	11Q2	15.6	0.059	--	< 0.01 U	2.45	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	77
MW-39S	11Q3	0.86	< 0.01 U	--	< 0.01 U	0.45	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	477
MW-39S	11Q4	61.1	0.098	--	< 0.01 UJ	1.9	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	130
MW-39S	12Q1	37.7	0.05	--	< 0.01 U	2.74	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	--	--	92.3
MW-39S	12Q3	25.9 J	0.057	--	< 0.01 U	2.51	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	83.3
MW-39S	12Q3	8.08	0.073	--	< 0.01 UJ	1.27	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	98.3
MW-39S	12Q4	48.2	0.072	--	< 0.01 UJ	2.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	123
MW-39S	13Q1	35.9	0.085	--	< 0.01 U	1.96	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	122
MW-39S	13Q2	53.4	0.079	--	< 0.01 U	1.59	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	125
MW-39S	13Q3	30.3 J	0.07	--	< 0.01 U	2.01	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	165
MW-39S	13Q4	25.4	0.071	--	< 0.01 U	1.97	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	174
MW-39S	14Q1	23.3	--	--	< 0.01 U	1.91	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	151
MW-39S	14Q2	61.3	0.068	--	< 0.01 U	1.73	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	133
MW-39S	14Q3	27.8 J	0.065	--	< 0.01 U	1.93	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	120
MW-39S	14Q4	22.1 J	0.061	--	< 0.01 U	1.8	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	129
MW-39S	15Q1	33.2	0.066	--	< 0.01 U	1.62	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	132
MW-39S	15Q3	468	0.059	--	< 0.01 U	0.98	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	115
MW-39S	15Q3	7.54 J	0.087	--	< 0.01 U	1.66	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	146
MW-39S	15Q4	3.51	0.066	--	< 0.01 U	1.23	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	148
MW-39S	16Q1	14	0.082	--	0.006	1.6	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	171

Table C-2
East Plant Landfill
Historical Analytical Results Through 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-39S	16Q2	11.9	0.08	--	0.008	1.36	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	175
MW-39S	16Q3	23.4 J	0.064	--	< 0.01 U	1.15	--	--	--	< 0.02 U	< 0.02 U	< 0.021 U	< 0.021 U	--	--	--	183
MW-39S	17Q1	17.6 J	0.035	--	< 0.01 U	1.35	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	166
MW-39S	17Q1	16.3 J	0.061	--	< 0.01 U	1.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	164
MW-39S	17Q2	4.81	0.047	--	0.01	1.09	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	158
MW-39S	17Q3	12.2	0.063	--	0.0071 J	1.43	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	149
MW-39S	17Q4	14.3	0.03	--	< 0.01 U	1.46	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	124
MW-39S	18Q1	32.8	0.029	--	0.0078 J	1.76	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	102
MW-39S	18Q2	18.3	0.05	--	--	1.29	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	123
MW-39S	18Q4	23.6	0.054	--	0.0061 J	1.46 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	149
MW-39S	18Q4	2.83	0.035	--	0.012	1.69	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	157
MW-39S	19Q1	18.9	0.029 J	--	0.017 B	1.69	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	133
MW-39S	19Q2	0.094 J	0.073	--	< 0.01 UJ	0.234 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	65.6
MW-39S	19Q3	24.2	0.0501 J	--	< 0.01 U	1.78	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	133
MW-39S	19Q4	4.52	0.061	--	< 0.01 U	1.67	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	176
MW-39S	20Q1	0.488	0.027	--	< 0.01 U	1.57	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	133
MW-39S	20Q2	2.04	0.047	--	< 0.01 U	1.65	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	--	--	142
MW-39S	20Q3	0.144	0.048	--	< 0.01 U	1.76	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	191
MW-39S	20Q4	5.51 J	0.022	--	< 0.01 U	1.33	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	210 J
MW-39S	21Q1	3.15	0.012	--	--	1.85 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	138
MW-39S	21Q2	0.213	0.024	--	< 0.01 U	2.11	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	111
MW-39S	21Q3	0.386	0.003 R	--	--	1.48	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	238
MW-39S	21Q4	0.798	0.019 J	--	< 0.01 U	2.72	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	118
MW-39S	22Q1	0.298	0.019 J	--	< 0.01 U	2.78	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	84.6
MW-39S	22Q2	0.816	0.02	--	0.011 J	2.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	88.3
MW-39S	22Q3	0.112	0.052	--	< 0.01 U	1.71	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	249
MW-39S	22Q4	0.0753	0.046	--	< 0.01 U	1.89	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	268
MW-39S	23Q1	--	--	0.0018 J	--	1.81	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	170
MW-39S	23Q2	--	0.031	< 0.002 U	< 0.01 U	2.45	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	137
MW-39S	23Q3	--	--	0.0017 J	--	1.65	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	285
MW-39S	23Q4	--	--	< 0.006 U	--	1.54	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	330
MW-40S	99Q2	0.41	0.43	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	110
MW-40S	99Q3	0.21	0.48	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	110
MW-40S	99Q4	0.22	0.39	--	--	0.4	--	--	--	--	--	--	--	--	--	< 0.065 U	97
MW-40S	00Q2	0.57	0.34	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	100
MW-40S	00Q3	0.56	0.11	--	--	0.3	--	--	--	--	--	--	--	--	--	< 0.065 U	74
MW-40S	00Q4	< 0.01 U	0.316	--	0.028	0.248	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	88
MW-40S	01Q1	< 0.01 U	0.0715	--	0.013	0.303	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	88.47
MW-40S	01Q2	< 0.01 U	0.383	--	0.031	0.164	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	96.5
MW-40S	01Q3	0.12	0.363	--	0.08	< 0.2 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	84.36
MW-40S	01Q4	0.23	0.363	--	0.0405	0.272	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	86.62
MW-40S	02Q1	0.1	0.167	--	0.038	0.24	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	88.88
MW-40S	02Q2	0.15	0.383	--	0.0635	0.224	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	87.65
MW-40S	02Q3	0.1	0.046	--	0.063	0.286	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	0.21

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Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-40S	02Q4	< 0.01 U	0.325	--	0.039	0.294	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	91.97
MW-40S	03Q1	< 0.011 U	0.347	--	0.065	0.29	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	83.123
MW-40S	03Q2	< 0.01 U	0.32	--	0.0585	0.281	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	180.65
MW-40S	03Q3	0.053	0.344	--	0.064	0.274	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	83.12
MW-40S	03Q4	0.041	0.358	--	0.0685	0.286	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	86
MW-40S	04Q1	0.17	0.321	--	0.108	0.22	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	84.56
MW-40S	04Q2	0.847	0.0295	--	0.0845	0.456	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	82.09
MW-40S	04Q3	0.117	0.32	--	< 0.01 U	0.351	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	83.53
MW-40S	04Q4	0.134	0.359	--	0.131	0.327	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	76.77
MW-40S	05Q1	0.082	0.313	--	0.075	0.304	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	82.51
MW-40S	05Q2	0.134	0.3	--	0.0975	0.3011	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	89.22
MW-40S	05Q3	1.5	0.291	--	< 0.01 U	0.2958	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	80.37
MW-40S	05Q4	0.138	0.239	--	0.0645	0.2466	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	1.197	< 0.065 U	< 0.065 U	--	--	--	103.81
MW-40S	06Q1	1.1	0.253	--	0.0765	0.259	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	63.86
MW-40S	06Q2	1.067 J	0.261	--	0.0855	0.2648	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	87.36
MW-40S	06Q3	0.323	0.26	--	0.097	0.2699	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	71.77
MW-40S	06Q4	0.138	0.265	--	0.0875	0.2709	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	56.02
MW-40S	07Q1	0.451	0.28	--	0.0915	0.2296	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	30.93
MW-40S	07Q2	0.148	0.251	--	0.081	0.2178	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	72.57
MW-40S	07Q3	1.278	0.25	--	0.061	0.2445	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	69.6
MW-40S	07Q4	0.465	0.24	--	0.017	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	63
MW-40S	08Q1	1.241	0.17	--	0.017 J	0.2374	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	73
MW-40S	08Q2	0.437 R	0.2	--	0.038 J	0.2151	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	90.4 J
MW-40S	08Q3	0.033	--	--	0.012	0.2272	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	104 J
MW-40S	08Q4	4.232	0.17	--	< 0.01 U	0.223	--	--	--	< 0.065 U	0.108	< 0.065 U	< 0.065 U	--	--	--	82.8
MW-40S	09Q1	0.72	0.155	--	0.0123 J	0.15	--	--	--	< 0.508 U	< 0.508 U	< 0.508 U	< 0.508 U	--	--	--	82.7
MW-40S	09Q2	1.91	0.103	--	< 0.01 U	0.2545	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	79.1
MW-40S	09Q3	0.565	0.179 J	--	0.012	0.2113	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	69.7
MW-40S	09Q4	2.048	0.175	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	86.1
MW-40S	10Q1	1.849	0.171	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	73.2
MW-40S	10Q2	0.254	0.162	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	69.7
MW-40S	10Q3	0.377	0.201	--	< 0.01 U	0.2278	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	67
MW-40S	11Q1	0.72	0.182	--	< 0.01 U	0.26	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	63
MW-40S	11Q2	0.72	0.179	--	< 0.01 U	0.26	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	60.3
MW-40S	11Q3	0.28	0.17	--	0.02	0.27	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	--	--	58.5
MW-40S	11Q4	0.36	0.127	--	< 0.01 UJ	0.27	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.066 U	--	--	--	73.4
MW-40S	12Q1	0.39	0.165	--	< 0.01 U	0.21	--	--	--	< 0.061 UJ	< 0.061 UJ	< 0.061 UJ	< 0.061 UJ	--	--	--	58.6
MW-40S	12Q3	0.56 J	0.167	--	< 0.01 U	0.18	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	58.9
MW-40S	12Q3	0.26	0.168	--	< 0.01 UJ	0.19	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	58.7
MW-40S	12Q4	0.38	0.155	--	< 0.01 UJ	0.17	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	58.2
MW-40S	13Q1	0.96	0.159	--	< 0.01 U	0.18	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	52.2
MW-40S	13Q2	0.31	0.143	--	< 0.01 U	0.19	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	61.1
MW-40S	13Q3	< 0.1 U	0.15	--	< 0.01 U	0.21	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	59.5
MW-40S	13Q4	0.76	0.14	--	< 0.01 U	0.23	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	65.7

Table C-2
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Massena East, Massena, New York
Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-40S	14Q1	0.11	0.137 J	--	< 0.01 U	0.18	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	58
MW-40S	14Q2	0.14	0.142	--	< 0.01 U	0.2	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	61.7
MW-40S	14Q3	0.66 J	0.137	--	0.013	0.2	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	57.4
MW-40S	14Q4	0.13 J	0.13	--	< 0.01 U	0.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	58.4
MW-40S	15Q1	< 0.1 U	0.141	--	< 0.01 U	0.21	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	57.7
MW-40S	15Q3	< 0.1 U	0.114	--	0.011	0.24	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	71.9
MW-40S	15Q3	0.1 UJ	0.141	--	< 0.01 U	0.19	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	62.9
MW-40S	15Q4	< 0.1 U	0.109	--	< 0.01 U	0.29	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	71.1
MW-40S	16Q1	0.04 J	0.109	--	0.007	0.239	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	67.7
MW-40S	16Q2	0.104	0.13 J	--	0.011 J	0.23	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	54.8
MW-40S	16Q3	0.208 J	0.127	--	< 0.01 U	0.204	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	59.9
MW-40S	17Q1	0.068 J	0.113	--	0.01	0.111	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	57.9
MW-40S	17Q1	0.076 J	0.133	--	0.0084 J	0.161	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	54.7
MW-40S	17Q2	< 0.1 U	0.12	--	0.018	0.152	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	55.8
MW-40S	17Q3	0.092 J	0.111	--	0.008 J	0.198	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	58.5
MW-40S	17Q4	0.036 J	0.12	--	0.014	0.19	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	56.2
MW-40S	18Q1	0.05 J	0.071	--	0.01	0.169	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	56.7
MW-40S	18Q2	0.084 J	0.083	--	--	0.179	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	56.3
MW-40S	18Q4	0.048 J	0.112	--	0.0092 J	0.192	--	--	--	< 0.021 U	< 0.021 U	< 0.021 U	< 0.021 U	--	--	--	56.9
MW-40S	18Q4	0.169	0.075	--	0.0096 J	0.212	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	63.7
MW-40S	19Q1	0.121	0.116	--	0.021 B	0.175	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	56.5
MW-40S	19Q2	69.2	0.044	--	< 0.01 UJ	0.991 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	130
MW-40S	19Q3	0.113	0.111	--	< 0.01 U	0.237	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	58.9
MW-40S	19Q4	0.054 J	0.085	--	< 0.01 U	0.196	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	58.6
MW-40S	20Q1	0.0104	0.066	--	< 0.01 U	0.201	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	58
MW-40S	20Q2	< 0.1 U	0.082	--	< 0.01 U	0.31	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	--	--	56.2
MW-40S	20Q3	< 0.1 U	0.056	--	< 0.01 U	0.192	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	57.6
MW-40S	20Q4	< 0.1 U	0.046	--	< 0.01 U	0.179	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	57.6 J
MW-40S	21Q1	0.00454 J	0.097	--	--	0.192 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	59.8
MW-40S	21Q2	0.00409 J	0.077	--	< 0.01 U	0.173	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	56.2
MW-40S	21Q3	0.00498 J	0.002 R	--	--	0.205	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	61.5
MW-40S	21Q4	0.00846 J	0.097	--	< 0.01 U	0.198	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	53.9
MW-40S	22Q1	0.00795 J	0.105 J	--	< 0.01 U	0.148	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	53.4
MW-40S	22Q3	0.0053 J	0.086	--	< 0.01 U	0.16	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	62.7
MW-40S	22Q4	0.00445 J	0.061	--	< 0.01 U	0.16 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	56.5
MW-40S	23Q2	--	--	< 0.002 U	--	0.239	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	69.6
MW-40S	23Q2	--	--	< 0.002 U	--	0.138	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	56.7
MW-40S	23Q3	--	--	0.0013 J	--	0.219	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	54.8
MW-40S	23Q4	--	--	< 0.006 U	--	0.15	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	52.4
MW-45	06Q2	1.714	1.64	--	0.38	0.7049	--	--	--	--	--	--	--	--	--	--	141.43
MW-45	06Q3	1.506	1.87	--	0.509	0.7454	--	--	--	--	--	--	--	--	--	--	128.36
MW-45	06Q4	0.586	1.38	--	0.302	0.5272	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	74.13
MW-45	07Q1	2.079	1.98	--	0.361	0.6317	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	135.42
MW-45	07Q2	2.259	1.92	--	0.579	0.6846	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	154.6

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Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-45	07Q3	3.254	1.6	--	0.341	0.6643	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	132.47
MW-45	07Q4	0.712	1.1	--	0.06	0.5919	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	150
MW-45	08Q1	139.5	1.09	--	0.057	0.6421	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	144
MW-45	08Q2	39.24	1.3	--	0.096 J	0.7549	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	204 J
MW-45	08Q3	124.9	--	--	0.035	0.4408	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	139
MW-45	08Q4	85.59	0.85	--	< 0.01 U	0.7445	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	188
MW-45	09Q1	44.5	0.161	--	0.0328 J	0.7	--	--	--	< 0.521 U	< 0.521 U	< 0.521 U	< 0.521 U	--	--	--	180
MW-45	09Q2	7.38	0.937	--	0.0306	0.8509	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	191
MW-45	09Q3	8.85	0.698	--	0.0492 J	0.6361	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	164
MW-45	09Q4	13.46	1.66	--	0.0274	0.8217	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	191
MW-45	10Q1	89.56	1.26	--	0.0284	0.6434	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	191
MW-45	10Q2	47.28	1.85	--	0.026	0.6678 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	113
MW-45	10Q3	16.98	2.49	--	0.026	0.753	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	132
MW-45	10Q4	53.79	1.04	--	< 0.01 U	0.3794	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	124
MW-45	11Q1	55.7	1.53	--	< 0.01 U	0.74	--	--	--	< 0.0657 U	< 0.0657 U	< 0.0657 U	< 0.0657 U	--	--	--	124
MW-45	11Q2	16.3	1.35	--	0.026	0.78	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	119
MW-45	11Q3	12.9	0.944	--	0.072	0.69	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	--	--	107
MW-45	11Q4	54.9	0.908	--	< 0.01 UJ	0.56	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	109
MW-45	12Q1	29.6	0.981	--	0.014	0.5	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	--	--	116
MW-45	12Q3	22.9 J	1.15	--	0.033	0.63	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	104
MW-45	12Q3	120	0.68	--	0.011 J	0.46	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	134
MW-45	12Q4	10.4	0.836	--	0.017 J	0.48	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	122
MW-45	13Q1	42.4 J	0.859	--	0.015	0.49	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	111
MW-45	13Q2	51	0.843	--	0.021	0.53	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	119
MW-45	13Q3	28.9	0.97	--	0.014	0.55	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	110
MW-45	13Q4	53.3	0.967	--	0.023	0.53	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	120
MW-45	14Q1	20.9	0.895 J	--	0.026	0.48	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	115
MW-45	14Q2	62.1	0.931	--	0.029	0.52	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	117
MW-45	14Q3	34.2 J	0.871	--	0.038	0.49	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	117
MW-45	14Q4	31 J	0.883	--	0.026	0.49	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	170
MW-45	15Q1	12.2	0.91	--	0.024	0.5	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	134
MW-45	15Q3	30.2	0.848	--	0.037	0.49	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	154
MW-45	15Q3	6.41 J	0.66	--	0.024	0.42	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	700
MW-45	15Q4	42.7	0.532	--	0.016	0.48	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	--	--	334

Table C-2
East Plant Landfill
Historical Analytical Results Through 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-45	16Q1	4.6	0.709	--	0.046	0.433	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	115
MW-45	16Q2	12.4	0.567	--	0.055	0.433	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	373
MW-45	16Q3	3.66 J	0.408	--	0.007 J	0.388	--	--	--	< 0.021 U	< 0.021 U	< 0.022 U	< 0.022 U	--	--	--	621
MW-45	17Q1	4.98	0.566	--	0.025	0.259	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	608
MW-45	17Q1	7.61	0.644	--	0.051	0.385	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	565
MW-45	17Q2	2.92	0.603	--	0.086	0.335	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	471
MW-45	17Q3	2.89	0.475	--	0.065	0.437	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	500
MW-45	17Q4	9.79	0.569	--	0.054	0.406	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	496
MW-45	18Q1	10.2 J	0.303 J	--	0.064	0.421	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	508
MW-45	18Q2	5.83	0.349	--	0.041	0.395	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	471
MW-45	18Q4	7.04	0.435	--	0.059	0.405	--	--	--	< 0.02 U	< 0.02 U	< 0.021 U	< 0.021 U	--	--	--	871
MW-45	18Q4	1.15	0.499	--	0.075	0.405	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	702
MW-45	19Q1	23.8	0.53	--	0.078 B	0.391	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	635
MW-45	19Q2	19.6	0.362	--	< 0.01 UJ	0.36 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	485
MW-45	19Q3	16.3	0.35	--	0.022	0.456	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	516
MW-45	19Q4	2.23	0.401	--	0.013	0.452	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	742
MW-45	20Q1	0.747	0.439	--	< 0.01 U	0.397	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	594
MW-45	20Q2	0.347	0.458	--	0.035	0.43	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	531
MW-45	20Q3	0.448	0.398	--	0.024	< 1.25 U	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	844
MW-45	20Q4	0.267	0.022	--	0.013	< 1.25 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	686 J
MW-45	21Q1	0.564	0.363	--	--	0.393 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	612
MW-45	21Q2	0.114	0.436	--	0.029	0.415	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	562
MW-45	21Q3	0.0681	0.024 R	--	--	1.15 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	696
MW-45	21Q4	0.0704	0.451	--	0.014	0.401	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	548
MW-45	22Q1	0.144	0.452 J	--	0.014	0.326	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	490
MW-45	22Q2	0.135	0.458	--	0.022 J	0.324	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	457
MW-45	22Q3	0.0477	0.599	--	< 0.01 U	0.36	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	643
MW-45	22Q4	0.0431	0.384	--	0.014	0.343	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	667
MW-45	23Q1	--	--	0.0039	--	0.312	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	531
MW-45	23Q2	--	--	0.0022	--	0.337	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	578

Table C-2
East Plant Landfill
Historical Analytical Results Through 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-45	23Q3	--	--	0.0082 J	--	0.437	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	558
MW-45	23Q4	--	--	< 0.006 U	--	0.387	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--	--	722

Notes:
µg/L = micrograms per liter
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample
mg/L = milligrams per liter
PCB = polychlorinated biphenyl
R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
U = The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ = The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
WAD = weak acid dissociable
WDCN = weak dissociable cyanide

Table C-3
East Plant PSP
Historical Analytical Results Through 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
East Plant PSP															
MW-03S	98Q1	2.1	15	--	--	8.9	--	--	--	--	--	--	--	< 0.065 U	520
MW-03S	98Q2	2.1	6.9	--	--	8.4	--	--	--	--	--	--	--	< 0.065 U	470
MW-03S	98Q3	1.6	11	--	--	9.3	--	--	--	--	--	--	--	< 0.065 U	540
MW-03S	98Q4	2.2	16	--	--	12	--	--	--	--	--	--	--	< 0.065 U	480
MW-03S	99Q1	2.1	9.8	--	--	13	--	--	--	--	--	--	--	< 0.065 U	550
MW-03S	99Q2	3.3	14	--	--	11	--	--	--	--	--	--	--	< 0.065 U	450
MW-03S	99Q3	2.5	14	--	--	10	--	--	--	--	--	--	--	< 0.065 U	580
MW-03S	99Q4	3	14	--	--	14	--	--	--	--	--	--	--	< 0.065 U	490
MW-03S	00Q1	3.2	14	--	--	12	--	--	--	--	--	--	--	< 0.065 U	450
MW-03S	00Q2	2.7	5.3	--	--	12	--	--	--	--	--	--	--	< 0.065 U	530
MW-03S	00Q3	4.1	14	--	--	17	--	--	--	--	--	--	--	< 0.065 U	650
MW-03S	00Q4	0.2	12.4	--	0.104	12.63	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	446
MW-03S	01Q1	0.75	5.96	--	0.0735	13.1	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	637.41
MW-03S	01Q2	0.38	10	--	0.215	15.74	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	685.56
MW-03S	01Q3	4.1	8.37	--	0.221	15.54	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	714.78
MW-03S	01Q4	0.37	7.93	--	0.164	15.01	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	705.52
MW-03S	02Q1	0.19	12.1	--	0.465	14.5	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	679.18
MW-03S	02Q2	0.78	11.2	--	0.107	13.68	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	654.08
MW-03S	02Q3	0.5	10	--	0.21	15.3	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	2.171	--	688.44
MW-03S	02Q4	0.427	9.57	--	0.144	18.71	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	701.2
MW-03S	03Q1	15.65	10.3	--	0.119	17.98	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	654.285
MW-03S	03Q2	15.8	9.47	--	0.146	17.51	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	649.55
MW-03S	03Q3	0.658	9.41	--	0.726	20.25	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	649.96
MW-03S	03Q4	3.778	8.6	--	0.308	18.3	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	645.64
MW-03S	04Q1	36.61	8.94	--	0.081	16.67	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	647.7
MW-03S	04Q2	6.67	6.53	--	0.209	16.96	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	637
MW-03S	04Q3	3.097	7.74	--	0.363	22	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	621.98
MW-03S	04Q4	0.981	9.02	--	0.436	21.26	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	475.73
MW-03S	05Q1	13.34	8.06	--	0.193	23.2	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	595.66
MW-03S	05Q2	2.825	8.1	--	0.245	23.61	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	598.23
MW-03S	05Q3	5.58	7.52	--	0.229	20.68	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	614
MW-03S	05Q4	8.29	7.15	--	0.346	19.69	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	587.47
MW-03S	06Q1	3.906	6.98	--	0.18	20.06	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	591.92
MW-03S	06Q2	16.22	6.38	--	0.202	21.25	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	618.41
MW-03S	06Q3	9.16	5.96	--	0.138	24.39	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	505.51
MW-03S	06Q4	1.744	6.71	--	0.194	20.89	--	--	--	0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	422.86

Table C-3
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Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-03S	07Q1	2.673	6.02	--	0.628	20.31	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	469.11
MW-03S	07Q2	9.786	5.57	--	0.309	22	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	472.52
MW-03S	07Q3	1.932	5.7	--	0.306	20.16	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	479.11
MW-03S	07Q4	15.09	5.4	--	0.063	22.58	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	470
MW-03S	08Q4	5.234	2.5 R	--	0.1	17.06	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	402
MW-03S	09Q1	6.08	0.746	--	0.243 J	17.5	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	363
MW-03S	09Q2	0.653 J	3.54	--	0.0906	17.13	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	342
MW-03S	09Q3	1.29	4.41	--	0.869	18.39	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	346
MW-03S	09Q4	3.205	3.69	--	0.135	17.51	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	387
MW-03S	10Q1	3.476	3.17 J	--	0.0712 J	18.68	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	382
MW-03S	10Q2	5.671	5.92	--	0.166	17.22 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	349
MW-03S	10Q3	2.054	3.79	--	0.029	15.97	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	260
MW-03S	10Q4	5.423	3.98	--	0.078	15.81	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	322
MW-03S	11Q3	39.4	2.96	--	0.037	14.7	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	--	283
MW-03S	11Q4	16.5	4.77	--	0.066 J	15	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	333
MW-03S	12Q1	31.6	3.83	--	0.103	13.6 J	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	325
MW-03S	12Q3	21.8	3.59	--	0.024	15.1	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	341
MW-03S	13Q4	1.45	3.26	--	0.097	12	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	349
MW-03S	14Q2	21.8	1.87	--	0.129	8.6	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	260
MW-03S	17Q1	3.24	2.75	--	0.3	14.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	345
MW-03S	17Q2	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--
MW-03S	18Q2	10.8	0.998	--	--	32.1	--	--	--	< 0.065 U	< 0.065 U	0.065	0.017 J	--	218
MW-03S	19Q1	8.92	2.31	--	0.15	19.2	--	--	--	< 0.02 U	< 0.02 U	0.067	0.027	--	308
MW-03S	19Q2	0.84	0.484	--	0.05 J	16	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	364
MW-03S	19Q4	1.28	1.62	--	0.026	15.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	275
MW-03S	20Q2	1.3	1.77	--	0.123	12.9	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	256
MW-03S	20Q4	2.92	0.63	--	0.037	10.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	313 J
MW-03S	21Q2	2.06	1.32	--	0.419	11.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	258
MW-03S	21Q4	0.411	0.635	--	0.022	15.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	64
MW-03S	22Q2	6.27	1.34	--	0.036	10.4	--	--	--	0.122	< 0.065 U	0.124 P	0.033	--	188
MW-03S	22Q4	2.48	0.403	--	< 0.01 U	10.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	212
MW-03S	23Q2	--	0.008	< 0.002 U	< 0.01 U	5.94	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	10.4
MW-03S	23Q4	--	--	< 0.006 U	--	8.77	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	59.8
MW-26S	98Q1	0.4	0.09	--	--	4.6	--	--	--	--	--	--	--	< 0.065 U	340
MW-26S	98Q2	0.24	0.1	--	--	3.6	--	--	--	--	--	--	--	< 0.065 U	330
MW-26S	98Q3	0.58	0.11	--	--	3	--	--	--	--	--	--	--	< 0.065 U	88
MW-26S	98Q4	1.2	0.09	--	--	4.8	--	--	--	--	--	--	--	< 0.065 U	300

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Alcoa Corporation

Chemical		Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
CAS No.		7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-26S	99Q1	1.4	0.06	--	--	3.7	--	--	--	--	--	--	--	< 0.065 U	230
MW-26S	99Q2	0.85	0.04	--	--	2.7	--	--	--	--	--	--	--	< 0.065 U	260
MW-26S	99Q3	0.26	0.05	--	--	3.1	--	--	--	--	--	--	--	< 0.065 U	360
MW-26S	99Q4	0.37	0.05	--	--	4.1	--	--	--	--	--	--	--	< 0.065 U	360
MW-26S	00Q1	9.4545	0.05	--	--	4.3	--	--	--	--	--	--	--	< 0.065 U	278
MW-26S	00Q2	1.2	0.02	--	--	3.4	--	--	--	--	--	--	--	< 0.065 U	400
MW-26S	00Q3	0.44	0.02	--	--	3.3	--	--	--	--	--	--	--	< 0.065 U	380
MW-26S	00Q4	0.14	< 0.01 U	--	< 0.01 U	3.233	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.075	< 0.065 U	< 0.065 U	--	315
MW-26S	01Q1	1.16	< 0.01 U	--	< 0.01 U	3.455	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.181	< 0.065 U	< 0.065 U	--	335.99
MW-26S	01Q2	0.12	< 0.01 U	--	< 0.01 U	3.202	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	446.68
MW-26S	01Q3	3.97	< 0.01 U	--	< 0.01 U	3.471	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	343.4
MW-26S	01Q4	0.16	< 0.01 U	--	< 0.01 U	3.246	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	347.1
MW-26S	02Q1	0.48	< 0.01 U	--	< 0.01 U	3.316	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	325.7
MW-26S	02Q2	0.39	< 0.01 U	--	< 0.01 U	2.859	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	350.6
MW-26S	02Q3	0.7	< 0.01 U	--	< 0.01 U	3.551	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.435	--	295.66
MW-26S	02Q4	0.381	< 0.01 U	--	< 0.01 U	3.576	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	327.76
MW-26S	03Q1	2.24	< 0.01 U	--	< 0.01 U	3.067	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.103	< 0.065 U	< 0.065 U	--	280.026
MW-26S	03Q2	15.21	< 0.01 U	--	< 0.01 U	3.341	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	305.54
MW-26S	03Q3	11.1	< 0.01 U	--	< 0.01 U	3.546	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	294.02
MW-26S	03Q4	12.43	< 0.01 U	--	< 0.01 U	3.343	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	285.17
MW-26S	04Q1	12.8	< 0.01 U	--	< 0.01 U	3.659	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	245.05
MW-26S	04Q2	9.177	< 0.01 U	--	< 0.01 U	3.593	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	283.11
MW-26S	04Q3	5.623	< 0.01 U	--	< 0.01 U	4.053	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	262.33
MW-26S	04Q4	11.28	< 0.01 U	--	< 0.01 U	4.573	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	342.31
MW-26S	05Q1	25.38	< 0.01 U	--	< 0.01 U	4.028	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	246.91
MW-26S	05Q2	8.025	< 0.01 U	--	< 0.01 U	4.337	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	283.69
MW-26S	05Q3	9.6	< 0.01 U	--	< 0.01 U	3.961	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	268.76
MW-26S	05Q4	2.795	< 0.01 U	--	< 0.01 U	4.409	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	254.07
MW-26S	06Q1	10.42 J	0.019	--	< 0.01 U	4.062	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	230.87
MW-26S	06Q2	9.571	< 0.01 U	--	< 0.01 U	4.637	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	211.37
MW-26S	06Q3	6.777	< 0.01 U	--	< 0.01 U	4.499	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	205.54
MW-26S	06Q4	1.573	< 0.01 U	--	< 0.01 U	4.317	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	207.54
MW-26S	07Q1	6.789	< 0.01 U	--	< 0.01 U	4.825	--	--	--	< 0.065 U	0.155	< 0.065 U	< 0.065 U	--	198.21
MW-26S	07Q2	26.42	< 0.01 U	--	< 0.01 U	4.285	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	230.34
MW-26S	07Q3	6.118	< 0.01 U	--	< 0.01 U	4.692	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	212
MW-26S	07Q4	7.833	0.037	--	< 0.005 U	4.309	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	220
MW-26S	08Q1	21.1	< 0.01 U	--	< 0.01 UJ	5.238	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	260

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-26S	08Q2	6.598 R	< 0.005 U	--	< 0.01 U	5.148	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	254
MW-26S	08Q3	19.85	< 0.005 U	--	< 0.01 U	4.778	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	250 J
MW-26S	08Q4	34.01	< 0.005 U	--	< 0.01 U	5.333	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	209
MW-26S	09Q1	59.9 J	< 0.005 UJ	--	0.0075 J	5.45	--	--	--	< 0.176 U	< 0.176 U	< 0.25 U	< 0.25 U	--	206 J
MW-26S	09Q2	22.4	< 0.01 U	--	--	4.81	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	187
MW-26S	09Q3	33.2	< 0.01 U	--	< 0.01 U	5.176	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	212
MW-26S	09Q4	50.88	< 0.01 U	--	< 0.01 U	4.958	--	--	--	< 0.065 U	0.065	< 0.065 U	< 0.065 U	--	216
MW-26S	10Q1	48.01	< 0.01 UJ	--	< 0.01 UJ	4.126	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	242
MW-26S	10Q2	82.42	< 0.01 U	--	< 0.01 U	4.109 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	222
MW-26S	10Q3	10.71	< 0.01 U	--	< 0.01 U	5.635	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	209
MW-26S	10Q4	32.53	< 0.01 U	--	< 0.01 U	5.489	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	179
MW-26S	11Q1	52.6	< 0.01 U	--	< 0.01 U	5.45	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	195
MW-26S	11Q2	26.4	< 0.01 U	--	< 0.01 U	5.97	--	--	--	< 0.0663 U	< 0.0663 U	< 0.0663 U	< 0.0663 U	--	181
MW-26S	11Q3	25.9	< 0.01 U	--	< 0.01 U	5.15	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	167
MW-26S	11Q4	25.3	< 0.01 U	--	< 0.01 UJ	5.55	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	185
MW-26S	12Q1	29.9	< 0.01 U	--	< 0.01 U	4.62	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	187
MW-26S	12Q3	8.6	< 0.01 U	--	< 0.01 UJ	4.41	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	218
MW-26S	12Q4	34.3	< 0.01 U	--	< 0.01 U	4.37	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	231
MW-26S	12Q4	20.4	< 0.01 U	--	< 0.01 UJ	4.9	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	193
MW-26S	13Q2	18.6	< 0.01 U	--	< 0.01 U	5.48 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	230
MW-26S	13Q4	18	< 0.01 U	--	< 0.01 U	5.74	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	190
MW-26S	14Q2	49.3	< 0.01 U	--	< 0.01 U	4.81	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	208
MW-26S	14Q4	20.2	< 0.01 U	--	< 0.01 U	5.64	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	191
MW-26S	15Q3	15.5	< 0.01 U	--	< 0.01 U	5.68	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	195
MW-26S	15Q4	6.32	< 0.01 U	--	< 0.01 U	6.37	--	--	--	--	--	--	--	--	257
MW-26S	16Q2	1.28	0.003 J	--	0.003 J	6.87	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	202
MW-26S	16Q4	14.4	0.004 J	--	< 0.01 U	5.45	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	243
MW-26S	17Q2	3.59	0.001 J	--	< 0.01 U	6.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	170
MW-26S	17Q4	23.6	< 0.01 U	--	< 0.01 U	5.71	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	188
MW-26S	18Q2	11.9	< 0.005 U	--	--	5.76	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	171
MW-26S	18Q4	16.2	< 0.005 U	--	< 0.01 U	5.73	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	216
MW-26S	19Q2	16.5	< 0.005 U	--	< 0.01 UJ	6.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	162
MW-26S	19Q4	6.73	< 0.005 U	--	< 0.01 UJ	6.08	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	174
MW-26S	20Q2	0.636	< 0.005 U	--	< 0.01 U	5.74	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	132
MW-26S	20Q4	6.78	< 0.005 U	--	< 0.01 U	4.95	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	190 J
MW-26S	21Q2	23.1	< 0.005 U	--	< 0.01 U	5.26	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	186
MW-26S	21Q4	8.83	< 0.005 U	--	< 0.01 U	4.05	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	182

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-26S	22Q2	6.62	< 0.005 U	--	< 0.01 U	4.64	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	136
MW-26S	22Q4	5.14	< 0.005 U	--	< 0.01 U	4.38	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	165
MW-26S	23Q2	--	--	< 0.002 U	--	5.25	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	166
MW-26S	23Q4	--	--	< 0.006 U	--	5.61	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	182
MW-27S	99Q1	1.3	0.17	--	--	7.9	--	--	--	--	--	--	--	< 0.065 U	140
MW-27S	99Q2	0.96	0.14	--	--	6.7	--	--	--	--	--	--	--	< 0.065 U	290
MW-27S	99Q3	0.89	0.07	--	--	6.4	--	--	--	--	--	--	--	< 0.065 U	260
MW-27S	99Q4	0.67	0.07	--	--	8.5	--	--	--	--	--	--	--	< 0.065 U	250
MW-27S	00Q1	1.7	0.12	--	--	8.9	--	--	--	--	--	--	--	< 0.065 U	290
MW-27S	00Q2	3.3	0.11	--	--	7.1	--	--	--	--	--	--	--	< 0.065 U	280
MW-27S	00Q3	0.82	0.08	--	--	5.7	--	--	--	--	--	--	--	< 0.065 U	320
MW-27S	00Q4	0.1	0.0295	--	< 0.01 U	6.294	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	273
MW-27S	01Q1	0.66	0.0455	--	< 0.01 U	6.473	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	260.89
MW-27S	01Q2	1.45	0.0535	--	< 0.01 U	6.636	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	288.26
MW-27S	01Q3	8.79	0.039	--	< 0.01 U	5.919	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	278.38
MW-27S	01Q4	0.3	0.0255	--	< 0.01 U	6.134	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	244.43
MW-27S	02Q1	0.19	0.0445	--	< 0.01 U	5.26	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	277.56
MW-27S	02Q2	0.39	0.0665	--	< 0.01 U	5.54	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	268.71
MW-27S	02Q3	0.21	0.0645	--	< 0.01 U	5.289	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	260.89
MW-27S	02Q4	0.142	0.037	--	< 0.01 U	6.232	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	292.58
MW-27S	03Q1	4.222	0.0385	--	< 0.01 U	5.171	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	280.643
MW-27S	03Q2	0.155	0.0495	--	< 0.01 U	5.009	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	292.99
MW-27S	03Q3	0.22	0.0645	--	0.0175	5.581	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	282.29
MW-27S	03Q4	12.35	0.0485	--	< 0.01 U	5.083	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	276.94
MW-27S	04Q1	5.402	0.0535	--	0.0135	4.521	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.066	< 0.065 U	< 0.065 U	--	286.61
MW-27S	04Q2	7.815	0.067	--	0.0175	4.927	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	283.11
MW-27S	04Q3	11.64	0.0445	--	0.049	4.895	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	274.68
MW-27S	04Q4	1.933	0.0315	--	< 0.01 U	5.274	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	256.01
MW-27S	05Q1	15.42	0.04	--	< 0.01 U	5.889	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	255.41
MW-27S	05Q2	6.588	0.043	--	0.0105	5.298	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	257.88
MW-27S	05Q3	4.442	0.03	--	0.0115	4.252	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	257.9
MW-27S	05Q4	2.219	0.016	--	< 0.01 U	4.49	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	261.28
MW-27S	06Q1	27.79	0.032	--	0.0115	3.834	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	283.51
MW-27S	06Q2	15.16	0.0355	--	0.0125	4.264	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	259.34
MW-27S	06Q3	1.817	0.026	--	0.012	3.827	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	257.47
MW-27S	06Q4	0.297	0.021	--	< 0.01 U	4.24	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	218.27
MW-27S	07Q1	6.057	0.027	--	0.011	3.92	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	236.77

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-27S	07Q2	3.398	0.044 J	--	0.015	3.638	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	255.13
MW-27S	07Q3	2.968	0.05	--	0.0115	4.116	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	241.17
MW-27S	07Q4	3.622	0.04	--	< 0.005 U	3.579	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	260
MW-27S	08Q1	10.9	0.045	--	< 0.01 U	4.185	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	248 J
MW-27S	08Q2	1.519	0.086	--	< 0.01 U	3.783	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	200
MW-27S	08Q3	8.138	0.023 R	--	< 0.01 U	3.898	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	248 J
MW-27S	08Q4	4.811	< 0.005 U	--	< 0.01 UJ	3.445	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	236 J
MW-27S	09Q1	6.17	0.0281	--	< 0.01 UJ	3.64	--	--	--	< 0.495 U	< 0.495 U	< 0.495 U	< 0.495 U	--	228
MW-27S	09Q2	1.01 J	0.0866	--	< 0.01 U	3.551	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	214
MW-27S	09Q3	8.9	0.0899	--	0.0108	3.738	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	235 J
MW-27S	09Q4	2.733	0.0419	--	< 0.01 U	3.344	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	237
MW-27S	10Q1	5.686	0.0405 J	--	< 0.01 UJ	3.048	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	250
MW-27S	10Q2	3.884	0.099	--	< 0.01 U	2.929 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	241
MW-27S	10Q3	3.476	0.073	--	< 0.01 U	3.468	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	248
MW-27S	10Q4	18.74	0.079	--	< 0.01 U	3.845	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	239
MW-27S	11Q1	15.8	0.048	--	< 0.01 U	3.49	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	237
MW-27S	11Q2	2.93	0.043	--	< 0.01 U	3.66	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	227
MW-27S	11Q3	5.66	0.048	--	< 0.01 U	3.4	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	235
MW-27S	11Q4	7.09	0.036	--	< 0.01 UJ	3.3	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	248
MW-27S	12Q1	10.4	0.035	--	< 0.01 U	1.98 J	--	--	--	< 0.061 UJ	< 0.061 UJ	< 0.061 UJ	< 0.061 UJ	--	213
MW-27S	12Q3	3.47	0.044	--	< 0.01 U	2.79	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	256
MW-27S	12Q4	0.69	0.032	--	< 0.01 U	4.04	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	242
MW-27S	12Q4	7.95	0.031	--	< 0.01 UJ	2.86	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	247
MW-27S	13Q2	3.32	0.04	--	< 0.01 U	3.38 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	265
MW-27S	13Q4	13.5	0.028	--	< 0.01 U	2.97	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	257
MW-27S	14Q2	16.4	0.039	--	< 0.01 U	2.2	--	--	--	< 0.067 U	< 0.067 U	< 0.067 U	< 0.067 U	--	260
MW-27S	14Q4	15.1	0.02	--	< 0.01 U	3.17	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	247
MW-27S	15Q3	4.91 J	0.027	--	< 0.01 U	3.37	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	283
MW-27S	15Q4	7.63	0.02	--	< 0.01 U	2.37	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	280
MW-27S	16Q2	1	0.025	--	0.006	3.93	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	276
MW-27S	16Q4	0.668	0.017	--	< 0.01 U	3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	250
MW-27S	17Q2	2.22	0.024	--	0.0062 J	2.54	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	257
MW-27S	18Q1	1.82	0.017	--	< 0.01 U	1.89	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	275
MW-27S	18Q2	0.558 J	0.018	--	< 0.01 U	2.74	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	293
MW-27S	19Q1	1.5	0.009	--	< 0.01 U	2.95	--	--	--	< 0.019 U	< 0.019 U	< 0.02 U	< 0.02 U	--	270
MW-27S	19Q2	3.14 J	--	--	0.012 J	3.22	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	407
MW-27S	19Q4	0.912	0.007	--	< 0.01 U	3.05	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	297

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-27S	20Q2	0.539	0.023	--	< 0.01 U	2.96	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	289
MW-27S	20Q4	0.811	0.01	--	< 0.01 U	2.44	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	285
MW-27S	21Q2	4.56	0.016	--	< 0.01 U	3.18	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	312
MW-27S	21Q4	1.95	0.0156	--	< 0.01 U	0.132	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	278
MW-27S	22Q2	0.0462	0.009	--	< 0.01 U	< 0.05 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	255
MW-27S	22Q4	0.24	0.007	--	< 0.01 U	1.96	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	262
MW-27S	23Q2	--	--	< 0.002 U	--	2.32	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	287
MW-27S	23Q4	--	--	< 0.006 U	--	2.87	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	320
MW-28S	99Q1	7.4	18	--	--	170	--	--	--	--	--	--	--	< 0.065 U	630
MW-28S	99Q2	3.6	9.2	--	--	94	--	--	--	--	--	--	--	< 0.065 U	290
MW-28S	99Q3	3.1	14	--	--	84	--	--	--	--	--	--	--	< 0.065 U	440
MW-28S	99Q4	3.6	14	--	--	130	--	--	--	--	--	--	--	< 0.065 U	560
MW-28S	00Q1	21.715	3.1	--	--	109	--	--	--	--	--	--	--	< 0.065 U	652
MW-28S	00Q2	16	1.4	--	--	100	--	--	--	--	--	--	--	< 0.065 U	690
MW-28S	00Q3	12	5.9	--	--	100	--	--	--	--	--	--	--	< 0.065 U	530
MW-28S	00Q4	0.77	8.05	--	0.049	126.8	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	409
MW-28S	01Q1	3.51	8.83	--	0.042	120.9	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	482.28
MW-28S	01Q2	1.12	12.4	--	0.0295	90.7	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	435.98
MW-28S	01Q3	2.73	7.95	--	0.03	81.57	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	522.81
MW-28S	01Q4	0.64	17.2	--	0.025	84.2	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	575.28
MW-28S	02Q1	0.71	14.6	--	0.12	81.04	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	594.62
MW-28S	02Q2	0.97	9.72	--	< 0.01 U	68.86	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	483.92
MW-28S	02Q3	0.3	8.12	--	0.032	67.74	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	452.86
MW-28S	02Q4	0.624	11.2	--	0.0195	78.91	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	455.32
MW-28S	03Q1	9.921	9.35	--	0.064	69.25	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	461.497
MW-28S	03Q2	10.56	6.53	--	0.042	55.12	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.151	< 0.065 U	< 0.065 U	--	417.88
MW-28S	03Q3	0.888	5.4	--	0.031	45.15	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	408.62
MW-28S	03Q4	8.216	8.02	--	0.0515	55.63	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	469.93
MW-28S	04Q1	6.177	7.85	--	0.035	46.04	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	489.69
MW-28S	04Q2	7.177	5.71	--	0.035	50.64	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	385.78
MW-28S	04Q3	14.74	4.19	--	0.025	41.34	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	381.46
MW-28S	04Q4	1.537	7.63	--	0.081	55.2	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	482.65
MW-28S	05Q1	13.61	6.76	--	0.032	61.21	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	455.66
MW-28S	05Q2	7.137	2.72	--	< 0.01 U	52.99	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	404.24
MW-28S	05Q3	5.502	4.17	--	0.019	43.78	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	361.2
MW-28S	05Q4	3.193	5.5	--	0.0305	41.37	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	406.44
MW-28S	06Q1	6.013	2.16	--	0.0385	44.21	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	470.32

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-28S	06Q2	1.645	4.9	--	0.034	36.05	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	317.31
MW-28S	06Q3	3.801	3.54	--	0.121	34.09	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	283.06
MW-28S	06Q4	1.439	4.01	--	0.0305	33.77	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	307.86
MW-28S	07Q1	1.411	4.03	--	0.0325	32.99	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	345.64
MW-28S	07Q2	7.876	3.32	--	0.042	31.46	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	312.71
MW-28S	07Q3	2.054	1.5	--	0.0185	19.23	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	265.82
MW-28S	07Q4	5.125	1.9	--	0.015	19.99	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	340
MW-28S	08Q1	4.5	2.68	--	0.011 J	25.87	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	340
MW-28S	08Q2	1.983	1.6	--	0.042	21.54	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	276
MW-28S	08Q3	2.282	1.2 R	--	0.02	16.34	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	281 J
MW-28S	08Q4	1.918	0.67	--	< 0.01 U	14.93	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	304
MW-28S	09Q1	4.61	1.35 R	--	0.0683	16.4	--	--	--	< 0.185 U	< 0.185 U	< 0.263 U	< 0.263 U	--	310
MW-28S	09Q2	14.1	1.5	--	--	15.35	--	--	--	< 0.065 U	0.1	0.067	< 0.065 U	--	271
MW-28S	09Q3	9.81	1.68 J	--	0.115 J	15.38	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	272
MW-28S	09Q4	0.647	1.58	--	0.146	16.15	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	293
MW-28S	10Q1	7.932	1.05 J	--	0.257 J	14.56	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	325
MW-28S	10Q2	1.746 J	4.06	--	0.072	16.03 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	271
MW-28S	10Q3	4.588	4.76	--	0.035	19.12	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	258
MW-28S	10Q4	1.763	3.56	--	0.015	17.13	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	254
MW-28S	11Q1	2.92	3.27	--	0.039	16.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	256
MW-28S	11Q2	1.05	2.44	--	0.038 J	16	--	--	--	< 0.0663 U	< 0.0663 U	< 0.0663 U	< 0.0663 U	--	237
MW-28S	11Q3	1.54	2.45	--	0.019	12.8	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	221
MW-28S	11Q4	2.73	3.25	--	0.013 J	15.5	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	239
MW-28S	12Q1	1.24	3.06	--	0.056	12.7	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	231
MW-28S	12Q3	2.63	1.84	--	0.054 J	11.6	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	201
MW-28S	12Q4	2.15	2.28 J	--	0.175	12.2	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	213
MW-28S	12Q4	1.94 J	2.12	--	0.097 J	13.5	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	242
MW-28S	13Q2	20.7 J	1.89	--	0.02	11.3 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	251
MW-28S	13Q4	18.9	2.23	--	0.018	10.9	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	287
MW-28S	14Q2	1.69	1.23	--	0.069	9.5	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	179
MW-28S	14Q4	10.1 J	2.17	--	--	9.93	--	--	--	< 0.061 U	0.061 UR	0.061 UR	< 0.061 U	--	197
MW-28S	15Q3	10.8	1.98	--	0.049	10	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	209
MW-28S	15Q4	8.53	2.63	--	0.017	13.4	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	329
MW-28S	16Q2	1.88	3.09	--	0.13	14.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	323
MW-28S	16Q4	11.3	2.32	--	0.086	26.7	--	--	--	< 0.065 U	0.042	< 0.065 U	< 0.065 U	--	154
MW-28S	17Q2	2.67	3.47	--	1.3	13.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	207
MW-28S	17Q4	0.391	4.05	--	1.3	15.9	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	248

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-28S	18Q2	< 0.1 U	2.22	--	0.16	15.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	212
MW-28S	18Q4	< 0.1 U	4.1	--	--	16.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	194
MW-28S	19Q2	0.251	2.46	--	0.159 J	12.4	--	--	--	< 0.065 U	< 0.065 U	0.024	< 0.065 U	--	178
MW-28S	19Q4	0.036 J	3.22	--	0.018 J	16.6	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	189
MW-28S	20Q2	3.63	2.94	--	0.087	14.3	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	169
MW-28S	20Q4	0.448	2.34	--	0.029	15.7	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	160
MW-28S	21Q2	0.0118	1.88	--	0.148	12.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	182
MW-28S	21Q4	0.0095 J	2 R	--	0.062	13.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	169
MW-28S	22Q2	0.213	2.7	--	0.043	11.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	160
MW-28S	22Q4	0.0494	2.43	--	0.017	11.6	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	179
MW-28S	23Q2	--	--	0.0028	--	11.9	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	170
MW-28S	23Q4	--	--	0.02	--	13.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	197
MW-33S	95Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	96Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	96Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	96Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	96Q4	--	0.018	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	97Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	97Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	97Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	97Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	98Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	98Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	98Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	99Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	99Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	99Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	99Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	00Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	00Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	00Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	00Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	01Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	01Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	01Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	01Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	02Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-33S	02Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	02Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	02Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	03Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	03Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	03Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	03Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	04Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	04Q2	--	0.329	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	04Q3	--	0.017	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	04Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	05Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	05Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	05Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	05Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	06Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	06Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	06Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	06Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	07Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	07Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	07Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	07Q4	--	< 0.005 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--
MW-33S	08Q1	--	< 0.01 U	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-33S	08Q2	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	08Q3	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	08Q4	--	< 0.005 R	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	09Q1	--	< 0.005 UJ	--	< 0.006 U	--	--	--	--	--	--	--	--	--	--
MW-33S	09Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	09Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	09Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	10Q1	--	< 0.01 UJ	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-33S	10Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	10Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	10Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	11Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	11Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-33S	11Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	11Q4	--	< 0.01 U	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-33S	12Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	12Q3	--	< 0.01 U	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-33S	12Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	12Q4	--	< 0.01 U	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-33S	13Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	13Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	14Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	14Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	15Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	15Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	16Q2	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	17Q1	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	17Q2	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	17Q4	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	18Q2	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-33S	18Q4	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	19Q2	--	0.04	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-33S	19Q4	--	< 0.005 U	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-33S	20Q2	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	20Q4	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	21Q2	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	21Q4	--	0.001 JR	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	22Q2	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	22Q4	--	< 0.005 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-33S	23Q2	--	--	< 0.002 UJ	--	--	--	--	--	--	--	--	--	--	--
MW-33S	23Q4	--	--	< 0.006 U	--	--	--	--	--	--	--	--	--	--	--
MW-34S	95Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	96Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	96Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	96Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	96Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	97Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	97Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	97Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	97Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--

Table C-3
East Plant PSP
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Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-34S	98Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	98Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	98Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	99Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	99Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	99Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	99Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	00Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	00Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	00Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	01Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	01Q2	--	0.0095	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	01Q3	--	0.011	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	01Q4	--	0.0115	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	02Q1	--	0.012	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	02Q2	--	0.013	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	02Q3	--	0.0155	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	02Q4	--	0.016	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	03Q1	--	0.019	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	03Q2	--	0.019	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	03Q3	--	0.0305	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	03Q4	--	0.028	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	04Q1	--	0.042	--	0.0125	--	--	--	--	--	--	--	--	--	--
MW-34S	04Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	04Q3	--	0.0355	--	0.016	--	--	--	--	--	--	--	--	--	--
MW-34S	04Q4	--	0.055	--	0.0185	--	--	--	--	--	--	--	--	--	--
MW-34S	05Q1	--	0.043	--	0.016	--	--	--	--	--	--	--	--	--	--
MW-34S	05Q2	--	0.0945	--	0.0175	--	--	--	--	--	--	--	--	--	--
MW-34S	05Q3	--	0.0445	--	0.021	--	--	--	--	--	--	--	--	--	--
MW-34S	05Q4	--	0.04	--	0.0165	--	--	--	--	--	--	--	--	--	--
MW-34S	06Q1	--	0.0645	--	0.0155	--	--	--	--	--	--	--	--	--	--
MW-34S	06Q2	--	0.063	--	0.0265	--	--	--	--	--	--	--	--	--	--
MW-34S	06Q3	--	0.0655	--	0.0255	--	--	--	--	--	--	--	--	--	--
MW-34S	06Q4	--	0.0815	--	0.0305	--	--	--	--	--	--	--	--	--	--
MW-34S	07Q1	--	0.0815	--	0.0325	--	--	--	--	--	--	--	--	--	--
MW-34S	07Q2	--	0.0825	--	0.0315	--	--	--	--	--	--	--	--	--	--
MW-34S	07Q3	--	0.042	--	0.0285	--	--	--	--	--	--	--	--	--	--

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-34S	07Q4	--	0.061	--	0.01	--	--	--	--	--	--	--	--	--	--
MW-34S	08Q1	--	0.07	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-34S	08Q2	--	0.072	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	08Q3	--	0.063 R	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	08Q4	--	0.047 R	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	09Q1	--	0.0651	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-34S	09Q2	--	0.0526	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	09Q3	--	0.0536	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	09Q4	--	0.069	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	10Q1	--	0.066 J	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-34S	10Q2	--	0.073	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	10Q3	--	0.08	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	10Q4	--	0.088	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	11Q1	--	0.083	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	11Q2	--	0.075	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	11Q3	--	0.082	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	11Q4	--	0.085	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-34S	12Q1	--	0.08	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	12Q3	--	0.071	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-34S	12Q4	--	0.085	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	12Q4	--	0.08	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-34S	13Q2	--	0.077	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	13Q4	--	0.078	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	14Q2	--	0.067	--	0.012	--	--	--	--	--	--	--	--	--	--
MW-34S	14Q4	--	0.071	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	15Q3	--	0.075	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	15Q4	--	0.074	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	16Q2	--	0.048	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	17Q1	--	0.052	--	0.0062 J	--	--	--	--	--	--	--	--	--	--
MW-34S	17Q2	--	0.063	--	0.0087 J	--	--	--	--	--	--	--	--	--	--
MW-34S	18Q1	--	0.046	--	0.0087 J	--	--	--	--	--	--	--	--	--	--
MW-34S	18Q2	--	0.068	--	--	--	--	--	--	--	--	--	--	--	--
MW-34S	18Q4	--	0.015	--	0.011	--	--	--	--	--	--	--	--	--	--
MW-34S	19Q2	--	0.044	--	< 0.01 UJ	--	--	--	--	--	--	--	--	--	--
MW-34S	19Q4	--	0.03	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	20Q2	--	0.073	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	20Q4	--	0.053	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-34S	21Q2	--	0.063	--	0.012	--	--	--	--	--	--	--	--	--	--
MW-34S	21Q4	--	0.0907	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	22Q2	--	0.069	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	22Q4	--	0.036	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-34S	23Q2	--	--	< 0.002 U	--	--	--	--	--	--	--	--	--	--	--
MW-34S	23Q4	--	--	< 0.006 U	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	95Q4	--	0.015	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	96Q1	--	0.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	96Q2	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	96Q3	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	96Q4	--	0.37	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	97Q1	--	1.4	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	97Q2	--	1.3	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	97Q3	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	97Q4	--	1	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	98Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	98Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	99Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	99Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	99Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	99Q4	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	00Q1	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	00Q2	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	00Q3	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--
MW-35SR	00Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	01Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	01Q2	--	< 0.01 U	--	0.0175	--	--	--	--	--	--	--	--	--	--
MW-35SR	01Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	01Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	02Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	02Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	02Q3	--	0.081	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	02Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	03Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	03Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	03Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	03Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-35SR	04Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	04Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	04Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	04Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	05Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	05Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	05Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	05Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	06Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	06Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	06Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	06Q4	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	07Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	07Q2	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	07Q3	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	07Q4	--	< 0.005 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	08Q1	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--
MW-35SR	08Q2	80.78	< 0.005 U	--	0.2 R	0.9971	--	--	--	< 0.065 U	0.254	< 0.065 U	< 0.065 U	--	464
MW-35SR	08Q3	145.1	< 0.005 U	--	< 0.01 U	1.147	--	--	--	< 0.065 R	0.123 J	< 0.065 R	< 0.065 R	--	516
MW-35SR	08Q4	453.6 R	0.11 R	--	< 0.01 U	0.7607	--	--	--	< 0.065 U	0.39 R	< 0.065 U	< 0.065 U	--	632
MW-35SR	09Q1	127	< 0.005 R	--	< 0.006 U	0.2 J	--	--	--	< 0.173 U	0.196 J	< 0.245 U	< 0.245 U	--	521 J
MW-35SR	09Q2	3.51	< 0.01 U	--	< 0.01 U	0.7414	--	--	--	< 0.065 U	0.281	< 0.065 U	< 0.065 U	--	401
MW-35SR	09Q3	53.2	< 0.01 U	--	< 0.01 U	0.5046	--	--	--	< 0.065 U	0.121	0.082	< 0.065 U	--	554
MW-35SR	09Q4	32.33	< 0.01 U	--	< 0.01 U	0.5943	--	--	--	< 0.065 U	0.109	< 0.065 U	< 0.065 U	--	530
MW-35SR	10Q1	20.55	< 0.01 U	--	< 0.01 UJ	0.5731	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	523
MW-35SR	10Q2	15.18	< 0.01 U	--	< 0.01 U	0.3593 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	532
MW-35SR	10Q3	23.5	< 0.01 U	--	< 0.01 U	0.426	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	51.7
MW-35SR	10Q4	34.73	< 0.01 U	--	< 0.01 U	0.7604	--	--	--	< 0.065 U	0.085	0.094	< 0.065 U	--	502
MW-35SR	11Q1	5.39	< 0.01 U	--	< 0.01 U	0.72	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	538
MW-35SR	11Q2	67.2	< 0.01 U	--	< 0.01 U	0.63	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	497
MW-35SR	11Q3	38.8	< 0.01 U	--	< 0.01 U	0.43	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	538
MW-35SR	11Q4	68.4	< 0.01 U	--	< 0.01 UJ	0.51	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	529
MW-35SR	12Q1	46.5	< 0.01 U	--	< 0.01 U	0.62 J	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	557
MW-35SR	12Q3	71.6	< 0.01 U	--	< 0.01 U	0.42	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	596
MW-35SR	12Q4	122	< 0.01 U	--	< 0.01 U	0.4	--	--	--	< 0.061 U	< 0.061 U	0.56	0.079 U	--	541
MW-35SR	12Q4	17.1	< 0.01 U	--	< 0.01 UJ	0.63	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	539
MW-35SR	13Q2	51.1	< 0.01 U	--	< 0.01 U	0.99 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	453

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-35SR	13Q4	49.9	< 0.01 U	--	< 0.01 U	1.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	426
MW-35SR	14Q2	43.4 J	< 0.01 U	--	< 0.01 U	0.91	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	456
MW-35SR	14Q4	35.3 J	< 0.01 U	--	< 0.01 U	0.6	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	561
MW-35SR	15Q3	14.6	< 0.01 U	--	< 0.01 U	0.52 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	701
MW-35SR	15Q4	17.6	< 0.01 U	--	< 0.01 U	0.73	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	682
MW-35SR	16Q2	10.2	< 0.005 U	--	--	0.644	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	604
MW-35SR	17Q1	12.2	0.001 J	--	< 0.01 U	0.907	--	--	--	< 0.065 U	0.125 P	< 0.065 U	< 0.065 U	--	467
MW-35SR	17Q2	11.7	< 0.005 U	--	< 0.01 U	2.56	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	487
MW-35SR	18Q1	12.6	< 0.005 U	--	< 0.01 U	1.05	--	--	--	< 0.065 U	< 0.065 U	0.066	< 0.065 U	--	487
MW-35SR	18Q2	4.71	0.004 J	--	< 0.01 U	1.16	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	476
MW-35SR	18Q4	2.48	< 0.005 U	--	< 0.01 U	1.17	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	438
MW-35SR	19Q2	14.5	< 0.005 U	--	< 0.01 UJ	1.3	--	--	--	< 0.065 U	< 0.065 U	0.021	< 0.065 U	--	590
MW-35SR	19Q4	12.9	< 0.005 U	--	< 0.01 U	1.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	366 J
MW-35SR	20Q2	5.06	< 0.005 U	--	< 0.01 U	1.25	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	574
MW-35SR	20Q4	9.75	< 0.005 U	--	< 0.01 U	1.39	--	--	--	< 0.065 U	< 0.065 U	0.206	< 0.065 U	--	652
MW-35SR	21Q3	10	< 0.005 U	--	< 0.01 U	0.888	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	878
MW-35SR	21Q4	11.6	< 0.005 U	--	< 0.01 U	1.17	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	521
MW-35SR	22Q2	7.86	< 0.005 U	--	< 0.01 U	0.805	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	586
MW-35SR	22Q4	8.06	< 0.005 U	--	< 0.01 U	0.979	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	764
MW-35SR	23Q2	--	--	< 0.002 U	--	0.826	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	766
MW-35SR	23Q4	--	--	< 0.006 U	--	0.911	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	612
MW-42	06Q2	--	< 0.01 U	--	< 0.01 U	1.307	--	--	--	--	--	--	--	--	478.08
MW-42	06Q3	--	0.0105	--	< 0.01 U	1.441	--	--	--	--	--	--	--	--	471.71
MW-42	06Q4	31	< 0.01 U	--	< 0.01 U	1.537	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	411.61
MW-42	07Q1	72.52	< 0.01 U	--	0.042	9.951	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	545.61
MW-42	07Q2	42.43	0.119	--	0.044	11.21	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1060.01
MW-42	07Q3	92.93	0.41	--	0.0265	17.07	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	196.75
MW-42	07Q4	66.69	0.15	--	0.013	22.71	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1200
MW-42	08Q1	94.9	0.274	--	0.01 J	17.39	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1100
MW-42	08Q2	666.1	0.13	--	0.05 R	15.15	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	179
MW-42	08Q3	12.31	0.28 R	--	0.013	13.01	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	104
MW-42	08Q4	2.182	0.16	--	< 0.01 U	12.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	928
MW-42	09Q1	13.3 R	0.21 R	--	0.0237 J	14 J	--	--	--	< 0.174 U	< 0.174 U	< 0.248 U	< 0.248 U	--	1030 J
MW-42	09Q2	10.4	0.158	--	0.0149	26.83	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	964
MW-42	09Q3	6.44	0.174	--	0.0156	12.14	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	956
MW-42	09Q4	28.78	0.174	--	0.0105	11.53	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1010
MW-42	10Q1	9.97	0.21 J	--	< 0.01 UJ	26.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1420

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-42	10Q2	2.503	0.152	--	< 0.01 U	10.4 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	994
MW-42	10Q3	16.18	0.298	--	0.011	15.47	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	66.5
MW-42	10Q4	331.1	0.363	--	< 0.01 U	23.84	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1220
MW-42	11Q1	7.09	0.244	--	< 0.01 U	15.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1140
MW-42	11Q2	2.49	0.183	--	0.013	14.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1060
MW-42	11Q3	75.9	0.374	--	0.012	21.5	< 0.053 U	< 0.053 U	< 0.053 U	< 0.053 U	< 0.053 U	< 0.053 U	< 0.053 U	--	1320
MW-42	11Q4	53	0.393	--	< 0.01 UJ	26.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1410
MW-42	12Q1	22.7	0.393	--	< 0.01 U	26.7 J	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	1300
MW-42	12Q3	38.1	0.375	--	< 0.01 U	29.6	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	1400
MW-42	12Q4	2.54	0.206	--	< 0.01 U	15.2	--	--	--	< 0.061 U	< 0.061 U	0.13 U	< 0.061 U	--	1080
MW-42	12Q4	88.4	0.366	--	< 0.01 UJ	28.8	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	1330
MW-42	13Q2	11	0.172	--	< 0.01 U	15.8	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	1230
MW-42	13Q4	120	0.229	--	< 0.01 U	16.9	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	1280
MW-42	14Q2	32.3	0.391	--	0.017	41.3	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	1890
MW-42	14Q4	43.2 J	< 0.01 U	--	< 0.01 U	2.18	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	397
MW-42	15Q3	41.8	0.366	--	0.012	39.9	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	1850
MW-42	15Q4	58.1	0.376	--	0.011	42.6	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	1910
MW-42	16Q2	54.6	0.319	--	0.006	38.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1450
MW-42	17Q1	37.8	0.308	--	0.027	45.7	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1460
MW-42	17Q2	33.8	0.295	--	0.019	44.9	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1400
MW-42	18Q1	34	0.278	--	0.23	45.1	--	--	--	< 0.065 U	< 0.065 U	0.029	< 0.065 U	--	1440
MW-42	18Q2	52.4	0.243	--	--	48.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1480
MW-42	18Q4	42.1	0.054	--	0.0095 J	12.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1140
MW-42	19Q2	34.3	0.083	--	< 0.01 UJ	12.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1200
MW-42	19Q4	28.1	0.21	--	< 0.01 U	35.5	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1330 J
MW-42	20Q2	12.7	0.158	--	< 0.01 U	38.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1290
MW-42	20Q4	47.6	0.172	--	< 0.01 U	27.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1190
MW-42	21Q3	70	0.147	--	< 0.01 U	19.7	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	1260
MW-42	21Q4	69.6	0.209	--	< 0.01 U	32.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1160
MW-42	22Q2	81.5	0.192	--	< 0.01 U	21.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1520
MW-42	22Q4	22.9	0.186	--	< 0.01 U	21.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1250
MW-42	23Q2	--	--	0.00085 J	--	39.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1140
MW-42	23Q4	--	--	< 0.006 UJ	--	25.5	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1170
MW-43	06Q2	--	< 0.01 U	--	< 0.01 U	0.2257	--	--	--	--	--	--	--	--	193.89
MW-43	06Q3	--	< 0.01 U	--	< 0.01 U	0.2417	--	--	--	--	--	--	--	--	214.36
MW-43	06Q4	2.011	< 0.01 U	--	< 0.01 U	0.4865	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	0.065 U	--	186.81
MW-43	07Q1	16.71	< 0.01 U	--	< 0.01 U	0.216	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	207.4

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-43	07Q2	31.85	< 0.01 U	--	< 0.01 U	0.5412	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	165.1
MW-43	07Q3	18.48	< 0.01 U	--	< 0.01 U	0.2005	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	221.61
MW-43	07Q4	29.01	< 0.005 U	--	< 0.005 U	0.3448	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	180
MW-43	08Q1	20.9	0.01	--	< 0.01 UJ	0.307	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	195
MW-43	08Q2	50.98	< 0.005 U	--	< 0.01 R	0.406	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	162
MW-43	08Q3	30.02	< 0.005 U	--	< 0.01 U	0.3986	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	196
MW-43	08Q4	26.91	< 0.005 U	--	< 0.01 U	0.2297	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	222
MW-43	09Q1	37.9	< 0.005 UJ	--	< 0.006 U	0.09	--	--	--	< 0.173 U	< 0.173 U	< 0.246 U	< 0.246 U	--	206 J
MW-43	09Q2	46.1	< 0.01 U	--	--	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	181
MW-43	09Q3	31.8	0.059 J	--	< 0.01 U	0.2451	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	177
MW-43	09Q4	71.88	< 0.01 U	--	< 0.01 U	0.3549	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	182
MW-43	10Q1	32.96 J	< 0.01 UJ	--	< 0.01 UJ	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	213
MW-43	10Q2	52.39	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	166
MW-43	10Q3	60.07	< 0.01 U	--	< 0.01 U	0.2881	--	--	--	< 0.0657 U	< 0.0657 U	< 0.0657 U	< 0.0657 U	--	184
MW-43	10Q4	58.89	< 0.01 U	--	< 0.01 U	0.2043	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	161
MW-43	11Q1	84.9	< 0.01 U	--	< 0.01 U	0.24	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	171
MW-43	11Q2	29.4	< 0.01 U	--	< 0.01 U	0.2	--	--	--	< 0.0663 U	< 0.0663 U	< 0.0663 U	< 0.0663 U	--	178
MW-43	11Q3	34.7	< 0.01 U	--	< 0.01 U	0.21	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	168
MW-43	11Q4	17.6	< 0.01 U	--	< 0.01 UJ	0.23	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	171
MW-43	12Q1	30.2	< 0.01 U	--	< 0.01 U	0.24	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	143
MW-43	12Q3	20.8	< 0.01 U	--	< 0.01 UJ	0.22	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	184
MW-43	12Q4	43.6	< 0.01 U	--	< 0.01 U	0.19	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	149
MW-43	12Q4	28.5	< 0.01 U	--	< 0.01 UJ	0.22	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	165
MW-43	13Q2	44.3	< 0.01 U	--	< 0.01 U	0.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	175
MW-43	13Q4	23.6	< 0.01 U	--	< 0.01 U	0.2	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	163
MW-43	14Q2	90.4	< 0.01 U	--	< 0.01 U	0.24	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	143
MW-43	14Q4	18.1	< 0.01 U	--	< 0.01 U	0.22	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	150
MW-43	15Q3	16.5	< 0.01 U	--	< 0.01 U	0.24	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	151
MW-43	15Q4	92	< 0.01 U	--	< 0.01 U	0.26	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	166
MW-43	16Q2	16.7	< 0.005 U	--	--	0.191	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	170
MW-43	17Q1	10.1	< 0.005 U	--	< 0.01 U	0.204	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	132
MW-43	17Q2	13.7	0.002 J	--	< 0.01 U	0.901	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	164
MW-43	18Q1	8.42	< 0.005 U	--	< 0.01 U	0.265	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	138
MW-43	18Q2	22.2	< 0.005 U	--	--	0.19	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	154
MW-43	18Q4	21.6	< 0.005 U	--	0.0084 J	0.25	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	137
MW-43	19Q2	9.47	< 0.005 U	--	< 0.01 U	0.274	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	143
MW-43	19Q4	8.69	< 0.005 U	--	< 0.01 U	0.288	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	120 J

Table C-3
East Plant PSP
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2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-43	20Q2	9.83	< 0.005 U	--	< 0.01 U	0.537	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	123
MW-43	20Q4	14.9	< 0.005 U	--	< 0.01 U	< 0.5 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	111
MW-43	21Q2	16.6	< 0.005 U	--	< 0.01 U	0.22	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	141
MW-43	21Q4	28.8	0.007 R	--	< 0.01 U	0.271	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	109
MW-43	22Q2	14.9	< 0.005 U	--	< 0.01 U	0.131	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	132
MW-43	22Q4	19.6	< 0.005 U	--	< 0.01 U	0.248	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	111
MW-43	23Q2	--	--	< 0.002 UJ	--	0.379	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	126
MW-43	23Q4	--	--	< 0.006 U	--	0.284	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	121
MW-44	06Q2	--	< 0.01 U	--	< 0.01 U	0.3933	--	--	--	--	--	--	--	--	158.8
MW-44	06Q3	--	< 0.01 U	--	< 0.01 U	0.2716	--	--	--	--	--	--	--	--	199.3
MW-44	06Q4	0.149	< 0.01 U	--	< 0.01 U	0.3082	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	143.15
MW-44	07Q1	0.487	< 0.01 U	--	< 0.01 U	0.2423	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	183.64
MW-44	07Q2	0.288	< 0.01 U	--	< 0.01 U	0.3368	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	148.85
MW-44	07Q3	0.307	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	197.82
MW-44	07Q4	0.142	< 0.005 U	--	< 0.005 U	0.2813	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	170
MW-44	08Q1	0.156	< 0.01 U	--	< 0.01 UJ	0.2922	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	170
MW-44	08Q2	0.084	< 0.005 U	--	< 0.01 R	0.4385	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	165
MW-44	08Q3	0.035	< 0.005 U	--	< 0.01 U	0.348	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	186
MW-44	08Q4	0.061	< 0.005 U	--	< 0.01 U	0.2638	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	190
MW-44	09Q1	1.05	< 0.005 U	--	< 0.006 U	0.1	--	--	--	< 0.176 U	< 0.176 U	< 0.25 U	< 0.25 U	--	205 J
MW-44	09Q2	0.367	< 0.01 U	--	--	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	171
MW-44	09Q3	2.63	< 0.01 UJ	--	< 0.01 U	0.2697	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	181
MW-44	09Q4	0.182	0.0324	--	< 0.01 U	0.3021	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	177
MW-44	10Q1	2.908	< 0.01 UJ	--	< 0.01 UJ	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	195
MW-44	10Q2	--	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	154
MW-44	10Q3	1.262	< 0.01 U	--	< 0.01 U	0.2184	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	170
MW-44	10Q4	0.184	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	150
MW-44	11Q1	0.18	< 0.01 U	--	< 0.01 U	0.25	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	164
MW-44	11Q2	< 0.1 U	< 0.01 U	--	< 0.01 U	0.24	--	--	--	< 0.0663 U	< 0.0663 U	< 0.0663 U	< 0.0663 U	--	168
MW-44	11Q3	< 0.1 U	< 0.01 U	--	< 0.01 U	0.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	154
MW-44	11Q4	0.28	< 0.01 U	--	< 0.01 UJ	0.24	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	151
MW-44	12Q1	0.36	< 0.01 U	--	< 0.01 U	0.25 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	133
MW-44	12Q3	0.12	< 0.01 U	--	< 0.01 UJ	0.35	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	162
MW-44	12Q4	0.12	< 0.01 U	--	< 0.01 U	0.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	137
MW-44	12Q4	< 0.1 U	< 0.01 U	--	< 0.01 UJ	0.2	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	160
MW-44	13Q2	0.83	< 0.01 U	--	< 0.01 U	0.26	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	151
MW-44	13Q4	< 0.1 U	< 0.01 U	--	< 0.01 U	0.22	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	150

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Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-44	14Q2	< 0.1 U	< 0.01 U	--	< 0.01 U	0.28	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	132
MW-44	14Q4	< 0.1 U	< 0.01 U	--	< 0.01 U	0.29	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	275
MW-44	15Q3	< 0.1 U	< 0.01 U	--	< 0.01 U	0.23	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	138
MW-44	15Q4	16.2	< 0.01 U	--	< 0.01 U	0.29	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	150
MW-44	16Q2	0.076 J	< 0.005 U	--	--	0.252	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	155
MW-44	17Q1	< 0.1 U	< 0.005 U	--	< 0.01 U	0.156	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	127
MW-44	17Q2	0.079 J	< 0.005 U	--	< 0.01 U	1.09	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	136
MW-44	18Q1	< 0.1 U	< 0.005 U	--	< 0.01 U	0.322	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	121
MW-44	18Q2	0.056 J	< 0.005 U	--	--	0.343	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	128
MW-44	18Q4	0.048 J	< 0.005 U	--	< 0.01 U	0.279	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	128
MW-44	19Q2	7.83	< 0.005 U	--	< 0.01 UJ	0.33 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	164
MW-44	19Q4	0.203	< 0.005 U	--	< 0.01 U	0.461	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	104 J
MW-44	20Q2	0.084 J	< 0.005 U	--	< 0.01 U	0.613	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	110
MW-44	20Q4	0.212	< 0.005 U	--	< 0.01 U	0.376 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	100
MW-44	21Q2	7.82	< 0.005 U	--	< 0.01 U	0.254	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	129
MW-44	21Q4	0.0291	< 0.005 U	--	< 0.01 U	0.421	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	85.6
MW-44	22Q2	--	< 0.005 U	--	< 0.01 U	0.236	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	111
MW-44	22Q4	0.0819	< 0.005 U	--	< 0.01 U	0.234	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	111
MW-44	23Q2	--	--	< 0.002 U	--	0.252	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	123
MW-44	23Q4	--	--	< 0.006 U	--	0.327	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	116
MW-56	23Q4	--	--	< 0.006 U	--	0.470	--	--	--	--	--	--	--	--	340
PZ-23	06Q2	--	26	--	0.552	--	--	--	--	--	--	--	--	--	--
PZ-24	06Q2	49.59 J	0.95	--	0.0125	71.17	--	--	--	--	--	--	--	--	104.54
PZ-25	06Q2	23.36 J	1.1 J	--	0.0275 J	69.05 J	--	--	--	--	--	--	--	--	258.31 J
PZ-26	06Q2	16.94 J	0.0815	--	< 0.01 U	1.465	--	--	--	--	--	--	--	--	1305.49
PZ-27	06Q2	--	0.015	--	< 0.01 U	38.12	--	--	--	--	--	--	--	--	--
PZ-28	06Q2	45.62 J	0.015	--	< 0.01 U	18.04	--	--	--	--	--	--	--	--	795.29
PZ-29	06Q2	22.02 J	11.3	--	0.31	49.85	--	--	--	--	--	--	--	--	405.85

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Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PZ-30	06Q2	71.38 J	0.016	--	< 0.01 U	17.41	--	--	--	--	--	--	--	--	112.66
PZ-31	06Q2	18.88 J	0.039	--	0.0125	18.38	--	--	--	--	--	--	--	--	137

Notes:
µg/L = micrograms per liter
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample
mg/L = milligrams per liter
PCB = polychlorinated biphenyl
PSP = Potliner Storage Pad
R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
U = The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ = The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
WAD = weak acid dissociable
WDCN = weak dissociable cyanide

Table C-4
East Plant North Yard
Historical Analytical Results Through 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
East Plant North Yard															
MW-16S	99Q1	7.8	0.35	--	--	640	--	--	--	--	--	--	--	1.6	3600
MW-16S	99Q2	1.3	0.23	--	--	190	--	--	--	--	--	--	--	0.19	220
MW-16S	99Q3	0.2	0.04	--	--	15	--	--	--	--	--	--	--	< 0.065 U	480
MW-16S	99Q4	0.46	0.03	--	--	16	--	--	--	--	--	--	--	< 0.065 U	350
MW-16S	00Q1	0.24	0.03	--	--	15	--	--	--	--	--	--	--	< 0.065 U	280
MW-16S	00Q2	0.28	0.04	--	--	13	--	--	--	--	--	--	--	< 0.065 U	2000
MW-16S	00Q3	0.2	0.04	--	--	22	--	--	--	--	--	--	--	< 0.065 U	1800
MW-16S	00Q4	0.13	0.0495	--	< 0.01 U	29.37	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1250
MW-16S	01Q1	0.15	0.129	--	< 0.01 U	36.87	< 0.065 U	< 0.065 U	< 0.065 U	0.416	< 0.065 U	< 0.065 U	0.067	--	1155.9
MW-16S	01Q2	0.1	0.0805	--	< 0.01 U	40	< 0.065 U	< 0.065 U	< 0.065 U	0.217	< 0.065 U	< 0.065 U	< 0.065 U	--	1116.4
MW-16S	01Q3	0.11	0.028	--	< 0.01 U	30.69	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	793.37
MW-16S	01Q4	0.32	0.0175	--	< 0.01 U	28.49	< 0.065 U	< 0.065 U	< 0.065 U	0.577	< 0.065 U	< 0.065 U	0.142	--	604.7
MW-16S	02Q1	0.13	0.0155	--	< 0.01 U	27.29	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.181	< 0.065 U	0.096	--	628.36
MW-16S	02Q2	0.11	0.141	--	< 0.01 U	21.79	< 0.065 U	< 0.065 U	< 0.065 U	0.209	< 0.065 U	< 0.065 U	< 0.065 U	--	931.43
MW-16S	02Q3	0.11	0.0145	--	< 0.01 U	12.75	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	829.38
MW-16S	02Q4	< 0.01 U	< 0.01 U	--	< 0.01 U	12.36	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	861.48
MW-16S	03Q1	< 0.011 U	0.01	--	< 0.01 U	11.07	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	728.355
MW-16S	03Q2	< 0.01 U	< 0.01 U	--	< 0.01 U	10.44	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	760.25
MW-16S	03Q3	0.053	< 0.01 U	--	< 0.01 U	11.74	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	567.25
MW-16S	03Q4	< 0.01 U	< 0.01 U	--	< 0.01 U	11.67	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	556.14
MW-16S	04Q1	0.041	< 0.01 U	--	< 0.01 U	10.4	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	526.31
MW-16S	04Q2	< 0.01 U	0.012	--	< 0.01 U	1.144	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	475.28
MW-16S	04Q3	< 0.003 U	< 0.01 U	--	< 0.01 U	8.98	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	428.78
MW-16S	04Q4	< 0.003 U	< 0.01 U	--	< 0.01 U	12.14	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	419.67
MW-16S	05Q1	0.046	0.018	--	< 0.01 U	9.961	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	360.99
MW-16S	05Q2	0.107	< 0.01 U	--	< 0.01 U	10.15	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	357
MW-16S	05Q3	0.124	< 0.01 U	--	< 0.01 U	8.841	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	346.16
MW-16S	05Q4	0.097	< 0.01 U	--	< 0.01 U	8.831	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	298.55
MW-16S	06Q1	0.115	0.027	--	< 0.01 U	9.992	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	359.14
MW-16S	06Q2	0.05	< 0.01 U	--	0.011	7.302	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	304.28
MW-16S	06Q3	0.032	< 0.01 U	--	< 0.01 U	8.485	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	318.79
MW-16S	06Q4	0.041	< 0.01 U	--	< 0.01 U	9.503	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	246.73
MW-16S	07Q1	0.075	< 0.01 U	--	< 0.01 U	9.448	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	304.7
MW-16S	07Q2	0.122	< 0.01 U	--	< 0.01 U	8.08	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	299.4
MW-16S	07Q3	0.102	< 0.01 U	--	< 0.01 U	9.903	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	308.79
MW-16S	07Q4	0.052	0.005	--	< 0.005 U	8.615	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	320

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East Plant North Yard
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Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-16S	08Q1	0.171	0.012	--	< 0.01 UJ	8.993	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	290
MW-16S	08Q2	0.18	< 0.005 U	--	0.11 R	7.597	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	338
MW-16S	08Q3	0.069	< 0.005 U	--	< 0.01 U	8.047	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	272
MW-16S	08Q4	0.139	0.011	--	< 0.01 U	7.828	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	267
MW-16S	09Q1	0.2 U	< 0.005 R	--	< 0.006 U	8.25	--	--	--	< 0.173 U	< 0.173 U	< 0.245 U	< 0.245 U	--	290 J
MW-16S	09Q2	0.202	< 0.01 U	--	--	6.306	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	229
MW-16S	09Q3	0.34	< 0.01 U	--	< 0.01 U	7.098	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	257
MW-16S	09Q4	0.048	< 0.01 U	--	< 0.01 U	7.84	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	278
MW-16S	10Q1	0.42	< 0.01 UJ	--	< 0.01 UJ	6.596	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	312
MW-16S	10Q2	--	< 0.01 U	--	< 0.01 U	6.939 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	269
MW-16S	10Q3	0.083	< 0.01 UJ	--	< 0.01 UJ	8.235	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	289 J
MW-16S	10Q4	0.04	< 0.01 U	--	< 0.01 U	8.154	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	257
MW-16S	11Q1	< 0.1 U	< 0.01 U	--	< 0.01 U	7.22	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	292
MW-16S	11Q2	< 0.1 U	< 0.01 U	--	< 0.01 U	9.88	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	190
MW-16S	11Q3	< 0.1 U	< 0.01 U	--	< 0.01 U	7.95	--	--	--	< 0.08 U	< 0.08 U	< 0.08 U	< 0.08 U	--	136
MW-16S	11Q4	< 0.1 U	< 0.01 U	--	< 0.01 UJ	9.09	--	--	--	< 0.062 U	< 0.062 U	< 0.062 U	< 0.062 U	--	136
MW-16S	12Q1	< 0.1 U	< 0.01 U	--	< 0.01 U	8.09	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	154
MW-16S	12Q3	0.11	< 0.01 U	--	< 0.01 UJ	7.92	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	203
MW-16S	12Q4	< 0.1 U	0.01	--	< 0.01 U	7.95	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	198
MW-16S	12Q4	0.11	0.038	--	< 0.01 UJ	10.2	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	223
MW-16S	13Q2	< 0.1 U	0.016	--	< 0.01 U	10.4	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	227
MW-16S	13Q4	0.78	< 0.01 U	--	< 0.01 U	7.21	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	261
MW-16S	14Q2	< 0.1 U	< 0.01 U	--	< 0.01 U	7.74	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	268
MW-16S	14Q4	0.6	< 0.01 U	--	< 0.01 U	7.23	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	255
MW-16S	15Q3	< 0.1 U	< 0.01 U	--	< 0.01 U	7.99	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	280
MW-16S	15Q4	< 0.1 U	< 0.01 U	--	< 0.01 U	8.79	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	281
MW-16S	16Q2	0.072 J	0.007	--	--	9.61	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	292
MW-16S	16Q4	0.047 J	0.076	--	< 0.01 U	7.66	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	220
MW-16S	17Q2	0.055 J	0.004 J	--	< 0.01 U	8.5	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	217
MW-16S	17Q4	< 0.1 UJ	< 0.005 U	--	< 0.01 U	8.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	236
MW-16S	18Q2	0.032 J	< 0.005 U	--	< 0.01 U	7.38	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	226
MW-16S	18Q4	< 0.1 U	0.003 J	--	< 0.01 U	9.37	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	211
MW-16S	19Q2	0.066 J	0.002 J	--	< 0.01 U	6.81	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	188
MW-16S	19Q4	< 0.1 U	0.002 J	--	< 0.01 UJ	11.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	208
MW-16S	20Q2	< 0.1 U	0.004 J	--	< 0.01 U	7.42	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	200
MW-16S	20Q4	0.052 J	0.002 J	--	< 0.01 U	7.92	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	171
MW-16S	21Q2	0.0798	0.002 J	--	< 0.01 U	7.97	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	187

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Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-16S	21Q4	0.00422 J	0.068 R	--	< 0.01 U	6.92	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	196
MW-16S	22Q2	0.0114	0.009	--	< 0.01 U	7.03	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	190
MW-16S	22Q4	0.054	< 0.005 U	--	< 0.01 U	7.16	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	246
MW-16S	23Q2	--	--	< 0.002 U	--	7.88	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	211
MW-16S	23Q4	--	--	--	--	8.47	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	233
MW-17S	99Q1	0.61	< 0.01 U	--	--	1.4	--	--	--	--	--	--	--	< 0.065 U	430
MW-17S	99Q2	0.49	0.03	--	--	1	--	--	--	--	--	--	--	< 0.065 U	380
MW-17S	99Q3	0.56	< 0.01 U	--	--	0.9	--	--	--	--	--	--	--	< 0.065 U	670
MW-17S	99Q4	0.52	< 0.01 U	--	--	2.5	--	--	--	--	--	--	--	< 0.065 U	620
MW-17S	00Q1	0.34	0.03	--	--	1.8	--	--	--	--	--	--	--	< 0.065 U	410
MW-17S	00Q2	0.86	0.02	--	--	1.1	--	--	--	--	--	--	--	< 0.065 U	560
MW-17S	00Q3	0.2	< 0.01 U	--	--	1.1	--	--	--	--	--	--	--	0.18	480
MW-17S	00Q4	0.18	< 0.01 U	--	< 0.01 U	1.162	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	304
MW-17S	01Q1	0.82	< 0.01 U	--	< 0.01 U	1.359	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	406.77
MW-17S	01Q2	0.1	0.0095	--	< 0.01 U	0.933	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	405.33
MW-17S	01Q3	0.41	< 0.01 U	--	< 0.01 U	0.952	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	298.75
MW-17S	01Q4	0.14	< 0.01 U	--	< 0.01 U	2.391	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	246.28
MW-17S	02Q1	0.12	< 0.01 U	--	< 0.01 U	1.267	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	503.06
MW-17S	02Q2	0.12	< 0.01 U	--	< 0.01 U	0.988	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	487.01
MW-17S	02Q3	< 0.01 U	< 0.01 U	--	< 0.01 U	1.496	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	317.68
MW-17S	02Q4	0.838	< 0.01 U	--	< 0.01 U	2.349	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	310.48
MW-17S	03Q1	0.74	< 0.01 U	--	< 0.01 U	1.15	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	601.407
MW-17S	03Q2	0.085	< 0.01 U	--	< 0.01 U	1.054	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	621.78
MW-17S	03Q3	0.083	< 0.01 U	--	< 0.01 U	0.931	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	434.13
MW-17S	03Q4	0.453	< 0.01 U	--	< 0.01 U	1.02	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	314.39
MW-17S	04Q1	1.131	< 0.01 U	--	< 0.01 U	1.114	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	470.14
MW-17S	04Q2	2.974	< 0.01 U	--	< 0.01 U	0.791	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	356.36
MW-17S	04Q3	2.589	< 0.01 U	--	< 0.01 U	0.744	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	338.05
MW-17S	04Q4	1.408	< 0.01 U	--	< 0.01 U	1.278	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	272.22
MW-17S	05Q1	3.927	< 0.01 U	--	< 0.01 U	1.097	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	279.22
MW-17S	05Q2	2.527	< 0.01 U	--	< 0.01 U	0.7517	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	281.5
MW-17S	05Q3	3.142	< 0.01 U	--	< 0.01 U	1.014	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	277.7
MW-17S	05Q4	2.057	< 0.01 U	--	< 0.01 U	1.837	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	215.05
MW-17S	06Q1	20.84	< 0.01 U	--	< 0.01 U	0.8417	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	216.88
MW-17S	06Q2	15.01	< 0.01 U	--	< 0.01 U	0.7225	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	215.11
MW-17S	06Q3	10.85	< 0.01 U	--	< 0.01 U	0.6616	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	200.16
MW-17S	06Q4	7.305	< 0.01 U	--	< 0.01 U	< 0.2 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	144.98

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-17S	07Q1	7.112	0.0145	--	< 0.01 U	0.7146	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	152.75
MW-17S	07Q2	6.852	< 0.01 U	--	< 0.01 U	0.6408	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	167.9
MW-17S	07Q3	3.015	< 0.01 U	--	< 0.01 U	0.8034	--	--	--	< 0.065 U	0.471	0.131	< 0.065 U	--	168.67
MW-17S	07Q3	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	--
MW-17S	07Q4	4.661	< 0.005 U	--	< 0.005 U	1.81	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	150
MW-17S	08Q1	3.88	< 0.01 U	--	< 0.01 UJ	0.8118	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	198
MW-17S	08Q2	6.569	< 0.005 U	--	< 0.01 UJ	0.7293	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	167 J
MW-17S	08Q3	11.89	< 0.005 U	--	< 0.01 U	0.7726	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	151
MW-17S	08Q4	1.901	< 0.005 U	--	< 0.01 U	0.6294	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	171
MW-17S	09Q1	1.88	< 0.005 UJ	--	< 0.006 U	0.5	--	--	--	< 0.18 U	< 0.18 U	< 0.255 U	< 0.255 U	--	169 J
MW-17S	09Q2	0.405 J	< 0.01 U	--	< 0.01 U	0.5536	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	131
MW-17S	09Q3	2.76	< 0.01 U	--	< 0.01 U	0.5872	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	128
MW-17S	09Q4	1.424	< 0.01 U	--	< 0.01 U	0.6341	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	151
MW-17S	10Q1	3.745	< 0.01 U	--	< 0.01 UJ	0.7306	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	133
MW-17S	10Q2	7.285	< 0.01 U	--	< 0.01 U	0.4851 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	102
MW-17S	10Q3	2.558	< 0.01 U	--	< 0.01 U	0.63	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	112
MW-17S	10Q4	11.92	< 0.01 U	--	< 0.01 U	0.5836	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	105
MW-17S	11Q1	1.88	< 0.01 U	--	< 0.01 U	0.95	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	81.6
MW-17S	11Q2	1.75	< 0.01 U	--	< 0.01 U	0.65	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	98.7
MW-17S	11Q3	2.18	< 0.01 U	--	< 0.01 U	0.45	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	145
MW-17S	11Q4	4.4	< 0.01 U	--	< 0.01 UJ	0.76	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	146
MW-17S	12Q1	4.57	< 0.01 U	--	< 0.01 U	0.78 J	--	--	--	< 0.063 UJ	< 0.063 UJ	< 0.063 UJ	< 0.063 UJ	--	123
MW-17S	12Q3	1.69	< 0.01 UJ	--	< 0.01 U	0.8	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	651
MW-17S	12Q4	2.05	< 0.01 U	--	< 0.01 U	0.25	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	165
MW-17S	12Q4	1.05	< 0.01 U	--	< 0.01 UJ	1	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	145
MW-17S	13Q2	1.33	< 0.01 U	--	< 0.01 U	0.67	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	157
MW-17S	13Q4	2.38	< 0.01 U	--	< 0.01 U	0.67	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	144
MW-17S	14Q2	2.12	< 0.01 U	--	< 0.01 U	0.59	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	133
MW-17S	14Q4	2.21	< 0.01 U	--	< 0.01 U	0.61	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	145
MW-17S	15Q3	0.78	< 0.01 U	--	< 0.01 U	0.9 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	117
MW-17S	15Q4	0.71	< 0.01 U	--	< 0.01 U	1.01	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	125
MW-17S	16Q2	0.663	0.001 J	--	--	0.708	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	89.7
MW-17S	16Q4	0.736	< 0.005 U	--	< 0.01 U	1.37	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	111
MW-17S	17Q2	0.491	0.003 J	--	< 0.01 U	1.04	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	116
MW-17S	18Q1	0.387	< 0.005 U	--	< 0.01 U	1.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	88.8
MW-17S	18Q2	0.342	< 0.005 U	--	0.0068 J	0.806	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	106
MW-17S	19Q2	1.13	< 0.005 U	--	< 0.01 UJ	0.806 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	107

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-17S	19Q4	0.032 J	< 0.005 U	--	< 0.01 U	0.919	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	130
MW-17S	20Q2	< 0.1 U	< 0.005 U	--	< 0.01 U	1.05	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	103
MW-17S	20Q4	< 0.1 U	< 0.005 U	--	< 0.01 U	0.886	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	159
MW-17S	21Q3	0.0263	< 0.005 U	--	< 0.01 U	0.913	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	177
MW-17S	21Q4	0.0469	< 0.005 U	--	< 0.01 U	1.03	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	125
MW-17S	22Q2	0.0477	< 0.005 U	--	< 0.01 U	0.84	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	100
MW-17S	22Q4	0.0333	0.002 J	--	< 0.01 U	1.01	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	126
MW-17S	23Q2	--	--	< 0.002 U	--	1.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	162
MW-17S	23Q4	--	--	< 0.006 U	--	2.77	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	72
MW-18S	99Q1	15	0.17	--	--	4800	--	--	--	--	--	--	--	1.1	15000
MW-18S	99Q2	18	0.23	--	--	2000	--	--	--	--	--	--	--	0.17	20000
MW-18S	99Q3	9.2	0.3	--	--	780	--	--	--	--	--	--	--	0.21	20000
MW-18S	99Q4	3.9	0.26	--	--	870	--	--	--	--	--	--	--	0.24	1500
MW-18S	00Q1	8.3	0.4	--	--	420	--	--	--	--	--	--	--	< 0.065 U	4800
MW-18S	00Q2	1.2	0.22	--	--	44	--	--	--	--	--	--	--	0.24	240
MW-18S	00Q3	0.39	0.46	--	--	71	--	--	--	--	--	--	--	0.092	310
MW-18S	00Q4	0.38	0.207	--	< 0.01 U	122.1	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	3440
MW-18S	01Q1	1.29	1.12	--	0.012	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.097	< 0.065 U	--	2422.91
MW-18S	01Q1	--	--	--	--	146.4	--	--	--	--	--	--	--	--	--
MW-18S	01Q2	0.56	0.923	--	< 0.01 U	126.4	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1258.57
MW-18S	01Q3	1.16	0.749	--	< 0.01 U	135.8	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1958.33
MW-18S	01Q4	0.63	0.552	--	0.0135	119.7	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	2400.9
MW-18S	02Q1	0.62	0.521	--	< 0.01 U	127.7	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.134	< 0.065 U	--	190.52
MW-18S	02Q2	0.57	0.465	--	< 0.01 U	69.21	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.13	< 0.065 U	< 0.065 U	--	982.66
MW-18S	02Q3	0.15	0.362	--	< 0.01 U	89.35	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1062.29
MW-18S	02Q4	0.099	0.246	--	< 0.01 U	78.52	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1150.97
MW-18S	03Q1	0.244	0.267	--	< 0.01 U	77.38	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.07	--	1319.27
MW-18S	03Q2	0.055	0.299	--	< 0.01 U	88.88	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1281.21
MW-18S	03Q3	0.075	0.284	--	< 0.01 U	71.09	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1413.09
MW-18S	03Q4	0.102	0.241	--	< 0.01 U	88.18	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.19	< 0.065 U	< 0.065 U	--	1753.81
MW-18S	04Q1	0.086	0.316	--	< 0.01 U	84.25	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1154.05
MW-18S	04Q2	0.129	0.354	--	< 0.01 U	81.11	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	827.73
MW-18S	04Q3	0.081	0.432	--	< 0.01 U	76.42	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.217	< 0.065 U	< 0.065 U	--	790.49
MW-18S	04Q4	0.14	0.337	--	< 0.01 U	14.84	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	1162.81
MW-18S	05Q1	0.329	0.311	--	< 0.01 U	106.2	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	822.5
MW-18S	05Q2	0.231	0.286	--	< 0.01 U	85.58	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	797.41
MW-18S	05Q3	0.15	0.337	--	< 0.01 U	57.37	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	595.18

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-18S	05Q4	0.327	0.288	--	< 0.01 U	77.52	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.142	< 0.065 U	< 0.065 U	--	711.67
MW-18S	06Q1	0.294	0.183	--	< 0.01 U	76.71	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.108	< 0.065 U	< 0.065 U	--	705.46
MW-18S	06Q2	0.101	0.08	--	< 0.01 U	45.1	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.068	< 0.065 U	< 0.065 U	--	369.47
MW-18S	06Q3	0.067	0.088	--	< 0.01 U	45.81	--	--	--	< 0.065 U	0.087	< 0.065 U	< 0.065 U	--	584.56
MW-18S	06Q4	0.077	0.14	--	< 0.01 U	64.3	--	--	--	< 0.065 U	0.13	0.11	< 0.065 U	--	473.31
MW-18S	07Q1	0.118	0.148	--	< 0.01 U	75.88	--	--	--	0.073	< 0.065 U	< 0.065 U	< 0.065 U	--	610.75
MW-18S	07Q2	0.113	< 0.01 UJ	--	< 0.01 U	53.57	--	--	--	< 0.065 U	0.109	< 0.065 U	< 0.065 U	--	491.18
MW-18S	07Q3	0.07	0.094	--	< 0.01 U	57.16	--	--	--	< 0.065 U	0.095	< 0.065 U	< 0.065 U	--	499.98
MW-18S	07Q4	0.053	0.045	--	< 0.005 U	52.66	--	--	--	< 0.065 U	0.149	< 0.065 U	< 0.065 U	--	470
MW-18S	08Q1	0.095	0.063	--	< 0.01 UJ	4.868	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	445
MW-18S	08Q2	0.289	0.058	--	0.037 R	39.38	--	--	--	< 0.065 U	0.101	< 0.065 U	< 0.065 U	--	198
MW-18S	08Q3	0.233	0.057 R	--	< 0.01 U	49.31	--	--	--	< 0.065 U	0.188	< 0.065 U	< 0.065 U	--	420
MW-18S	08Q4	0.124	0.058	--	< 0.01 U	51.48	--	--	--	< 0.065 U	0.133	< 0.065 U	< 0.065 U	--	433
MW-18S	09Q1	0.2 U	0.0977 R	--	< 0.006 U	63.2	--	--	--	< 0.169 U	< 0.169 U	< 0.24 U	< 0.24 U	--	506 J
MW-18S	09Q2	< 0.2 U	0.0725	--	--	63.62	--	--	--	< 0.065 U	0.109	< 0.065 U	< 0.065 U	--	430
MW-18S	09Q3	0.24	0.0627	--	< 0.01 U	59.85	--	--	--	< 0.065 U	0.11	< 0.065 U	< 0.065 U	--	520
MW-18S	09Q4	0.068	0.0691	--	< 0.01 U	58.47	--	--	--	< 0.065 U	0.094	< 0.065 U	< 0.065 U	--	500
MW-18S	10Q1	0.152	0.0258 J	--	< 0.01 UJ	38.7	--	--	--	< 0.065 U	0.133	< 0.065 U	< 0.065 U	--	386
MW-18S	10Q2	--	0.08	--	0.011	44.27 J	--	--	--	< 0.065 U	0.107	< 0.065 U	< 0.065 U	--	423
MW-18S	10Q3	0.08	0.074	--	< 0.01 U	56.15	--	--	--	0.0825 PD	< 0.0699 U	< 0.0699 U	< 0.0699 U	--	491
MW-18S	10Q4	0.281	0.096	--	< 0.01 U	60.53	--	--	--	< 0.065 U	0.117	< 0.065 U	< 0.065 U	--	443
MW-18S	11Q1	0.27	0.074	--	< 0.01 U	63.1	--	--	--	--	--	--	--	--	371
MW-18S	11Q2	0.16	0.061	--	< 0.01 U	48.6	--	--	--	< 0.0677 U	< 0.0677 U	< 0.0677 U	< 0.0677 U	--	417
MW-18S	11Q3	1.27	0.103	--	< 0.01 U	67.2	--	--	--	< 0.065 U	0.19	< 0.065 U	< 0.065 U	--	618
MW-18S	11Q4	0.39	0.08	--	< 0.01 UJ	73.2	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.066 U	--	466
MW-18S	12Q1	0.84	0.051	--	< 0.01 U	70.6	--	--	--	< 0.065 U	0.17	< 0.065 U	< 0.065 U	--	389
MW-18S	12Q3	1.25	0.038	--	< 0.01 UJ	48.5	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	403
MW-18S	12Q4	0.94	0.04	--	< 0.01 U	71.7	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	327
MW-18S	12Q4	1.18	0.045	--	< 0.01 UJ	73.1	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	--	371
MW-18S	13Q2	3.33	0.022	--	< 0.01 U	77.7 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	192
MW-18S	13Q4	4.44	0.074	--	< 0.01 U	65.9	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	508
MW-18S	14Q2	1.21	0.023	--	< 0.01 U	33.4	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	263
MW-18S	14Q4	2.11	0.032	--	< 0.01 U	33.8	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	405
MW-18S	15Q3	1.82	0.037	--	< 0.01 U	53.5	--	--	--	< 0.061 U	0.091	< 0.061 U	< 0.061 U	--	330
MW-18S	15Q4	2.73	0.052	--	< 0.01 U	60	--	--	--	< 0.061 U	0.095	< 0.061 U	< 0.061 U	--	689
MW-18S	16Q2	2.05	0.005	--	--	57	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	425
MW-18S	16Q4	1.61	0.006	--	< 0.01 U	55.7	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	285

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East Plant North Yard
Historical Analytical Results Through 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-18S	17Q2	4.23	0.025	--	0.015 J	60.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	180
MW-18S	17Q4	0.819	0.023	--	0.0065 J	31.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	270
MW-18S	18Q2	0.371	0.018	--	0.0061 J	24.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	318
MW-18S	18Q4	0.18	0.02	--	< 0.01 U	27.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	250
MW-18S	19Q2	0.111	0.035	--	0.019	20.7	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	250
MW-18S	19Q4	0.072 J	0.051	--	< 0.01 UJ	27.9	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	282
MW-18S	20Q2	0.082 J	0.023 J	--	< 0.01 U	22.1 J	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	226
MW-18S	20Q4	0.051 J	0.007	--	< 0.01 U	29.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	178
MW-18S	21Q2	0.0629 J	0.018 J	--	< 0.01 U	26.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	330
MW-18S	21Q4	0.0571	0.019	--	< 0.01 U	25.2	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	296
MW-18S	22Q2	0.0709	0.009	--	< 0.01 U	20.1	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	268
MW-18S	22Q4	0.0345	0.01	--	< 0.01 U	20	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	244
MW-18S	23Q2	--	0.01 J	< 0.002 U	< 0.01 U	25.7	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	283
MW-18S	23Q4	--	--	< 0.006 U	--	15.4	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	240
MW-19S	99Q1	0.09	< 0.01 U	--	--	2.7	--	--	--	--	--	--	--	< 0.065 U	490
MW-19S	99Q2	0.16	< 0.01 U	--	--	2	--	--	--	--	--	--	--	< 0.065 U	340
MW-19S	99Q3	0.2	< 0.01 U	--	--	2.2	--	--	--	--	--	--	--	< 0.065 U	390
MW-19S	99Q4	0.14	< 0.01 U	--	--	3.7	--	--	--	--	--	--	--	< 0.065 U	350
MW-19S	00Q1	0.19	< 0.01 U	--	--	2.6	--	--	--	--	--	--	--	< 0.065 U	290
MW-19S	00Q2	0.21	< 0.01 U	--	--	4.3	--	--	--	--	--	--	--	< 0.065 U	470
MW-19S	00Q3	0.1	< 0.01 U	--	--	4.3	--	--	--	--	--	--	--	< 0.065 U	360
MW-19S	00Q4	0.42	< 0.01 U	--	< 0.01 U	4.715	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	339
MW-19S	01Q1	< 0.01 U	< 0.01 U	--	< 0.01 U	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	406.56
MW-19S	01Q1	--	--	--	--	3.524	--	--	--	--	--	--	--	--	--
MW-19S	01Q2	< 0.01 U	< 0.01 U	--	< 0.01 U	3.051	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	459.23
MW-19S	01Q3	0.16	< 0.01 U	--	< 0.01 U	4.359	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	327.97
MW-19S	01Q4	< 0.01 U	< 0.01 U	--	< 0.01 U	4.455	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	275.71
MW-19S	02Q1	< 0.01 U	< 0.01 U	--	< 0.01 U	4.768	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	349.78
MW-19S	02Q2	< 0.01 U	< 0.01 U	--	< 0.01 U	3.771	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	381.46
MW-19S	02Q3	< 0.01 U	< 0.01 U	--	< 0.01 U	4.755	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	310.48
MW-19S	02Q4	0.054	< 0.01 U	--	< 0.01 U	8.876	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.07	< 0.065 U	--	246.49
MW-19S	03Q1	0.046	< 0.01 U	--	< 0.01 U	8.491	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	312.123
MW-19S	03Q2	< 0.01 U	< 0.01 U	--	< 0.01 U	5.187	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	331.46
MW-19S	03Q3	0.083	< 0.01 U	--	< 0.01 U	7.794	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	308.42
MW-19S	03Q4	0.289	< 0.01 U	--	< 0.01 U	6.739	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	225.09
MW-19S	04Q1	4.346	< 0.01 U	--	< 0.01 U	7.551	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	285.17
MW-19S	04Q2	0.972	< 0.01 U	--	< 0.01 U	0.457	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	212.75

Table C-4
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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-19S	04Q3	0.694	< 0.01 U	--	< 0.01 U	4.238	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	181.06
MW-19S	04Q4	0.497	< 0.01 U	--	< 0.01 U	6.609	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	190.32
MW-19S	05Q1	1.157	< 0.01 U	--	< 0.01 U	8.789	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	242.64
MW-19S	05Q2	1.201	< 0.01 U	--	< 0.01 U	5.769	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	197.31
MW-19S	05Q3	0.454	< 0.01 U	--	< 0.01 U	4.667	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	178.24
MW-19S	05Q4	1.507	< 0.01 U	--	< 0.01 U	4.569	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.145	0.067	< 0.065 U	--	290.16
MW-19S	06Q1	0.476	< 0.01 U	--	< 0.01 U	5.686	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	266.89
MW-19S	06Q2	1.555	< 0.01 U	--	< 0.01 U	3.592	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	112.62
MW-19S	06Q3	0.375	< 0.01 U	--	< 0.01 U	3.329	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	106.94
MW-19S	06Q4	0.325 J	< 0.01 U	--	< 0.01 U	4.641	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	66.95 J
MW-19S	07Q1	1.119	< 0.01 U	--	< 0.01 U	8.192	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	203.42
MW-19S	07Q2	0.412	< 0.01 U	--	< 0.01 U	6.407	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	247.41
MW-19S	07Q3	0.512	< 0.01 U	--	< 0.01 U	8.341	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	182.51
MW-19S	07Q4	1.567	< 0.005 U	--	< 0.005 U	7.331	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	190
MW-19S	08Q1	0.341	< 0.01 U	--	< 0.01 UJ	7.228	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	201
MW-19S	08Q2	0.599	< 0.005 U	--	< 0.01 UJ	4.461	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	154 J
MW-19S	08Q3	0.404	< 0.005 U	--	< 0.01 U	5.019	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	140
MW-19S	08Q4	0.747	< 0.005 U	--	< 0.01 U	6.388	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	186
MW-19S	09Q1	0.848	< 0.005 UJ	--	< 0.006 U	10.4	--	--	--	< 0.176 U	< 0.176 U	< 0.25 U	< 0.25 U	--	222 J
MW-19S	09Q2	0.369 J	< 0.01 U	--	< 0.01 U	8.525	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	109
MW-19S	09Q3	1.06	< 0.01 U	--	< 0.01 U	7.853	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	169 J
MW-19S	09Q4	0.105	< 0.01 U	--	< 0.01 U	5.71	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	423
MW-19S	10Q1	5.94	< 0.01 U	--	< 0.01 UJ	2.51	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	394
MW-19S	10Q2	--	< 0.01 U	--	< 0.01 U	2.722 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	242
MW-19S	10Q3	0.816	< 0.01 U	--	< 0.01 U	3.605	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	250
MW-19S	10Q4	1.915 J	< 0.01 U	--	< 0.01 U	4.051	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	231
MW-19S	11Q1	0.3	< 0.01 U	--	< 0.01 U	4.78	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	191
MW-19S	11Q2	0.19	< 0.01 U	--	< 0.01 U	2.83	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	195
MW-19S	11Q3	0.59	< 0.01 U	--	< 0.01 U	2.77	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	184
MW-19S	11Q4	0.66	< 0.01 U	--	< 0.01 UJ	5.03	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	221
MW-19S	12Q1	0.32	< 0.01 U	--	< 0.01 U	6.18 J	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	227
MW-19S	12Q3	0.44	< 0.01 U	--	< 0.01 U	6.82	--	--	--	< 0.061 U	< 0.061 U	0.064	< 0.061 U	--	207
MW-19S	12Q4	0.3	< 0.01 U	--	< 0.01 U	7.65	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	198
MW-19S	12Q4	0.61	< 0.01 U	--	< 0.01 UJ	6.72	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	212
MW-19S	13Q2	0.69	< 0.01 U	--	< 0.01 U	6.01	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	236
MW-19S	13Q4	0.84	< 0.01 U	--	< 0.01 U	6.04	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	168
MW-19S	14Q2	0.9	< 0.01 U	--	< 0.01 U	4.5	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	180

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	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-19S	14Q4	0.68	< 0.01 U	--	< 0.01 U	5.44	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	129
MW-19S	15Q3	0.2	< 0.01 U	--	< 0.01 U	4.68	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	170
MW-19S	15Q4	0.71	< 0.01 U	--	< 0.01 U	4.63	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	142
MW-19S	16Q2	12	0.001 J	--	--	3.36	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	104
MW-19S	16Q4	0.326	< 0.005 U	--	< 0.01 U	3.18	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	142
MW-19S	17Q2	0.168	0.002 J	--	< 0.01 U	5.21	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	215
MW-19S	18Q1	0.186	< 0.005 U	--	< 0.01 U	3.02	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	161
MW-19S	18Q2	0.123	< 0.005 U	--	0.0068 J	3.16	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	117
MW-19S	19Q1	0.099 J	< 0.005 U	--	< 0.01 U	3.49	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	158
MW-19S	19Q2	0.042 J	< 0.005 U	--	< 0.01 UJ	2.61 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	272
MW-19S	19Q4	0.051 J	< 0.005 U	--	< 0.01 U	3.38	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	130
MW-19S	20Q2	< 0.1 U	< 0.005 U	--	< 0.01 U	3.49	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	97.6
MW-19S	20Q4	0.033 J	< 0.005 U	--	< 0.01 U	3.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	101
MW-19S	21Q2	0.0165	0.002 J	--	< 0.01 U	3.57	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	79
MW-19S	21Q4	0.0274	< 0.005 U	--	< 0.01 U	3.34	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	74.2
MW-19S	22Q2	0.0184	< 0.005 U	--	< 0.01 U	2.8	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	88.3
MW-19S	22Q4	0.0134	< 0.005 U	--	< 0.01 U	2.94	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	90.9
MW-19S	23Q2	--	--	< 0.002 U	--	3.13	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	63.9
MW-19S	23Q4	--	--	< 0.006 U	--	3.29	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	98.4
MW-36	99Q1	1.1	< 0.01 U	--	--	3.6	--	--	--	--	--	--	--	< 0.065 U	340
MW-36	99Q2	0.47	< 0.01 U	--	--	2.9	--	--	--	--	--	--	--	< 0.065 U	450
MW-36	99Q3	0.46	0.02	--	--	2.2	--	--	--	--	--	--	--	< 0.065 U	630
MW-36	99Q4	0.31	< 0.01 U	--	--	2.9	--	--	--	--	--	--	--	< 0.065 U	610
MW-36	00Q1	0.48	0.06	--	--	1.7	--	--	--	--	--	--	--	< 0.065 U	530
MW-36	00Q2	1	< 0.01 U	--	--	3.4	--	--	--	--	--	--	--	< 0.065 U	500
MW-36	00Q3	0.53	< 0.01 U	--	--	3.3	--	--	--	--	--	--	--	< 0.065 U	510
MW-36	00Q4	0.21	< 0.01 U	--	< 0.01 U	3.479	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	513
MW-36	01Q1	0.24	< 0.01 U	--	< 0.01 U	3.484	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	625.27
MW-36	01Q2	3.79	< 0.01 U	--	< 0.01 U	3.589	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	662.1
MW-36	01Q3	1.7	< 0.01 U	--	< 0.01 U	3.697	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	667.04
MW-36	01Q4	1.09	< 0.01 U	--	< 0.01 U	3.291	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	643.59
MW-36	02Q1	0.71	< 0.01 U	--	< 0.01 U	3.397	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	652.23
MW-36	02Q2	0.14	< 0.01 U	--	< 0.01 U	3.081	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	683.09
MW-36	02Q3	0.29	< 0.01 U	--	< 0.01 U	3.519	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	664.98
MW-36	02Q4	0.085	< 0.01 U	--	< 0.01 U	3.481	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	663.54
MW-36	03Q1	5.672	< 0.01 U	--	< 0.01 U	3.748	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	697.287
MW-36	03Q2	62.53	< 0.01 U	--	< 0.01 U	3.629	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	719.1

Table C-4
East Plant North Yard
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Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-36	03Q3	37.19	< 0.01 U	--	< 0.01 U	3.772	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	691.32
MW-36	03Q4	98.57	< 0.01 U	--	< 0.01 U	3.541	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	692.35
MW-36	04Q1	54.29	< 0.01 U	--	< 0.01 U	3.519	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	680
MW-36	04Q2	65.49	< 0.01 U	--	< 0.01 U	3.391	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	690.91
MW-36	04Q3	52.55	< 0.01 U	--	< 0.01 U	3.754	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	682.47
MW-36	04Q4	44.15	< 0.01 U	--	< 0.01 U	3.8	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	637.83
MW-36	05Q1	85.78	6.61	--	< 0.01 U	3.291	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	675.18
MW-36	05Q2	57.42	< 0.01 U	--	< 0.01 U	3.501	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	703.41
MW-36	05Q3	48.23	< 0.01 U	--	< 0.01 U	3.516	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	682.1
MW-36	05Q4	51.75	< 0.01 U	--	< 0.01 U	2.613	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	656.68
MW-36	06Q1	46.69	< 0.01 U	--	< 0.01 U	3.259	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	639.53
MW-36	06Q2	41.55	< 0.01 U	--	< 0.01 U	2.61	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	626.05
MW-36	06Q3	77.12	< 0.01 U	--	< 0.01 U	2.909	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	665.24
MW-36	06Q4	3.292	< 0.01 U	--	< 0.01 U	3.152	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	491.78
MW-36	07Q1	41.7	< 0.01 U	--	< 0.01 U	2.833	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	562.15
MW-36	07Q2	39.65	< 0.01 U	--	< 0.01 U	2.955	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	575.81
MW-36	07Q3	138	< 0.01 U	--	< 0.01 U	2.731	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	514.74
MW-36	07Q4	50.13	< 0.005 U	--	< 0.005 U	2.822	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	520
MW-36	08Q1	153	< 0.01 U	--	< 0.01 U	2.741	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	498
MW-36	08Q2	4.279	< 0.005 U	--	< 0.01 UJ	3.014	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	629 J
MW-36	08Q3	356.4	< 0.005 U	--	< 0.01 U	3.608	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	595
MW-36	08Q4	5.046	< 0.005 U	--	< 0.01 U	3.899	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	588
MW-36	09Q1	65.7	< 0.005 UJ	--	< 0.006 U	2.45	--	--	--	< 0.166 U	< 0.166 U	< 0.236 U	< 0.236 U	--	589 J
MW-36	09Q2	9.73	< 0.01 U	--	< 0.01 U	2.313	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	511
MW-36	09Q3	2.82	< 0.01 U	--	< 0.01 U	2.333	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	590
MW-36	09Q4	743	< 0.01 U	--	< 0.01 U	2.349	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	566
MW-36	10Q1	0.319	< 0.01 U	--	< 0.01 UJ	2.855	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	613
MW-36	10Q2	347.2	< 0.01 U	--	< 0.01 U	2.369 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	426
MW-36	10Q3	4.344	< 0.01 U	--	< 0.01 U	2.431	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	42.5
MW-36	10Q4	4.392	< 0.01 U	--	< 0.02 U	2.3	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	432
MW-36	11Q1	7	< 0.01 U	--	< 0.01 U	2.08	--	--	--	< 0.0915 U	< 0.0915 U	< 0.0915 U	< 0.0915 U	--	421
MW-36	11Q2	81.2	< 0.01 U	--	< 0.01 U	2.56	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	424
MW-36	11Q3	96.1	< 0.01 U	--	< 0.01 U	1.99	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	432
MW-36	11Q4	159	< 0.01 U	--	< 0.01 UJ	2.23	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	443
MW-36	12Q1	50.6	< 0.01 U	--	< 0.01 U	2.37 J	--	--	--	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	< 0.064 UJ	--	424
MW-36	12Q3	104	< 0.01 U	--	< 0.01 U	2.1	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	213
MW-36	12Q4	43.7	< 0.01 U	--	< 0.01 U	2.03	--	--	--	< 0.061 U	< 0.061 U	0.25 U	< 0.061 U	--	446

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-36	12Q4	70.6	< 0.01 U	--	< 0.01 UJ	2.09	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	401
MW-36	13Q2	59	< 0.01 U	--	< 0.01 U	2.13	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	447
MW-36	13Q4	85.1	< 0.01 U	--	< 0.01 U	1.99	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	407
MW-36	14Q2	99.3	< 0.01 U	--	< 0.01 U	1.99	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	426
MW-36	14Q4	102 J	0.388	--	< 0.01 U	41	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	1640
MW-36	15Q3	84.9	< 0.01 U	--	< 0.01 U	2.06	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	414
MW-36	15Q4	21.9	< 0.01 U	--	< 0.01 U	2.35	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	535
MW-36	16Q2	35	< 0.005 U	--	--	0.382	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	413
MW-36	17Q1	78.9	< 0.005 U	--	< 0.01 U	2.08	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	403
MW-36	17Q2	36.2	< 0.005 U	--	< 0.01 U	5.69	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	393
MW-36	18Q1	22.1	< 0.005 U	--	< 0.01 U	2.26	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	367
MW-36	18Q2	24.3	0.002 J	--	< 0.01 U	2.15	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	406
MW-36	19Q1	47.2	< 0.005 U	--	< 0.01 U	2.3	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	386
MW-36	19Q2	5.05	< 0.005 U	--	< 0.01 UJ	2.71 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	486
MW-36	19Q4	29.7	< 0.005 U	--	< 0.01 U	2.15	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	396 J
MW-36	20Q2	6.74	< 0.005 U	--	< 0.01 U	2.35	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	352
MW-36	20Q4	25.3	< 0.005 U	--	< 0.01 U	1.99	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	361
MW-36	21Q3	93.3	< 0.005 U	--	< 0.01 U	2.27	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	372
MW-36	21Q4	50.2	< 0.005 U	--	< 0.01 U	2.08	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	371
MW-36	22Q2	40.6	< 0.005 U	--	< 0.01 U	1.86	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	333
MW-36	22Q4	38.4	< 0.005 U	--	< 0.01 U	1.98	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	390
MW-36	23Q2	--	--	0.0022	--	2.03	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	346
MW-36	23Q4	--	--	< 0.006 U	--	1.75	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	378
MW-37	99Q1	0.29	< 0.01 U	--	--	0.5	--	--	--	--	--	--	--	< 0.065 U	250
MW-37	99Q2	0.25	< 0.01 U	--	--	0.4	--	--	--	--	--	--	--	< 0.065 U	220
MW-37	99Q3	0.21	< 0.01 U	--	--	0.4	--	--	--	--	--	--	--	< 0.065 U	310
MW-37	99Q4	0.1	< 0.01 U	--	--	0.5	--	--	--	--	--	--	--	< 0.065 U	280
MW-37	00Q1	0.4	< 0.01 U	--	--	0.6	--	--	--	--	--	--	--	< 0.065 U	220
MW-37	00Q2	0.26	< 0.01 U	--	--	0.5	--	--	--	--	--	--	--	< 0.065 U	270
MW-37	00Q3	0.22	< 0.01 U	--	--	0.4	--	--	--	--	--	--	--	< 0.065 U	260
MW-37	00Q4	< 0.01 U	< 0.01 U	--	< 0.01 U	0.434	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	278
MW-37	01Q1	0.99	< 0.01 U	--	< 0.01 U	0.597	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	267.06
MW-37	01Q2	0.24	< 0.01 U	--	< 0.01 U	0.772	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	274.68
MW-37	01Q3	6.2	< 0.01 U	--	< 0.01 U	0.331	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	260.89
MW-37	01Q4	0.24	< 0.01 U	--	< 0.01 U	0.43	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	274.06
MW-37	02Q1	0.44	< 0.01 U	--	< 0.01 U	0.48	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	273.24
MW-37	02Q2	0.8	< 0.01 U	--	< 0.01 U	0.577	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	275.09

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-37	02Q3	0.5	< 0.01 U	--	< 0.01 U	0.647	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	247.93
MW-37	02Q4	0.4	< 0.01 U	--	< 0.01 U	0.504	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	284.96
MW-37	03Q1	0.428	< 0.01 U	--	< 0.01 U	0.878	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	285.993
MW-37	03Q2	28.77	< 0.01 U	--	< 0.01 U	0.54	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	305.54
MW-37	03Q3	30.82	< 0.01 U	--	< 0.01 U	1.486	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	279.2
MW-37	03Q4	53.38	< 0.01 U	--	< 0.01 U	0.553	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	284.14
MW-37	04Q1	34.69	< 0.01 U	--	< 0.01 U	0.665	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	291.14
MW-37	04Q2	71.34	< 0.01 U	--	< 0.01 U	1.05	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	283.52
MW-37	04Q3	95.7	< 0.01 U	--	< 0.01 U	0.483	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	290.52
MW-37	04Q4	68.6	< 0.01 U	--	< 0.01 U	0.666	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	265.57
MW-37	05Q1	266.77	< 0.01 U	--	< 0.01 U	0.4677	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	275.92
MW-37	05Q2	66.93	< 0.01 U	--	< 0.01 U	0.69	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	287.04
MW-37	05Q3	46.11	0.34	--	< 0.01 U	0.8815	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	284.8
MW-37	05Q4	3.092	< 0.01 U	--	< 0.01 U	0.427	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	306.65
MW-37	06Q1	89.08	< 0.01 U	--	< 0.01 U	0.5457	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.157	0.25	< 0.065 U	--	326.04
MW-37	06Q2	25.75	< 0.01 U	--	< 0.01 U	0.5101	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	269
MW-37	06Q3	89.2	< 0.01 U	--	< 0.01 U	0.4557	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	297.92
MW-37	06Q4	44.112	< 0.01 U	--	< 0.01 U	0.5275	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	256.47
MW-37	07Q1	24.32	< 0.01 U	--	< 0.01 U	0.4771	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	280.1
MW-37	07Q2	75.61	< 0.01 U	--	< 0.01 U	0.4423	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	278.52
MW-37	07Q3	227.1	< 0.01 U	--	< 0.01 U	0.3365	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	293.42
MW-37	07Q4	54.58	< 0.005 U	--	< 0.005 U	0.4539	--	--	--	0.014	0.011	< 0.065 U	< 0.065 U	--	290
MW-37	08Q1	193	< 0.01 U	--	< 0.01 U	0.3342	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	270
MW-37	08Q2	123.2	< 0.005 U	--	< 0.01 UJ	0.3076	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	287 J
MW-37	08Q3	5.527	< 0.005 U	--	< 0.01 U	0.3784	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	292
MW-37	08Q4	6.868	< 0.005 U	--	< 0.01 U	0.3208	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	271
MW-37	09Q1	5.36	< 0.005 UJ	--	< 0.006 U	0.1 J	--	--	--	< 0.176 U	< 0.176 U	< 0.25 U	< 0.25 U	--	311 J
MW-37	09Q2	50.2 J	< 0.01 U	--	< 0.01 U	0.2654	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	271
MW-37	09Q3	7.48	< 0.01 U	--	< 0.01 U	0.2852	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	270
MW-37	09Q4	2.744	< 0.01 U	--	< 0.01 U	0.3339	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	283
MW-37	10Q1	9.296	< 0.01 U	--	< 0.01 UJ	0.2578	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	301
MW-37	10Q2	115.9	< 0.01 U	--	< 0.01 U	0.2715 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	276
MW-37	10Q3	--	< 0.01 U	--	< 0.01 U	0.3202	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	28.5
MW-37	10Q4	5.427	< 0.01 U	--	< 0.01 U	0.3146	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	285
MW-37	11Q1	7.72	< 0.01 U	--	< 0.01 U	0.33	--	--	--	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	--	293
MW-37	11Q2	67.7	< 0.01 U	--	< 0.01 U	0.34	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	279
MW-37	11Q3	70.3	< 0.01 U	--	< 0.01 U	0.25	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	287

Table C-4
East Plant North Yard
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Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-37	11Q4	78.3	< 0.01 U	--	< 0.01 UJ	0.3	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	296
MW-37	12Q1	46.2	< 0.01 U	--	< 0.01 U	0.28 J	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	282
MW-37	12Q3	117	< 0.01 U	--	< 0.01 U	0.37	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	176
MW-37	12Q4	55.6	< 0.01 U	--	< 0.01 U	0.23	--	--	--	< 0.061 U	< 0.061 U	0.47	0.12	--	283
MW-37	12Q4	170	< 0.01 U	--	< 0.01 UJ	0.4	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.066 U	--	297
MW-37	13Q2	117	< 0.01 U	--	< 0.01 U	0.28	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	304
MW-37	13Q4	293	< 0.01 U	--	< 0.01 U	0.28	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	290
MW-37	14Q2	351	< 0.01 U	--	< 0.01 U	0.27	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	299
MW-37	14Q4	473 J	< 0.01 U	--	< 0.01 U	0.3	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	289
MW-37	15Q3	64.4	< 0.01 U	--	< 0.01 U	0.3	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	296
MW-37	15Q4	96	< 0.01 U	--	< 0.01 U	0.33	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	314
MW-37	16Q2	29.4	< 0.005 U	--	--	0.279	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	308
MW-37	17Q1	29.2	< 0.005 U	--	< 0.01 U	0.263	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	285
MW-37	17Q2	59.1	< 0.005 U	--	< 0.01 U	2.16	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	287
MW-37	18Q1	80.6	< 0.005 U	--	< 0.01 U	0.275	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	319
MW-37	18Q2	19	< 0.005 U	--	< 0.01 U	0.39	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	272
MW-37	19Q1	300	< 0.005 U	--	< 0.01 U	0.316	--	--	--	< 0.019 U	< 0.019 U	< 0.02 U	< 0.02 U	--	300
MW-37	19Q2	26.6	< 0.005 U	--	< 0.01 UJ	0.324 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	383
MW-37	19Q4	74.7	< 0.005 U	--	< 0.01 U	0.321	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	354 J
MW-37	20Q2	12.5	0.003 J	--	< 0.01 U	0.59	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	292
MW-37	20Q4	25.2	< 0.005 U	--	< 0.01 U	< 0.5 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	308
MW-37	21Q3	33.7	< 0.005 U	--	< 0.01 U	0.32	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	314
MW-37	21Q4	34.3	< 0.005 U	--	< 0.01 U	0.32	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	308
MW-37	22Q2	45.7	< 0.005 U	--	< 0.01 U	0.229	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	288
MW-37	22Q4	32.8	< 0.005 U	--	< 0.01 U	0.284	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	310
MW-37	23Q2	--	--	< 0.002 U	--	0.317	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	296
MW-37	23Q4	--	--	< 0.006 UJ	--	0.332	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	318
MW-38	99Q1	0.69	< 0.01 U	--	--	0.7	--	--	--	--	--	--	--	< 0.065 U	180
MW-38	99Q2	0.37	< 0.01 U	--	--	0.6	--	--	--	--	--	--	--	< 0.065 U	170
MW-38	99Q3	0.36	< 0.01 U	--	--	0.5	--	--	--	--	--	--	--	< 0.065 U	170
MW-38	99Q4	0.27	< 0.01 U	--	--	0.7	--	--	--	--	--	--	--	< 0.065 U	180
MW-38	00Q1	0.51	< 0.01 U	--	--	0.7	--	--	--	--	--	--	--	< 0.065 U	160
MW-38	00Q2	3.3	< 0.01 U	--	--	0.7	--	--	--	--	--	--	--	< 0.065 U	190
MW-38	00Q3	0.37	< 0.01 U	--	--	0.6	--	--	--	--	--	--	--	< 0.065 U	200
MW-38	00Q4	0.13	< 0.01 U	--	< 0.01 U	0.554	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	178
MW-38	01Q1	0.78	< 0.01 U	--	< 0.01 U	0.671	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	193.82
MW-38	01Q2	0.4	< 0.01 U	--	< 0.01 U	0.764	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	198.34

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Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-38	01Q3	13.47	< 0.01 U	--	< 0.01 U	0.486	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	176.33
MW-38	01Q4	0.48	< 0.01 U	--	< 0.01 U	0.656	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	177.97
MW-38	02Q1	0.73	< 0.01 U	--	< 0.01 U	0.69	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	172.83
MW-38	02Q2	0.86	< 0.01 U	--	< 0.01 U	0.863	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	179
MW-38	02Q3	0.54	< 0.01 U	--	< 0.01 U	0.764	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	163.37
MW-38	02Q4	1.484	< 0.01 U	--	< 0.01 U	0.774	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	184.97
MW-38	03Q1	22.28	< 0.01 U	--	< 0.01 U	1.113	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	183.529
MW-38	03Q2	33.63	< 0.01 U	--	< 0.01 U	1.071	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	0.078	< 0.065 U	< 0.065 U	--	284.14
MW-38	03Q3	36.27	< 0.01 U	--	< 0.01 U	1.361	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	174.89
MW-38	03Q4	116.7	< 0.01 U	--	< 0.01 U	0.698	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	178.18
MW-38	04Q1	106.4	< 0.01 U	--	< 0.01 U	0.835	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	182.09
MW-38	04Q2	43.29	< 0.01 U	--	< 0.01 U	2.686	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	178.39
MW-38	04Q3	106.25	< 0.01 U	--	< 0.01 U	0.814	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	177.15
MW-38	04Q4	148.34	< 0.01 U	--	< 0.01 U	0.911	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	159.68
MW-38	05Q1	109.48	< 0.01 U	--	< 0.01 U	0.7393	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	177.08
MW-38	05Q2	116.51	0.0105	--	< 0.01 U	0.807	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	181.91
MW-38	05Q3	82.35	< 0.01 U	--	< 0.01 U	1.255	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	173.1
MW-38	05Q4	10.798	< 0.01 U	--	< 0.01 U	0.4902	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	201.12
MW-38	06Q1	98.23	< 0.01 U	--	< 0.01 U	0.5365	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	179.74
MW-38	06Q2	34.74	< 0.01 U	--	< 0.01 U	0.7073	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	195.49
MW-38	06Q3	134.6	< 0.01 U	--	< 0.01 U	0.4929	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	179.96
MW-38	06Q4	4.045	< 0.01 U	--	< 0.01 U	0.9198	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	162.09
MW-38	07Q1	48.55	< 0.01 U	--	< 0.01 U	0.7634	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	173.92
MW-38	07Q2	133.3	< 0.01 U	--	< 0.01 U	0.5055	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	178.19
MW-38	07Q3	75.3	< 0.01 U	--	< 0.01 U	0.3882	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	184.7
MW-38	07Q4	165.8	< 0.005 U	--	< 0.005 U	0.6454	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	180
MW-38	08Q1	298	< 0.01 U	--	< 0.01 U	0.5192	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	181
MW-38	08Q2	242.7	< 0.005 U	--	< 0.01 UJ	0.5395	--	--	--	< 0.065 UJ	0.085 J	< 0.065 UJ	< 0.065 UJ	--	182 J
MW-38	08Q3	469.5	< 0.005 U	--	< 0.01 U	0.5061	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	177
MW-38	08Q4	6.278	< 0.005 U	--	< 0.01 U	0.5228	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	166
MW-38	09Q1	161	< 0.005 UJ	--	< 0.006 U	0.35	--	--	--	< 0.18 U	< 0.18 U	< 0.255 U	< 0.255 U	--	182 J
MW-38	09Q2	202 J	< 0.01 U	--	< 0.01 UJ	0.4412	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	152
MW-38	09Q3	156	< 0.01 U	--	< 0.01 U	0.4614	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	151
MW-38	09Q4	36.06	< 0.01 U	--	< 0.01 U	0.4708	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	174
MW-38	10Q1	4.413	< 0.01 U	--	< 0.01 UJ	0.4368	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	180
MW-38	10Q2	100.5	< 0.01 U	--	< 0.01 U	0.44	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	163
MW-38	10Q3	2.151	< 0.01 U	--	< 0.01 U	0.5451	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	40.7

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-38	10Q4	161.6	< 0.01 U	--	< 0.02 U	0.4898	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	171
MW-38	11Q1	822	< 0.01 U	--	< 0.01 U	0.49	--	--	--	< 0.0677 U	< 0.0677 U	< 0.0677 U	< 0.0677 U	--	177
MW-38	11Q2	368	< 0.01 U	--	< 0.01 U	0.49	--	--	--	< 0.0677 U	0.122 AE	< 0.0677 U	< 0.0677 U	--	176
MW-38	11Q3	352	< 0.01 U	--	< 0.01 U	0.41	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	179
MW-38	11Q4	251	< 0.01 U	--	< 0.01 UJ	0.44	--	--	--	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	--	178
MW-38	12Q1	126	< 0.01 U	--	< 0.01 U	0.49 J	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	176
MW-38	12Q3	102	< 0.01 U	--	< 0.01 U	0.43	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	120
MW-38	12Q4	104	< 0.01 U	--	< 0.01 U	0.41	--	--	--	< 0.061 U	< 0.061 U	0.16 U	< 0.061 U	--	169
MW-38	12Q4	105	< 0.01 U	--	< 0.01 UJ	0.47	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	174
MW-38	13Q2	39.4	< 0.01 U	--	< 0.01 U	0.46	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	183
MW-38	13Q4	83.5	< 0.01 U	--	< 0.01 U	0.46	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	178
MW-38	14Q2	105	< 0.01 U	--	< 0.01 U	0.45	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	174
MW-38	14Q4	179 J	< 0.01 U	--	< 0.01 U	0.48	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	174
MW-38	15Q3	41.9	< 0.01 U	--	< 0.01 U	0.49	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	176
MW-38	14Q4	179 J	< 0.01 U	--	< 0.01 U	0.48	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	174
MW-38	15Q3	41.9	< 0.01 U	--	< 0.01 U	0.49	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	176
MW-38	15Q4	26.8	< 0.01 U	--	< 0.01 U	0.53	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	185
MW-38	16Q2	44.9	< 0.005 U	--	--	0.478	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	202
MW-38	17Q1	29.6	< 0.005 U	--	< 0.01 U	0.47	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	186
MW-38	17Q2	40.8	0.004 J	--	< 0.01 U	1.77	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	121
MW-38	18Q1	34.7	< 0.005 U	--	< 0.01 U	0.435	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	174
MW-38	18Q2	15	< 0.005 U	--	< 0.01 UJ	0.579	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	187
MW-38	19Q1	44.2	< 0.005 U	--	< 0.01 U	0.4	--	--	--	< 0.02 U	< 0.02 U	< 0.021 U	< 0.021 U	--	182
MW-38	19Q2	11.2	< 0.005 U	--	< 0.01 UJ	0.475 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	213
MW-38	19Q4	39.1	< 0.005 U	--	< 0.01 U	0.484	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	219 J
MW-38	20Q2	9.6	< 0.005 U	--	< 0.01 U	0.756	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	185
MW-38	20Q4	16.2	< 0.005 U	--	< 0.01 U	0.453 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	182
MW-38	21Q2	44.8	< 0.005 U	--	< 0.01 U	0.48	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	189
MW-38	21Q4	34.6	< 0.005 U	--	< 0.01 U	0.513	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	190
MW-38	22Q2	36.7	< 0.005 U	--	< 0.01 U	0.417	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	178
MW-38	22Q4	11.7	< 0.005 U	--	< 0.01 U	0.462	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	188
MW-38	23Q2	--	--	< 0.002 U	--	0.773	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	183
MW-38	23Q4	--	--	< 0.006 UJ	--	0.494	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	198
MW-41	06Q2	--	< 0.01 U	--	< 0.01 U	0.4405	--	--	--	--	--	--	--	--	130.96
MW-41	06Q3	--	< 0.01 U	--	< 0.01 U	0.4168	--	--	--	--	--	--	--	--	178.04
MW-41	06Q4	17.412	< 0.01 U	--	< 0.01 U	0.4099	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	167.49
MW-41	07Q1	6.79	< 0.01 U	--	< 0.01 U	0.5423	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	169.64
MW-41	07Q2	13.92	< 0.01 U	--	< 0.01 U	0.3869	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	163.46
MW-41	07Q3	49.36	< 0.01 U	--	< 0.01 U	0.2851	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	192.71

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East Plant North Yard
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Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-41	07Q4	61.55	< 0.005 U	--	0.008	0.3982	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	180
MW-41	08Q1	21.4	< 0.01 U	--	< 0.01 UJ	0.3603	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	206
MW-41	08Q2	66.92	< 0.005 U	--	0.018 R	0.5226	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	922
MW-41	08Q3	2.224	< 0.005 U	--	< 0.01 U	0.334	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	178
MW-41	08Q4	24.06	< 0.005 U	--	< 0.01 U	0.345	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	178
MW-41	09Q1	8.02	< 0.005 R	--	< 0.006 U	0.28	--	--	--	< 0.176 U	< 0.176 U	< 0.25 U	< 0.25 U	--	198 J
MW-41	09Q2	7.9 J	< 0.01 U	--	< 0.01 U	0.3448	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	173
MW-41	09Q3	5.42	< 0.01 U	--	< 0.01 U	0.3228	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	196
MW-41	09Q4	9.81	< 0.01 U	--	0.023	0.3409	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	218
MW-41	10Q1	5.563	< 0.01 U	--	< 0.01 UJ	0.2835	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	305
MW-41	10Q2	44.48	< 0.01 U	--	< 0.01 U	0.324 J	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	336
MW-41	10Q3	5.821	< 0.01 U	--	< 0.01 U	0.3902	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	382
MW-41	10Q4	4.456	< 0.01 U	--	< 0.01 U	0.3768	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	458
MW-41	11Q1	20.9 J	< 0.01 U	--	< 0.01 U	0.37	--	--	--	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	--	492
MW-41	11Q2	11.5	< 0.01 U	--	< 0.01 U	0.38	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	483
MW-41	11Q3	19.9	< 0.01 U	--	< 0.01 U	0.24	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	< 0.049 U	--	509
MW-41	11Q4	11.4 J	< 0.01 U	--	< 0.01 UJ	0.29	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.066 U	--	538
MW-41	12Q1	11.8	< 0.01 U	--	< 0.01 U	0.28 J	--	--	--	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	< 0.065 UJ	--	527
MW-41	12Q3	67.5	< 0.01 UJ	--	< 0.01 U	0.39	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	514
MW-41	12Q4	16.3 J	< 0.01 U	--	< 0.01 U	0.16	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	510
MW-41	12Q4	13.3	< 0.01 U	--	< 0.01 UJ	0.28	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	508
MW-41	13Q2	31.7	< 0.01 U	--	< 0.01 U	0.23	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	538
MW-41	13Q4	26.6	< 0.01 U	--	< 0.01 U	0.26	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	490
MW-41	14Q2	36.3	< 0.01 U	--	< 0.01 U	0.23	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	511
MW-41	14Q4	11.1	< 0.01 U	--	< 0.01 U	0.22	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	462
MW-41	15Q3	8.99	< 0.01 U	--	< 0.01 U	0.25 J	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	502
MW-41	15Q4	30.3	< 0.01 U	--	< 0.01 U	0.26	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U	--	523
MW-41	16Q2	0.183	< 0.005 U	--	--	0.238	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	441
MW-41	16Q4	17.9	0.002 J	--	< 0.01 U	0.168	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	485
MW-41	17Q2	9.94	< 0.005 U	--	< 0.01 U	0.609	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	461
MW-41	18Q1	3.02	< 0.005 U	--	< 0.01 U	0.205	--	--	--	< 0.065 U	< 0.065 U	0.068	< 0.065 U	--	470
MW-41	18Q2	6.47	< 0.005 U	--	< 0.01 UJ	0.214	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	480
MW-41	19Q1	4.87	< 0.005 U	--	< 0.01 U	0.221	--	--	--	< 0.019 U	< 0.019 U	< 0.02 U	< 0.02 U	--	434
MW-41	19Q2	10.6	0.001 J	--	< 0.01 UJ	0.23	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	447
MW-41	19Q4	2.71	< 0.005 U	--	< 0.01 U	0.202	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	403
MW-41	20Q2	5.35	< 0.005 U	--	< 0.01 U	0.385	--	--	--	< 0.019 U	< 0.019 U	< 0.019 U	< 0.019 U	--	359
MW-41	20Q4	8.66	< 0.005 U	--	< 0.01 U	< 0.5 U	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	335

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Massena East, Massena, New York
Alcoa Corporation

	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-41	21Q3	5.82	< 0.005 U	--	< 0.01 U	0.201	--	--	--	< 0.021 U	< 0.021 U	< 0.021 U	< 0.021 U	--	333
MW-41	21Q4	2.95	< 0.005 U	--	< 0.01 U	0.218	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	309
MW-41	22Q2	4.71	< 0.005 U	--	< 0.01 U	0.167	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	284
MW-41	22Q4	2	< 0.005 U	--	< 0.01 U	0.19	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	315
MW-41	23Q2	--	--	< 0.002 U	--	0.232	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	284
MW-41	23Q4	--	--	< 0.006 UJ	--	0.234	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	282
MW-48	23Q4	--	--	0.031	--	0.193	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	138
MW-49	23Q4	--	--	0.031	--	1.670	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	132
MW-50	23Q4	--	--	0.038	--	0.373	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	362
MW-51	23Q4	--	--	0.038	--	0.207	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	278
MW-52	23Q4	--	--	0.032	--	0.207	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	278
MW-54	23Q4	--	--	< 0.006 U	--	0.492	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	185
MW-55	23Q4	--	--	< 0.006 U	--	0.306	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	157

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	Chemical	Aluminum	Cyanide	Cyanide (Free)	Cyanide (WAD)	Fluoride	PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCBs	Sulfate (as SO4)
	CAS No.	7429-90-5	57-12-5	FREE CN	WDCN	16984-48-8	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	1336-36-3	14808-79-8
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
Location	Quarter	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result

Notes:
µg/L = micrograms per liter
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample
mg/L = milligrams per liter
PCB = polychlorinated biphenyl
R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
U = The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ = The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
WAD = weak acid dissociable
WDCN = weak dissociable cyanide

Table C-5
East Plant Sample Results at Rectifier Pond
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Collection Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
5/7/97	0.09 U	0.2 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.2 U
7/2/97	0.1 U	0.2 U	0.1 U	0.1 U	0.097J	0.1 U	0.1 U	0.097J
8/11/97	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
8/21/97	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
9/20/97	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
9/29/97	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/27/97	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
11/3/97	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
11/7/97	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
December 1997	No samples taken							
January 1998	No samples taken							
February 1998	No samples taken							
March 1998	No samples taken							
April 1998	No samples taken							
May 1998	No samples taken							
6/3/98	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/6/98	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
8/3/98	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
9/16/98	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/6/98	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
11/11/98	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
12/9/98	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
January 1999	No samples taken							
2/23/99	0.065 U	0.065 U	0.065 U	0.065 U	0.068	0.065 U	0.065 U	0.068
2/23/99	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
2/23/99	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
3/11/99	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/22/99	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
5/10/99	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
5/27/99	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
8/26/99	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/28/99	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/27/00	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U
4/26/00	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U
7/10/00	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
11/10/00	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
2/9/01	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/26/01	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
7/10/01	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/2/01	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/2/02	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/2/02	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/2/02	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/19/02	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/7/03	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/1/03	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/1/03	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U

Table C-5
East Plant Sample Results at Rectifier Pond
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Collection Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
10/7/03	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/6/04	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/6/04	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/6/04	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/18/04	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	---
1/4/05	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	---
4/5/05	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	---
7/6/05	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	---
10/18/04	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/4/05	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/5/05	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/6/05	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/4/05	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/3/06	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/4/06	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/5/06	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/3/06	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/2/07	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/3/07	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/9/07	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/8/07	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/4/08	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/1/08	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/9/08	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/7/08	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/6/09	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/7/09	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/7/09	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/6/09	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/5/10	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/6/10	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/6/10	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/4/10	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/4/11	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/5/11	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
7/5/11	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/4/11	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1/24/12	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
4/23/12	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
10/2/12	---	---	---	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U

Notes:

1. Sampling discontinued per letter from NYSDEC dated January 3, 2023

--- = analysis was not performed

J = estimated

PCB = polychlorinated biphenyl

U = not detected at the value listed

Table C-6
East Plant Field Monitoring
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

	Parameter	ORP	pH	Specific Conductance	Temperature	Turbidity
	Unit	mV	s.u.	mS/cm	°C	NTU
Sample ID	Date	Results				
East Plant BMP						
MW-11SR-0623	06/13/2023	163.9	7.51	1.279	12.4	49
MW-11SR-1223	12/14/2023	153.7	7.36	1.064	7.8	3.61
MW-12S-0623	06/13/2023	164.3	7.53	2.764	11.6	20
MW-12S-0823	08/23/2023	221.6	7.73	2.936	16.8	18.4
MW-12S-1223	12/15/2023	148.4	7.46	3.02	9.1	7.41
MW-13S-0623	06/13/2023	204.4	7.27	4.511	10.1	3
MW-13S-0823	08/23/2023	230.2	7.27	4.97	15.5	18.8
MW-13S-1223	12/18/2023	304.4	7.21	1.712	8.3	0.96
MW-14S-0623	06/13/2023	195.6	7.64	1.071	11.2	23
MW-14S-1223	12/18/2023	182	7.71	1.068	9.6	6.48
MW-15S-87-0623	06/13/2023	152.3	7.67	0.598	12.3	398
MW-15S-87-1223	12/20/2023	98.8	7.49	0.759	7	3.58
MW-20-85S-0623	06/13/2023	-27.7	12.1	1.778	11.4	3
MW-20-85S-1223	12/28/2023	-14.6	12.37	1.948	7	21.3
MW-22-85S-0623	06/28/2023	197.3	7.46	1.436	12.5	26
MW-22-85S-1223	12/22/2023	196.7	7.37	1.723	3.8	17.1
MW-23-85S-0623	06/13/2023	180.6	7.44	0.996	11.1	201
MW-23-85S-0823	08/23/2023	224.6	7.46	0.99	13.3	1020
MW-23-85S-1223	12/22/2023	180.3	7.25	1.269	3	231
MW-30S-0623	06/13/2023	169.3	7.49	0.773	11.2	30
MW-30S-1223	12/13/2023	107.2	6.85	0.781	5.9	2.78
MW-31SR-0623	06/13/2023	165.9	7.82	0.659	10.8	172
MW-31SR-1223	12/21/2023	113.8	7.53	0.855	6.3	5.35
PZ-44-0623	06/28/2023	-59.9	7.23	2.189	15.6	800
PZ-44-1223	12/20/2023	114.7	7.53	0.738	3.1	0.6
PZ-45-0623	06/28/2023	-84.6	7.2	1.766	15.4	289

Table C-6
East Plant Field Monitoring
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

	Parameter	ORP	pH	Specific Conductance	Temperature	Turbidity
	Unit	mV	s.u.	mS/cm	°C	NTU
Sample ID	Date	Results				
PZ-45-1223	12/20/2023	222	7.32	1.56	5.3	6.6
PZ-46-0623	06/28/2023	10.5	7.34	2.022	18.8	800
PZ-46-1223	12/20/2023	216.3	7.38	1.665	3.8	12.6
East Plant Landfill						
MW-10S-0323	03/30/2023	251.1	7.45	0.677	6.9	25
MW-10S-0623	06/13/2023	206.8	7.51	0.674	12.7	19
MW-10S-0923	09/20/2023	210.1	7.42	0.676	13.8	2.11
MW-10S-1223	12/12/2023	130.1	7.54	0.355	7	1.34
MW-39S-0323	03/30/2023	204.4	7.34	0.799	5.8	24
MW-39S-0623	06/13/2023	122.3	7.23	0.731	12	49
MW-39S-0923	09/20/2023	91.4	7.08	0.964	11.9	17
MW-39S-1223	12/12/2023	-12.2	7.14	0.83	7.8	2.25
MW-40S-0323	04/06/2023	206.2	7.82	0.828	8.1	4
MW-40S-0623	06/13/2023	160.4	7.25	1.115	12.5	1
MW-40S-0923	09/20/2023	180.2	7.33	1.183	16.6	3.97
MW-40S-1223	12/13/2023	167.4	7.02	1.367	5.8	1.59
MW-45-0323	03/30/2023	197.1	7.15	1.351	5.2	11
MW-45-0623	06/13/2023	141.2	7.06	1.424	12.2	11
MW-45-0923	09/20/2023	143.8	7.21	1.564	13.7	2.03
MW-45-1223	12/12/2023	94.9	7.12	1.295	7.11	3.53
East Plant North Yard						
MW-16S-0623	06/28/2023	128.5	8.12	0.88	12.3	17
MW-16S-1223	12/14/2023	189.3	7.74	0.783	10.8	2.5
MW-17S-0623	06/28/2023	168.6	7.54	0.87	11.4	28
MW-17S-1223	12/19/2023	142.9	7.18	0.908	5	2
MW-18S-0623	06/28/2023	108.4	7.98	1.206	12.5	4
MW-18S-1223	12/13/2023	232.1	7.59	0.762	9.7	0.02

Table C-6
East Plant Field Monitoring
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

	Parameter	ORP	pH	Specific Conductance	Temperature	Turbidity
	Unit	mV	s.u.	mS/cm	°C	NTU
Sample ID	Date	Results				
MW-19S-0623	06/28/2023	120.4	7.56	0.743	11.9	3
MW-19S-1223	12/20/2023	130.7	7.47	0.916	8.7	1.95
MW-36-0623	06/28/2023	164.5	8.6	1.959	11.1	800
MW-36-1223	12/22/2023	210	8.37	2.723	1.7	776
MW-37-0623	06/28/2023	158.9	8.37	0.461	11.1	800
MW-37-1223	12/26/2023	-55.5	7.4	0.803	10.9	419
MW-38-0623	06/28/2023	165.1	8.26	0.465	11.7	800
MW-38-1223	12/27/2023	137.5	7.96	0.617	5.2	621
MW-41-0623	06/28/2023	145.3	7.71	0.885	11.9	800
MW-41-1223	12/27/2023	132.6	7.4	1.158	7.4	863
East Plant PSP						
MW-03S-0623	06/28/2023	119.3	8.09	0.89	14.5	517
MW-03S-1223	12/20/2023	159.3	7.65	0.567	9.3	14.7
MW-26S-0623	06/28/2023	76.3	7.42	0.738	11.7	800
MW-26S-1223	12/14/2023	217.4	7.43	0.646	7.6	4.3
MW-27S-0623	06/28/2023	147.3	7.3	6.78	12.6	9
MW-27S-1223	12/20/2023	186.6	7.23	8.15	8.3	3.7
MW-28S-0623	06/28/2023	80.3	8.21	0.84	12.6	55
MW-28S-1223	12/13/2023	209	8.1	0.729	8.5	0.02
MW-33S-0623	06/28/2023	14.7	7.64	1.482	12.5	371
MW-33S-1223	12/15/2023	116.3	7.45	1.88	10.4	1.07
MW-34S-0623	06/28/2023	179	7.85	2.201	12.2	96
MW-34S-1223	12/20/2023	159.7	7.49	2.842	5.8	7.44
MW-35SR-0623	06/28/2023	190.5	7.28	1.607	11.3	800
MW-35SR-1223	12/21/2023	144.7	7.12	1.814	3.6	136
MW-42-0623	06/28/2023	174.3	8.08	2.702	11.4	239
MW-42-1223	12/27/2023	159.5	7.59	3.457	9.8	241

Table C-6
East Plant Field Monitoring
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

	Parameter	ORP	pH	Specific Conductance	Temperature	Turbidity
	Unit	mV	s.u.	mS/cm	°C	NTU
Sample ID	Date	Results				
MW-43-0623	06/28/2023	164.8	7.19	0.766	11.5	297
MW-43-1223	12/14/2023	106.7	6.91	0.901	8.5	19.5
MW-44-0623	06/28/2023	161.4	7.19	0.711	11.3	5
MW-44-1223	12/14/2023	109.1	6.9	0.878	9.2	0.02

Notes:

°C = degrees Celcius

BMP = Black Mud Pond

mS/cm = milliSiemens per centimeter

mV = millivolt

NTU = nephelometric turbidity unit

ORP = oxidation reduction potential

PSP = Potliner Storage Pad

s.u. = standard unit

Table C-7
East Plant Landfill Groundwater Extraction System Sampling Results
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Date	EW-01		EW-02		EW-04		EW-05		EW-06	
	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)
11/14/2023	0.27	0.01	0.29	0.0249	0.22	0.0871	0.12	0.0606	0.65	0.867
8/15/2023	0.29	0.008	0.33	0.024	0.23	0.0744	0.14	0.0498	0.95	0.59
5/9/2023	0.27	0.0070	0.35	0.0279	0.22	0.0933	0.11	0.0557	0.64	0.698
2/14/2023	0.34	0.0129	1.61	0.0464	0.31	0.13	0.14	0.0879	0.64	0.655
12/1/2022	NS	NS	NS	NS	NS	NS	0.1 U	0.034	0.58	0.80
11/15/2022	0.28	0.05 U	0.30	0.0321	0.17	0.0777	NS	NS	NS	NS
8/9/2022	0.27	0.005	0.31	0.0255	0.22	0.0844	0.1 U	0.0491	0.94	0.413
5/10/2022	0.21	0.0074	0.30	0.0250	0.21	0.0805	0.1 U	0.0461	0.66	0.0354
2/15/2022	0.27	0.0085	0.34	0.0307	0.22	0.0861	0.12	0.0573	0.77	0.434
11/16/2021	0.28	0.0075	1.26	0.0356	0.23	0.0911	0.13	0.0625	0.63	0.503
8/10/2021	0.36	0.005 U	0.53	0.0246	0.52	0.0707	0.43	0.0419	0.89	0.386
5/5/2021	0.28	0.0062	1.23	0.0461	0.24	0.0962	0.13	0.0688	0.66	0.456
2/9/2021	0.25	0.005 U	0.31	0.039	0.3	0.0673	0.3	0.0527	0.69	0.644
11/19/2020	0.42	0.0091	0.34	0.078	0.32	0.102	0.22	0.0637	0.61	0.636
8/10/2020	0.12	0.0055	0.1 U	0.0325	0.1 U	0.0978	0.1 U	0.0571	0.4	0.564
5/14/2020	0.27	0.005 U	0.28	0.0504	0.24	0.144	0.1 U	0.0607	0.86	0.513
2/12/2020	0.38	0.01 U	0.39	0.0298	0.35	0.0915	0.13	0.0439	0.99	0.723
12/11/2018	0.36	0.01 U	1.57	0.039	0.33	0.109	0.21	0.034	0.51	0.723
8/14/2018	0.26	0.01 U	0.340	0.021	0.17	0.088	0.14	0.041	0.75	0.638
5/8/2018	0.35	0.01 U	2.050	0.033	0.300	0.100	0.1 U	0.034	0.52	0.643
2/22/2018	0.24	0.01 U	0.86	0.023	0.16	0.103	0.1	0.044	0.43	0.719
11/21/2017	0.23	0.01 U	1.57	0.067	0.16	0.103	0.11	0.041	0.34	0.684
8/8/2017	0.26	0.01 U	NS	NS	0.2	0.101	0.12	0.036	0.71	0.606
5/9-6/15/2017	0.26	0.01 U	0.490	0.024	0.170	0.096	0.11	0.028	0.29	0.574
3/28/2017	0.25	0.01 U	NS	NS	0.16	0.104	0.12	0.033	0.57	0.681
11/22/2016	0.31	0.01 U	1.1	0.053	0.23	0.113	0.15	0.034	0.29	0.686
8/9/2016	0.24	0.01 U	NS	NS	0.19	0.104	0.12	0.032	0.64	0.586
5/11/2016	0.27	0.01 U	NS	NS	NS	NS	0.13	0.032	0.57	0.54
2/10/2016	0.32	0.01 U	0.96	0.040	0.21	0.106	0.15	0.029	0.36	0.556
11/11/2015	0.310	0.01 U	NS	NS	0.200	0.084	0.140	0.030	0.290	0.578
8/12/2015	0.290	0.01 U	1.630	0.071	0.190	0.097	NS	NS	0.310	0.475
6/17/2015	NS	NS	NS	NS	0.240	0.098	NS	NS	NS	NS
5/13/2015	0.250	0.035	0.280	0.01 U	NS	NS	NS	NS	0.230	0.098
11/14/2014	0.220	0.01 U	0.250	0.040	0.110	0.150	0.100	0.027	0.510	0.541
8/12/2014	0.240	0.01 U	NS	NS	0.130	0.098	0.140	0.027	0.460	0.477
5/19/2014	0.260	0.01 U	NS	NS	0.210	0.102	0.150	0.024	0.210	0.472
2/11/2014	0.280	0.01 U	NS	NS	0.230	0.112	0.160	0.025	0.250	0.523
11/13/2013	0.27	0.010	---	---	0.23	0.12	0.18	0.031	0.24	0.451
10/8/2013	0.27	0.010	---	---	0.270	0.124	0.23	0.028	0.25	0.512
9/10/2013	0.25	0.010	---	---	0.19	0.106	0.16	0.018	0.28	0.475
8/13/2013	0.290	0.010	---	---	0.250	0.114	*0.43* [1.]	*0.449* [1.]	*0.27* [1.]	*0.021* [1.]
7/10/2013	0.280	0.010	---	---	0.280	0.092	0.210	0.019	0.25	0.445
6/12/2013	0.160	0.010	---	---	0.260	0.142	0.210	0.020	0.250	0.418
5/14/2013	0.230	0.010	---	---	0.160	0.096	0.160	0.023	0.180	0.405
4/9/2013	0.220	0.010	---	---	0.140	0.090	0.200	0.033	0.150	0.420

Table C-7
East Plant Landfill Groundwater Extraction System Sampling Results
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Date	EW-01		EW-02		EW-04		EW-05		EW-06	
	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)	Fluoride (mg/L)	Total Cyanide (mg/L)
3/12/2013	0.290	0.010	---	---	0.170	0.102	0.250	0.029	0.260	0.418
2/12/2013	0.310	0.010	---	---	0.270	0.124	0.350	0.041	0.240	0.446
1/8/2013	0.250	0.010	0.150	0.036	0.310	0.164	0.490	0.037	0.270	0.426

Notes:

--- = Pump was broken, no measurement taken

1. Due to the inconsistancy of results, it is anticipated that the lab mislabeled the samples during testing; these results and the results for each EW should be switched

mg/L = milligrams per liter

NS = not sampled

U = not detected at the value listed

Appendix D Statistical Analysis

Appendix D1 Historical

Appendix D
Statistical Analysis - Mann-Kendall Analysis
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Area	Location	Parameter	Unit	Full					Post Closure				
				Number of Samples	Number of Detections	Number of Non-Detects	p-value	Trend	Number of Samples	Number of Detections	Number of Non-Detects	p-value	Trend
BMP	MW-11SR	Fluoride	mg/L	77	74	3	0.725	Stable	19	18	1	0.462	No Trend
BMP	MW-11SR	Sulfate (as SO4)	mg/L	78	78	0	<0.001	Decreasing	19	19	0	0.162	No Trend
BMP	MW-12S	Cyanide	mg/L	74	73	1	<0.001	Decreasing	19	19	0	0.460	Stable
BMP	MW-12S	Fluoride	mg/L	76	76	0	<0.001	Increasing	19	19	0	0.086	Probably Decreasing
BMP	MW-12S	Sulfate (as SO4)	mg/L	77	77	0	<0.001	Increasing	19	19	0	0.421	Stable
BMP	MW-13S	Fluoride	mg/L	78	77	1	0.836	Stable	19	18	1	0.600	Stable
BMP	MW-13S	Sulfate (as SO4)	mg/L	78	78	0	0.753	Stable	19	19	0	0.059	Probably Decreasing
BMP	MW-14S	Fluoride	mg/L	47	47	0	<0.001	Decreasing	19	19	0	0.421	Stable
BMP	MW-14S	Sulfate (as SO4)	mg/L	47	47	0	0.029	Decreasing	19	19	0	0.462	Stable
BMP	MW-15S-87	Fluoride	mg/L	76	76	0	<0.001	Increasing	18	18	0	<0.001	Increasing
BMP	MW-15S-87	Sulfate (as SO4)	mg/L	76	76	0	<0.001	Decreasing	18	18	0	0.034	Decreasing
BMP	MW-20-85-S	Fluoride	mg/L	42	38	4	<0.001	Decreasing	19	17	2	0.599	Stable
BMP	MW-20-85-S	Sulfate (as SO4)	mg/L	42	42	0	0.069	Probably Increasing	19	19	0	0.074	Probably Increasing
BMP	MW-22-85-S	Fluoride	mg/L	39	33	6	0.377	Stable	19	18	1	0.649	Stable
BMP	MW-22-85-S	Sulfate (as SO4)	mg/L	39	39	0	<0.001	Decreasing	19	19	0	0.012	Decreasing
BMP	MW-23-85-S	Fluoride	mg/L	43	41	2	0.983	Stable	19	18	1	0.624	Stable
BMP	MW-23-85-S	Sulfate (as SO4)	mg/L	43	43	0	0.067	Probably Increasing	19	19	0	0.046	Increasing
BMP	MW-30S	Fluoride	mg/L	46	46	0	0.045	Decreasing	18	18	0	0.255	Stable
BMP	MW-30S	Sulfate (as SO4)	mg/L	46	46	0	0.977	Stable	18	18	0	0.596	Stable
BMP	MW-31SR	Fluoride	mg/L	77	77	0	0.604	Stable	19	19	0	0.624	Stable
BMP	MW-31SR	Sulfate (as SO4)	mg/L	77	77	0	0.053	Probably Increasing	19	19	0	0.833	Stable
BMP	PZ-44	Fluoride	mg/L	36	36	0	0.058	Probably Decreasing	18	18	0	0.940	Stable
BMP	PZ-44	Sulfate (as SO4)	mg/L	35	35	0	0.037	Increasing	18	18	0	0.970	Stable
BMP	PZ-45	Fluoride	mg/L	32	32	0	0.092	Probably Increasing	19	19	0	1.000	Stable
BMP	PZ-45	Sulfate (as SO4)	mg/L	30	30	0	0.004	Increasing	19	19	0	0.779	Stable
BMP	PZ-46	Fluoride	mg/L	12	12	0	0.013	Increasing	5	5	0	1.000	Stable
BMP	PZ-46	Sulfate (as SO4)	mg/L	9	9	0	0.076	Probably Increasing	5	5	0	0.806	Stable
ILF	MW-10S	Fluoride	mg/L	107	84	23	0.066	Probably Decreasing	37	35	2	0.069	Probably Decreasing
ILF	MW-10S	Sulfate (As SO4)	mg/L	107	107	0	<0.001	Decreasing	37	37	0	<0.001	Decreasing
ILF	MW-39S	Cyanide	mg/L	93	91	2	<0.001	Decreasing	34	34	0	<0.001	Decreasing
ILF	MW-39S	Fluoride	mg/L	99	99	0	<0.001	Increasing	38	38	0	0.004	Increasing
ILF	MW-39S	Sulfate (as SO4)	mg/L	98	98	0	<0.001	Increasing	38	38	0	0.125	Stable
ILF	MW-39S	WAD Cyanide	mg/L	87	41	46	--	Greater than 50% ND	32	9	23	--	Greater than 50% ND
ILF	MW-40S	Fluoride	mg/L	96	91	5	<0.001	Decreasing	37	37	0	0.204	Stable
ILF	MW-40S	Sulfate (as SO4)	mg/L	96	96	0	<0.001	Decreasing	37	37	0	0.116	Stable
ILF	MW-45	Fluoride	mg/L	71	69	2	<0.001	Decreasing	38	36	2	0.013	Decreasing
ILF	MW-45	Sulfate (as SO4)	mg/L	71	71	0	<0.001	Increasing	38	38	0	0.003	Increasing
ILF	SLPWETE	Fluoride	mg/L	35	34	1	1.000	Stable	15	15	0	1.000	Stable

Appendix D
Statistical Analysis - Mann-Kendall Analysis
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Area	Location	Parameter	Unit	Full					Post Closure				
				Number of Samples	Number of Detections	Number of Non-Detects	p-value	Trend	Number of Samples	Number of Detections	Number of Non-Detects	p-value	Trend
ILF	SLPWETE	Sulfate (as SO4)	mg/L	33	29	4	0.221	No Trend	15	15	0	0.843	No Trend
ILF	SLPWETW	Fluoride	mg/L	33	33	0	0.065	Probably Decreasing	15	15	0	0.038	Decreasing
ILF	SLPWETW	Sulfate (as SO4)	mg/L	31	26	5	0.708	No Trend	15	14	1	0.373	No Trend
NY	FDRAIN1	Fluoride	mg/L	49	49	0	<0.001	Decreasing	19	19	0	0.247	Stable
NY	FDRAIN1	Sulfate (as SO4)	mg/L	47	47	0	<0.001	Decreasing	19	19	0	0.042	Decreasing
NY	MW-16S	Fluoride	mg/L	78	78	0	<0.001	Decreasing	19	19	0	0.363	Stable
NY	MW-16S	Sulfate (as SO4)	mg/L	78	78	0	<0.001	Decreasing	19	19	0	0.016	Decreasing
NY	MW-17S	Fluoride	mg/L	77	76	1	0.010	Decreasing	18	18	0	0.111	Stable
NY	MW-17S	Sulfate (as SO4)	mg/L	77	77	0	<0.001	Decreasing	18	18	0	0.909	Stable
NY	MW-18S	Cyanide	mg/L	75	74	1	<0.001	Decreasing	18	18	0	0.120	Stable
NY	MW-18S	Fluoride	mg/L	78	78	0	<0.001	Decreasing	19	19	0	<0.001	Decreasing
NY	MW-18S	Sulfate (as SO4)	mg/L	78	78	0	<0.001	Decreasing	19	19	0	0.025	Decreasing
NY	MW-18S	WAD Cyanide	mg/L	67	7	60	--	Greater than 50% ND	17	4	13	--	Greater than 50% ND
NY	MW-19S	Fluoride	mg/L	78	78	0	0.202	Stable	19	19	0	0.023	Decreasing
NY	MW-19S	Sulfate (as SO4)	mg/L	78	78	0	<0.001	Decreasing	19	19	0	0.004	Decreasing
NY	MW-36	Fluoride	mg/L	78	78	0	<0.001	Decreasing	19	19	0	0.039	Decreasing
NY	MW-36	Sulfate (as SO4)	mg/L	78	78	0	<0.001	Decreasing	19	19	0	<0.001	Decreasing
NY	MW-37	Fluoride	mg/L	78	77	1	<0.001	Decreasing	19	18	1	1.000	No Trend
NY	MW-37	Sulfate (as SO4)	mg/L	78	78	0	<0.001	Increasing	19	19	0	0.343	Stable
NY	MW-38	Fluoride	mg/L	78	78	0	<0.001	Decreasing	19	19	0	0.972	Stable
NY	MW-38	Sulfate (as SO4)	mg/L	78	78	0	0.264	Stable	19	19	0	0.132	Stable
NY	MW-41	Fluoride	mg/L	49	48	1	<0.001	Decreasing	19	18	1	0.345	Stable
NY	MW-41	Sulfate (as SO4)	mg/L	49	49	0	0.042	Increasing	19	19	0	<0.001	Decreasing
PSP	MW-03S	Cyanide	mg/L	66	66	0	<0.001	Decreasing	12	12	0	0.034	Decreasing
PSP	MW-03S	Fluoride	mg/L	68	68	0	0.723	Stable	13	13	0	0.001	Decreasing
PSP	MW-03S	Sulfate (as SO4)	mg/L	68	68	0	<0.001	Decreasing	13	13	0	0.006	Decreasing
PSP	MW-03S	WAD Cyanide	mg/L	55	53	2	<0.001	Decreasing	11	9	2	0.015	Decreasing
PSP	MW-26S	Fluoride	mg/L	82	82	0	<0.001	Increasing	19	19	0	0.019	Decreasing
PSP	MW-26S	Sulfate (as SO4)	mg/L	82	82	0	<0.001	Decreasing	19	19	0	0.019	Decreasing
PSP	MW-26S	WAD Cyanide	mg/L	67	2	65	--	Greater than 50% ND	16	1	15	--	Greater than 50% ND
PSP	MW-27S	Cyanide	mg/L	74	73	1	<0.001	Decreasing	16	16	0	0.002	Decreasing
PSP	MW-27S	Fluoride	mg/L	78	77	1	<0.001	Decreasing	19	18	1	0.069	Probably Decreasing
PSP	MW-27S	Sulfate (as SO4)	mg/L	78	78	0	0.822	Stable	19	19	0	0.162	Stable
PSP	MW-28S	Fluoride	mg/L	78	78	0	<0.001	Decreasing	19	19	0	0.649	Stable
PSP	MW-28S	Sulfate (as SO4)	mg/L	78	78	0	<0.001	Decreasing	19	19	0	0.019	Decreasing
PSP	MW-35SR	Fluoride	mg/L	41	41	0	<0.001	Increasing	19	19	0	0.220	Stable
PSP	MW-35SR	Sulfate (as SO4)	mg/L	41	41	0	0.023	Increasing	19	19	0	0.310	Stable
PSP	MW-42	Fluoride	mg/L	49	49	0	<0.001	Increasing	19	19	0	0.345	Stable

Appendix D
Statistical Analysis - Mann-Kendall Analysis
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Area	Location	Parameter	Unit	Full					Post Closure				
				Number of Samples	Number of Detections	Number of Non-Detects	p-value	Trend	Number of Samples	Number of Detections	Number of Non-Detects	p-value	Trend
PSP	MW-42	Sulfate (as SO4)	mg/L	49	49	0	<0.001	Increasing	19	19	0	0.033	Decreasing
PSP	MW-43	Fluoride	mg/L	49	45	4	0.647	Stable	19	18	1	0.293	Stable
PSP	MW-43	Sulfate (as SO4)	mg/L	49	49	0	<0.001	Decreasing	19	19	0	0.002	Decreasing
PSP	MW-44	Fluoride	mg/L	49	44	5	0.187	Stable	19	19	0	0.779	Stable
PSP	MW-44	Sulfate (as SO4)	mg/L	49	49	0	<0.001	Decreasing	19	19	0	0.006	Decreasing

Notes:

BMP = Black Mud Pond

ILF = Industrial Landfill

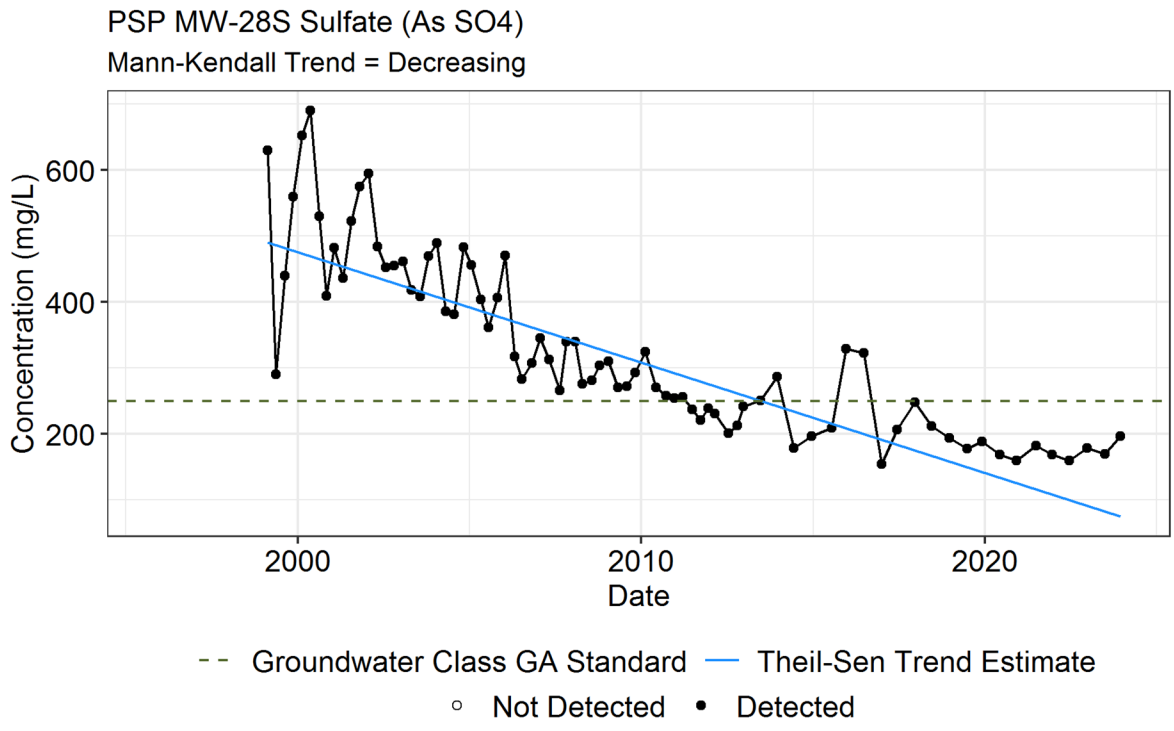
mg/L = milligrams per liter

ND = non-detect

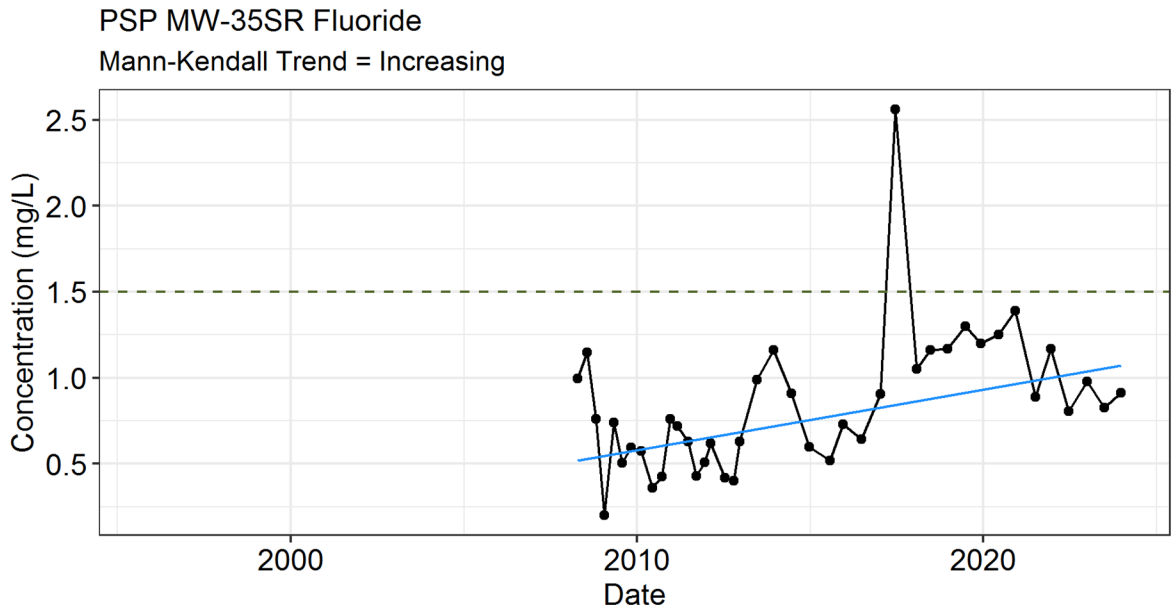
NY = North Yard

PSP = Potliner Storage Pad

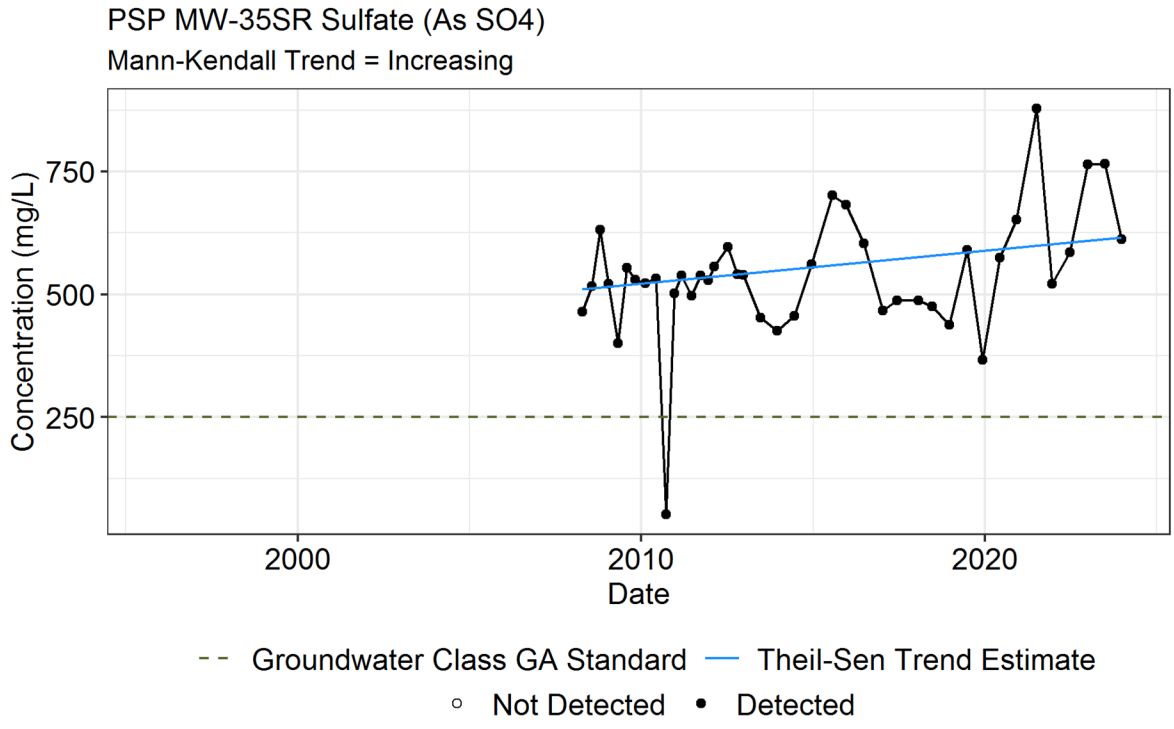
Appendix D2 Revised



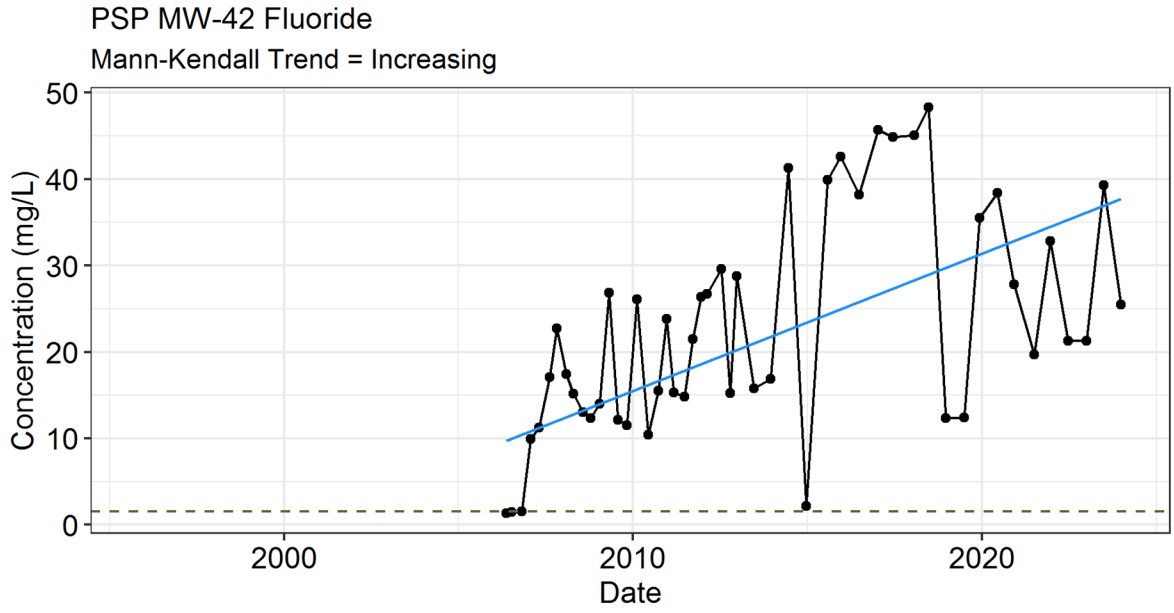
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



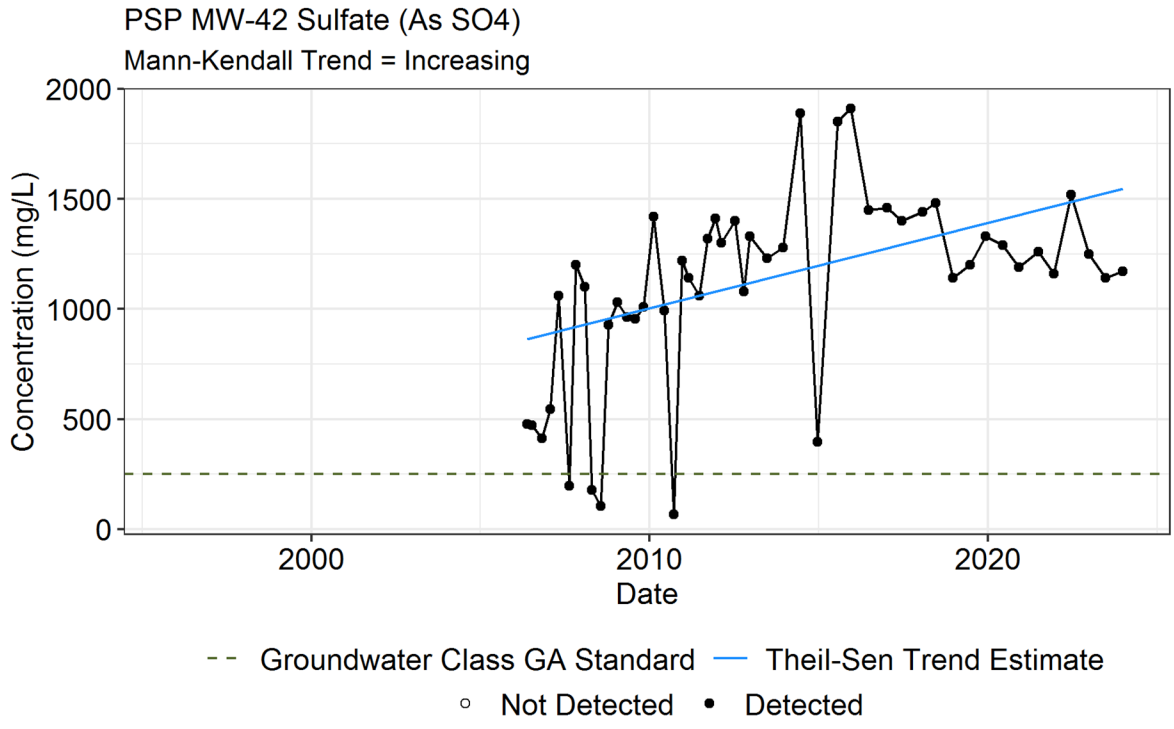
Mann-Kendall p-value = 0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



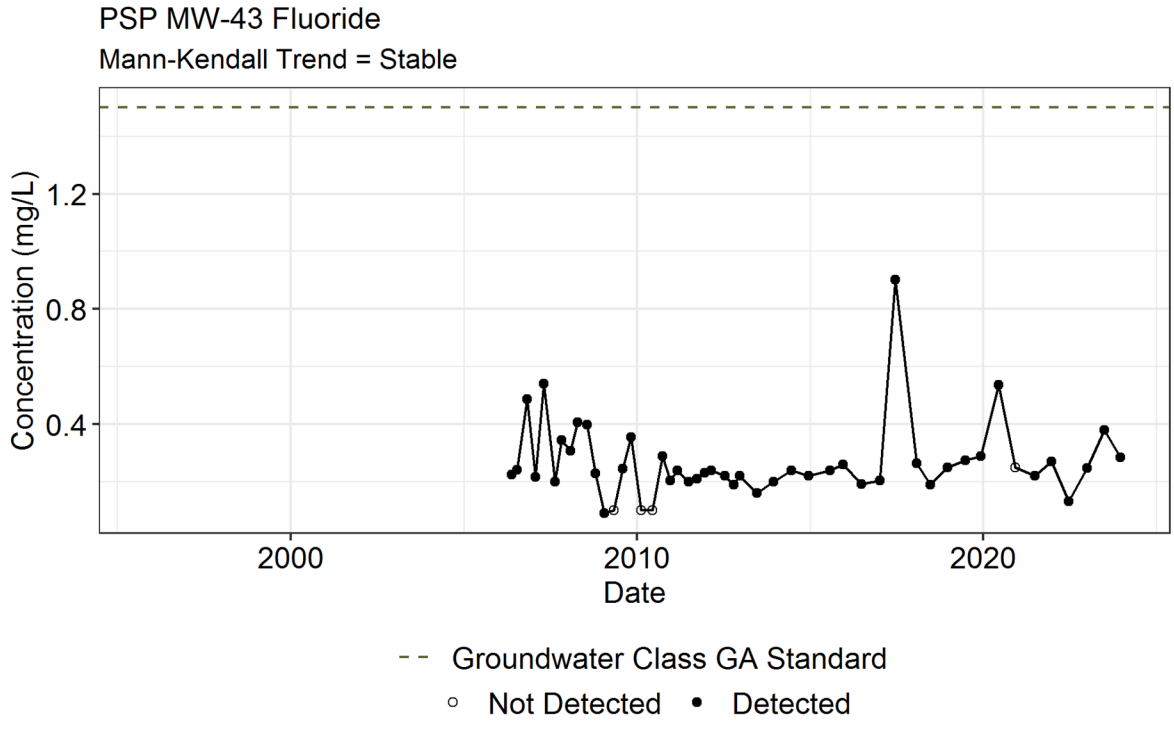
Mann-Kendall p-value = 0.023
Non-detects are shown as open circles at 1/2 of the reporting limit



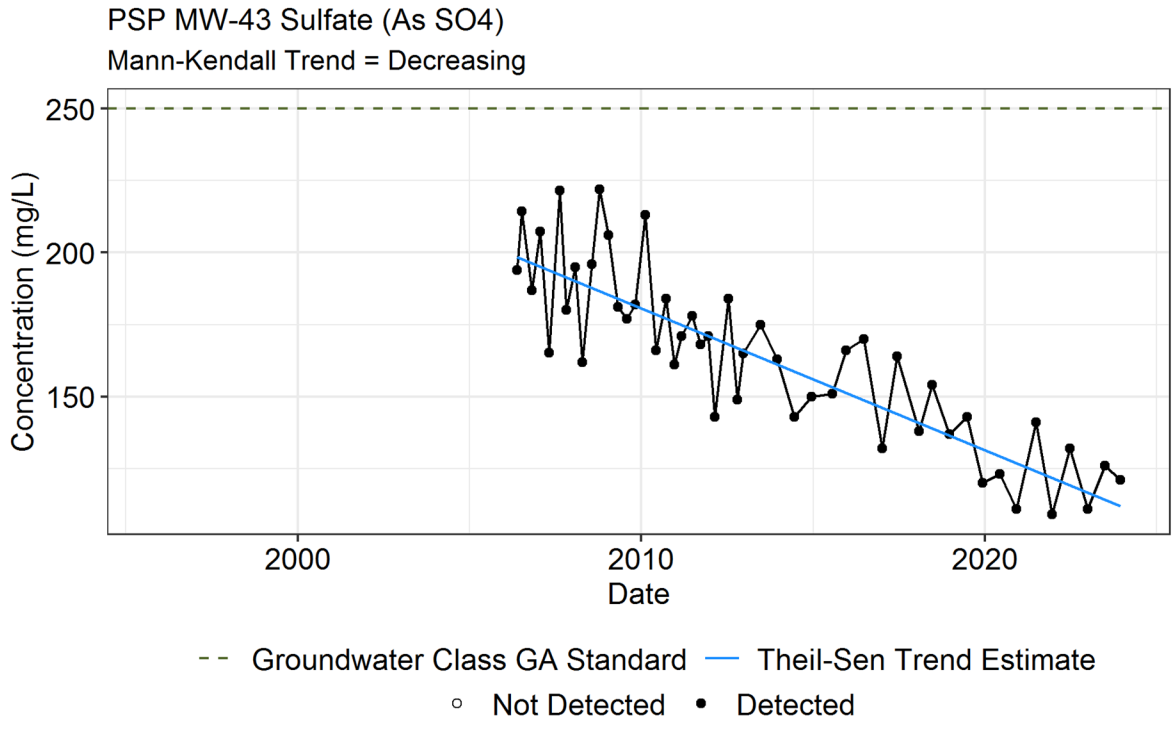
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



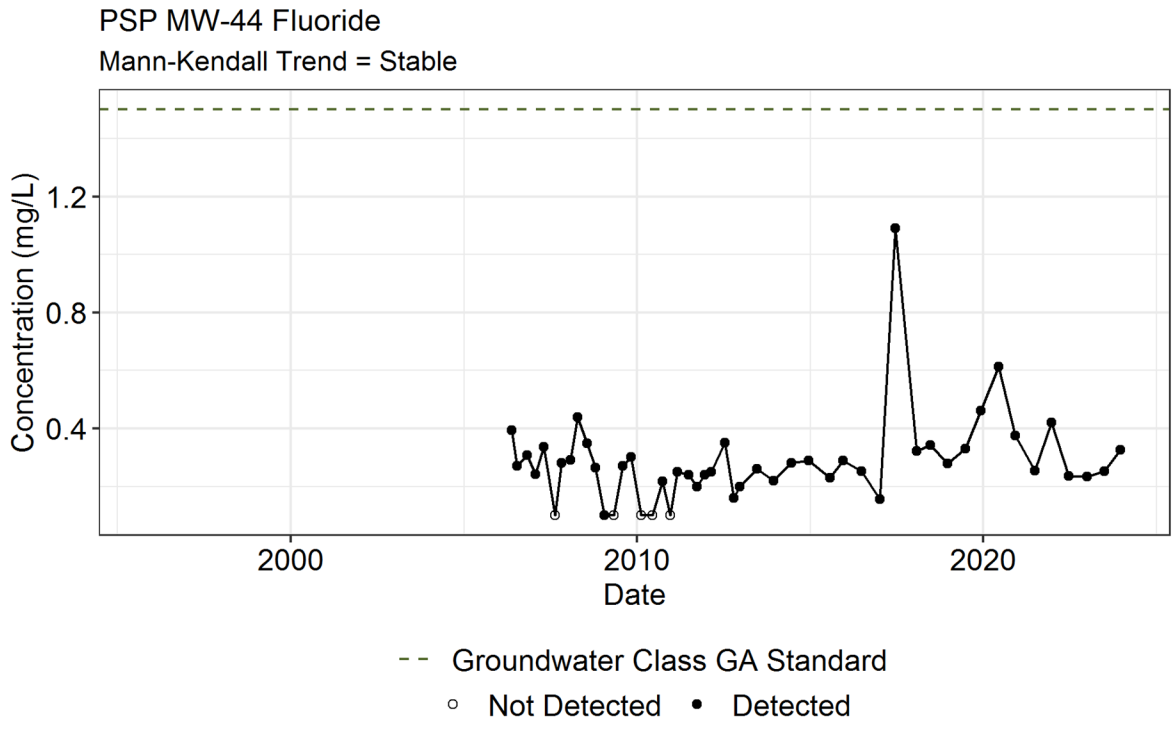
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



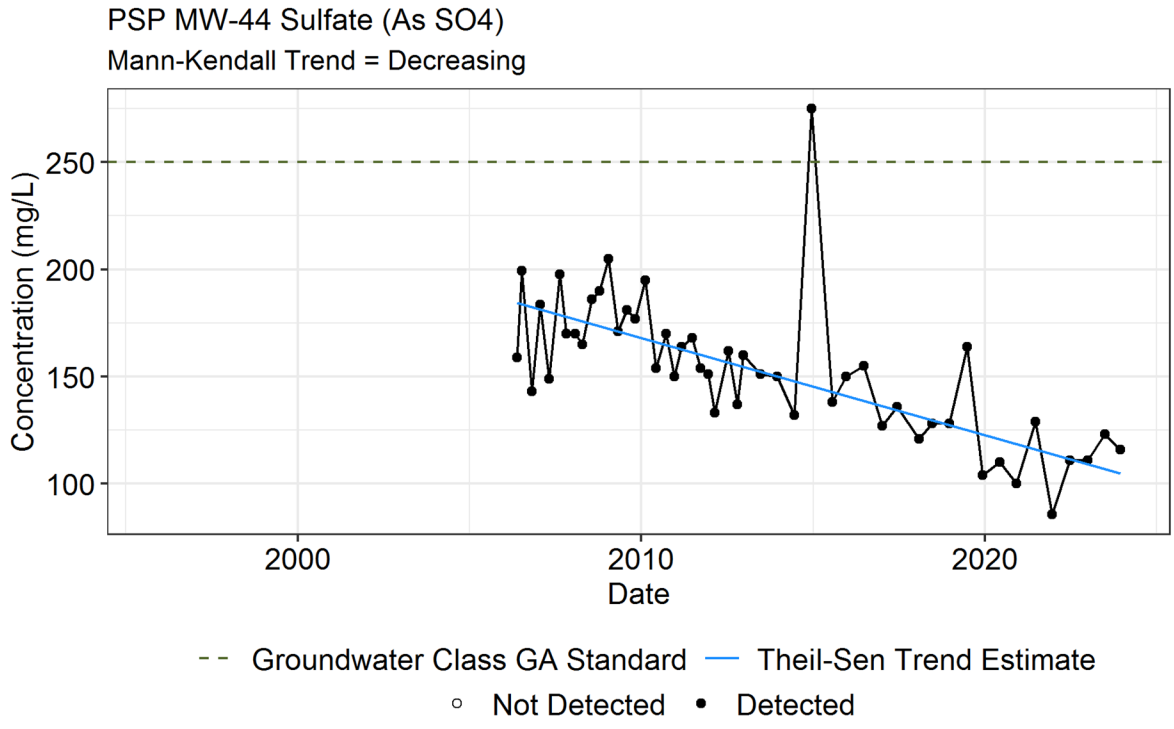
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



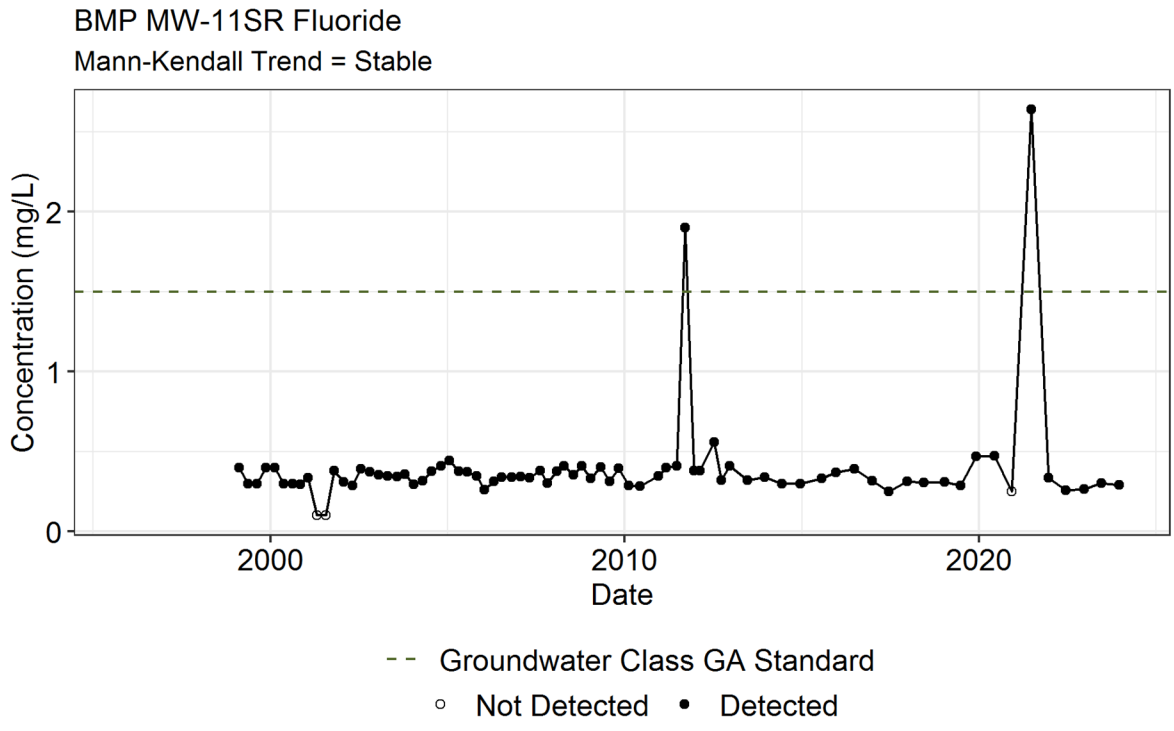
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



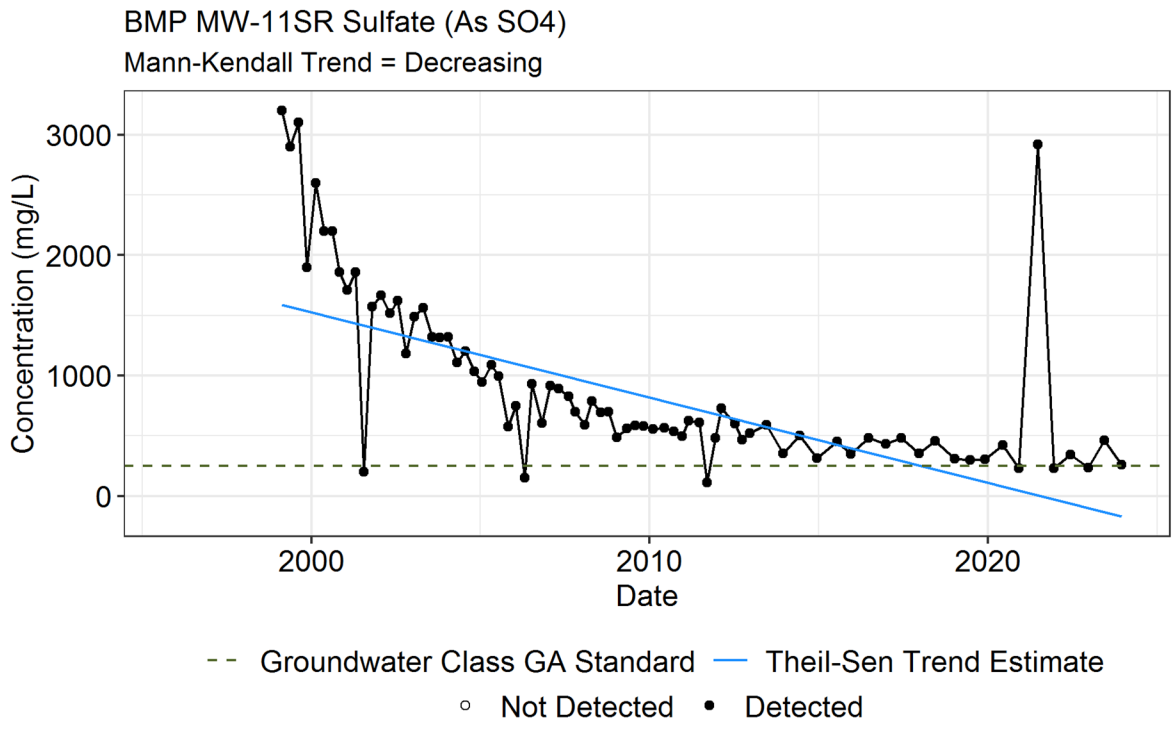
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



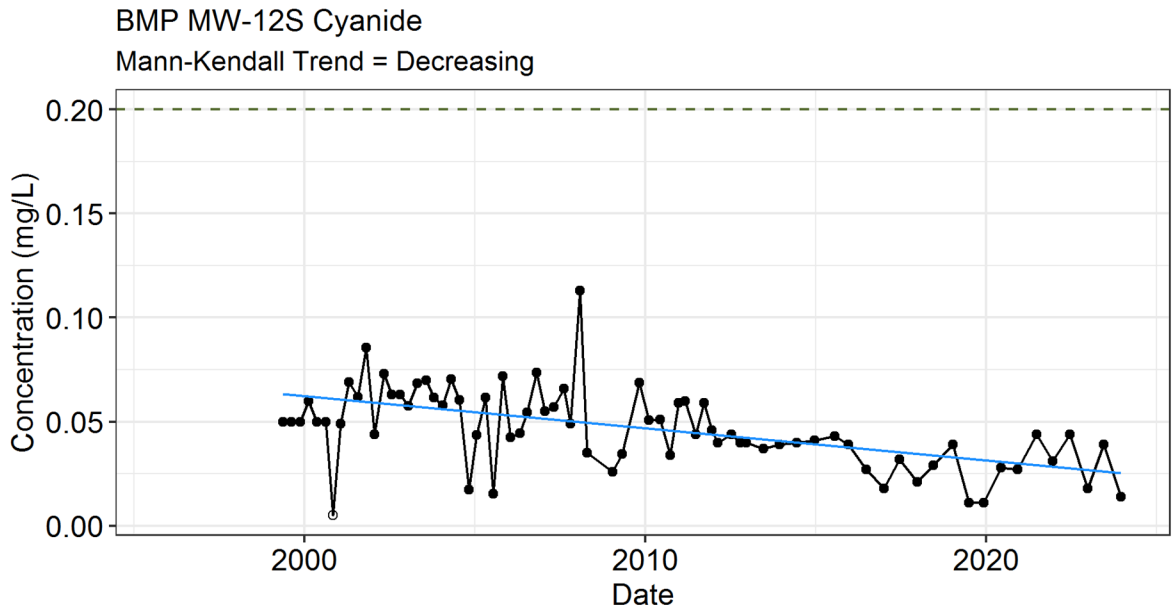
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



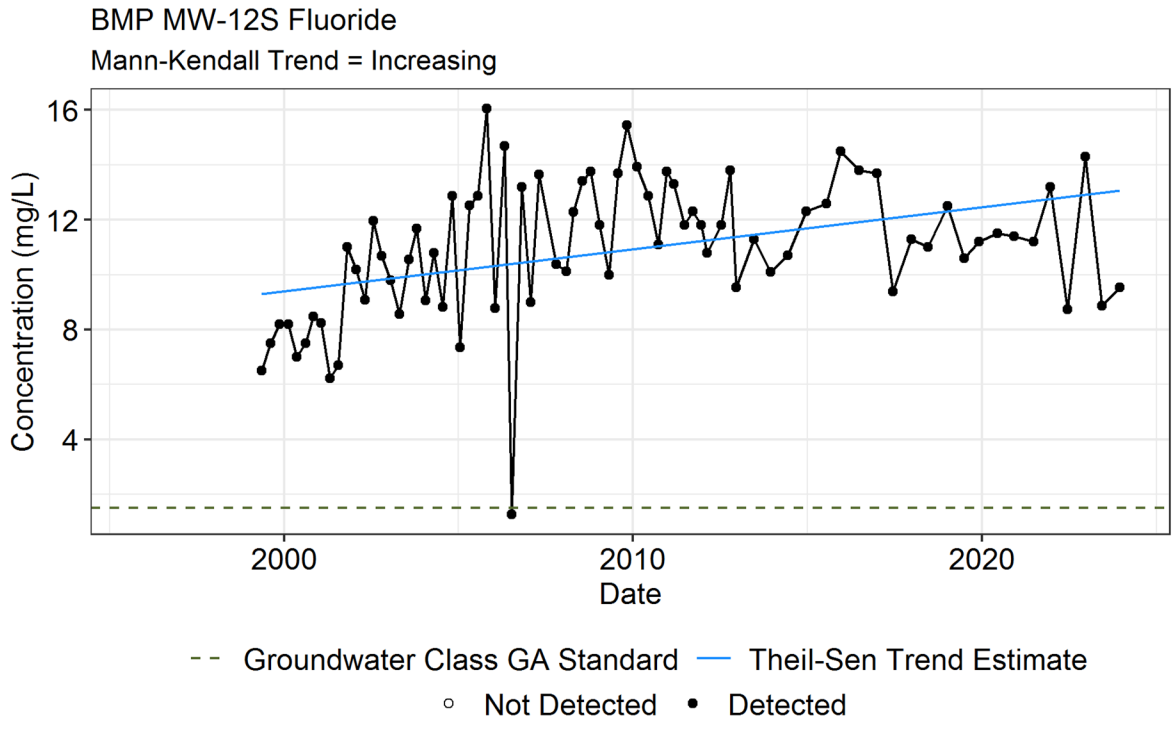
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

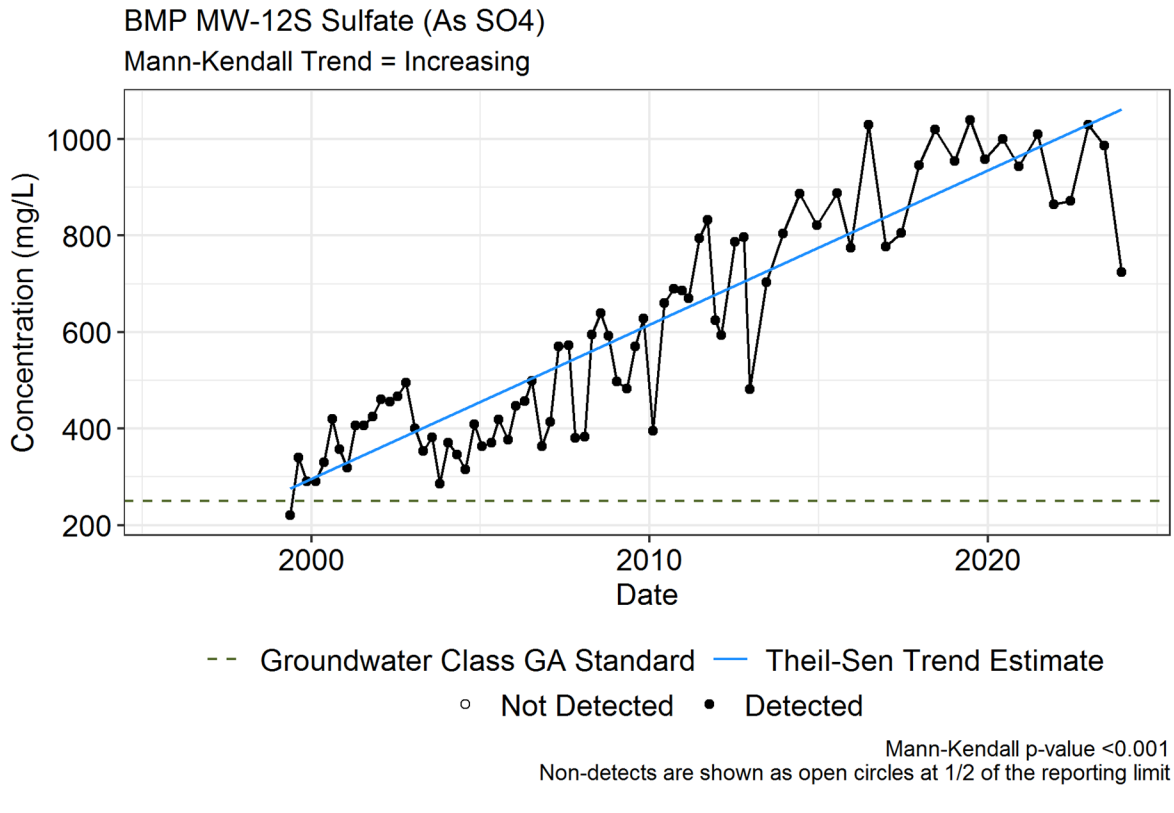


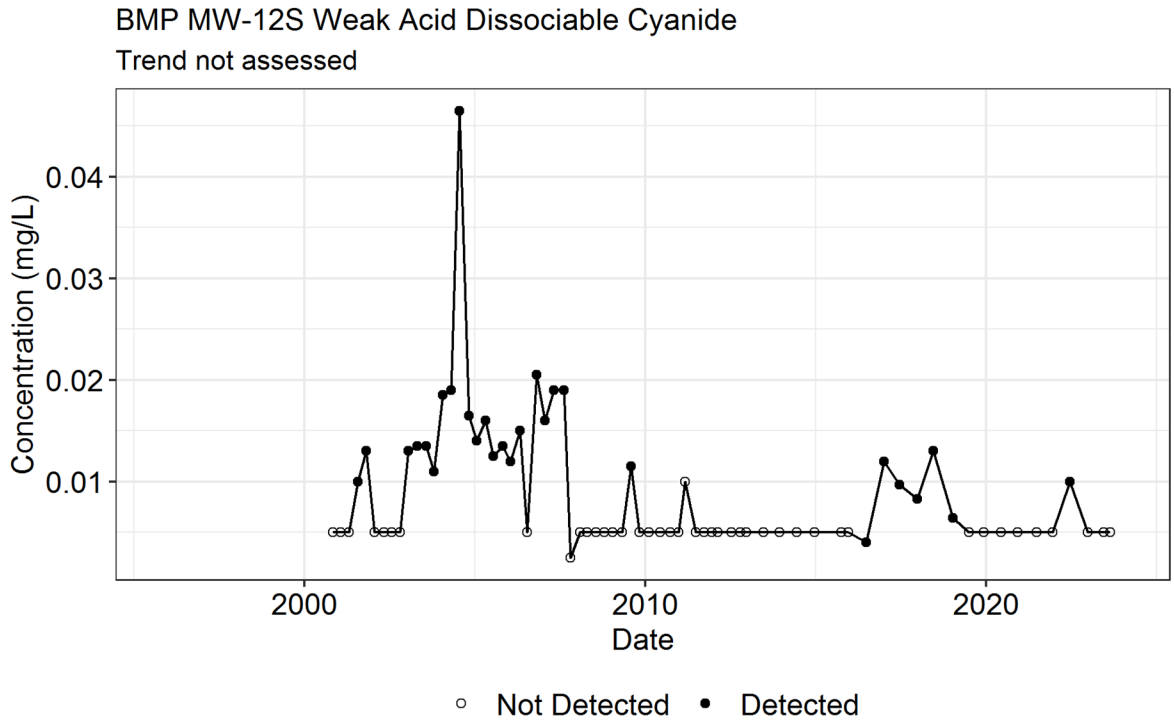
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



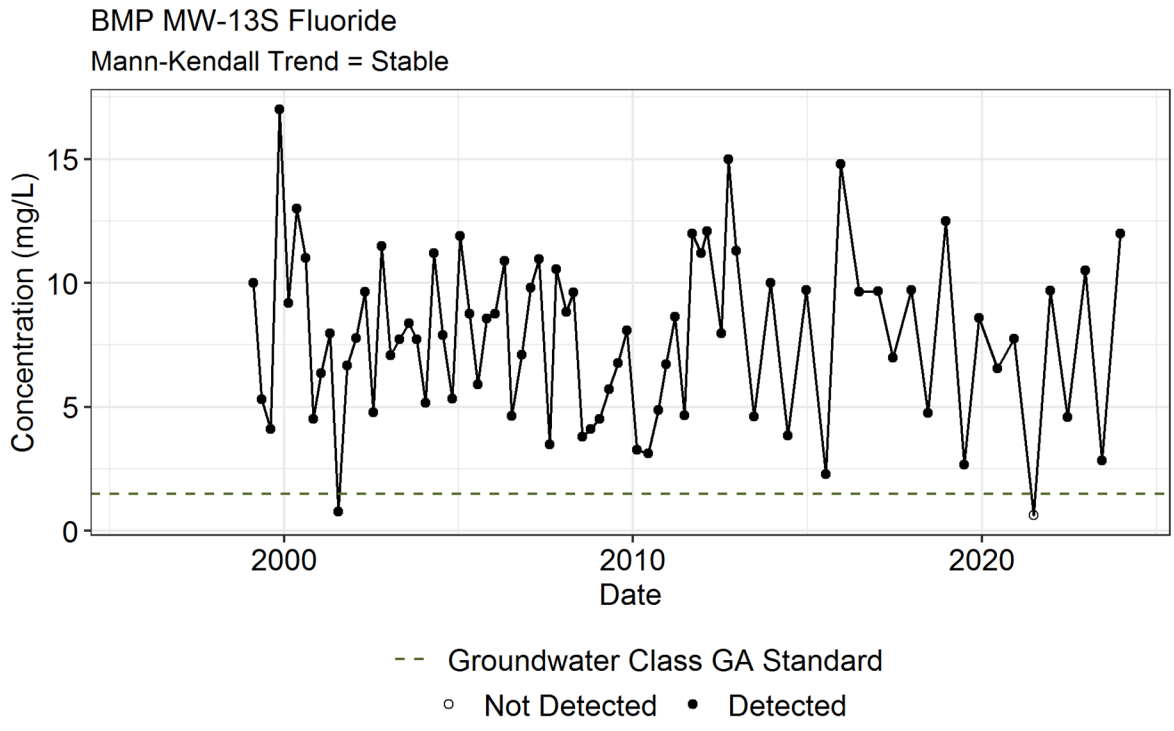
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit


BMP MW-12S Fluoride
Mann-Kendall Trend = Increasing
Concentration (mg/L)
16
12
8
4
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

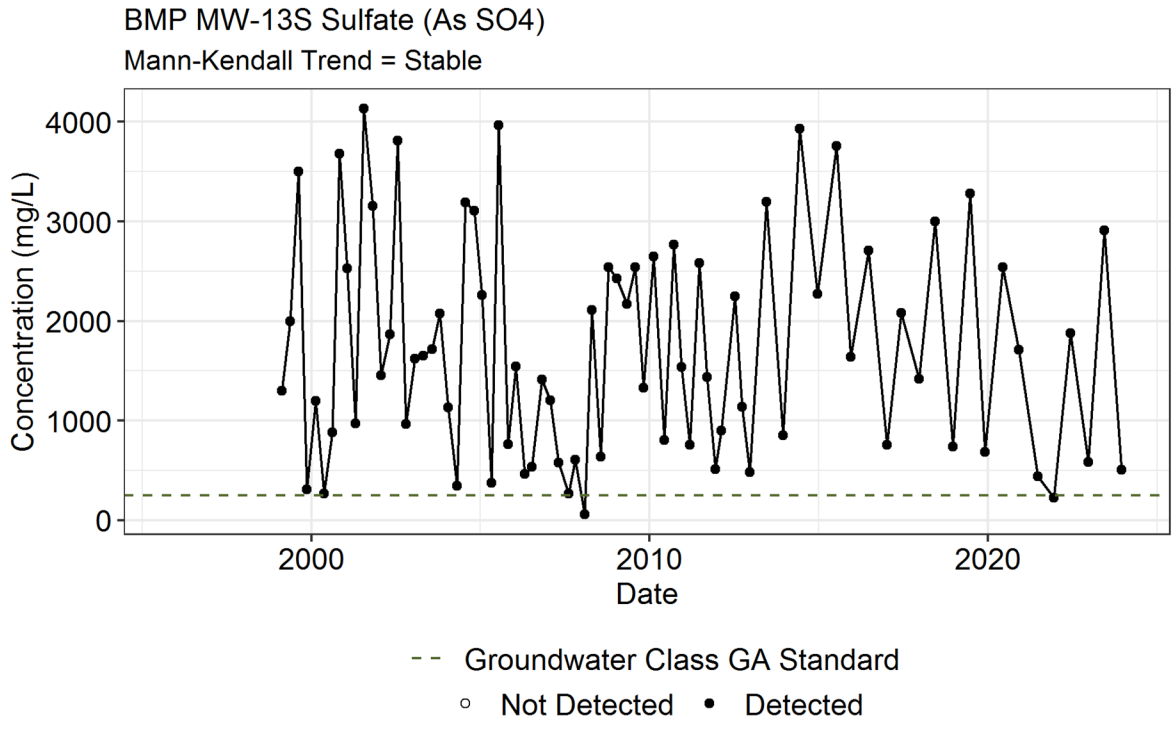

BMP MW-12S Sulfate (As SO4)
Mann-Kendall Trend = Increasing
Concentration (mg/L)
1000
800
600
400
200
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



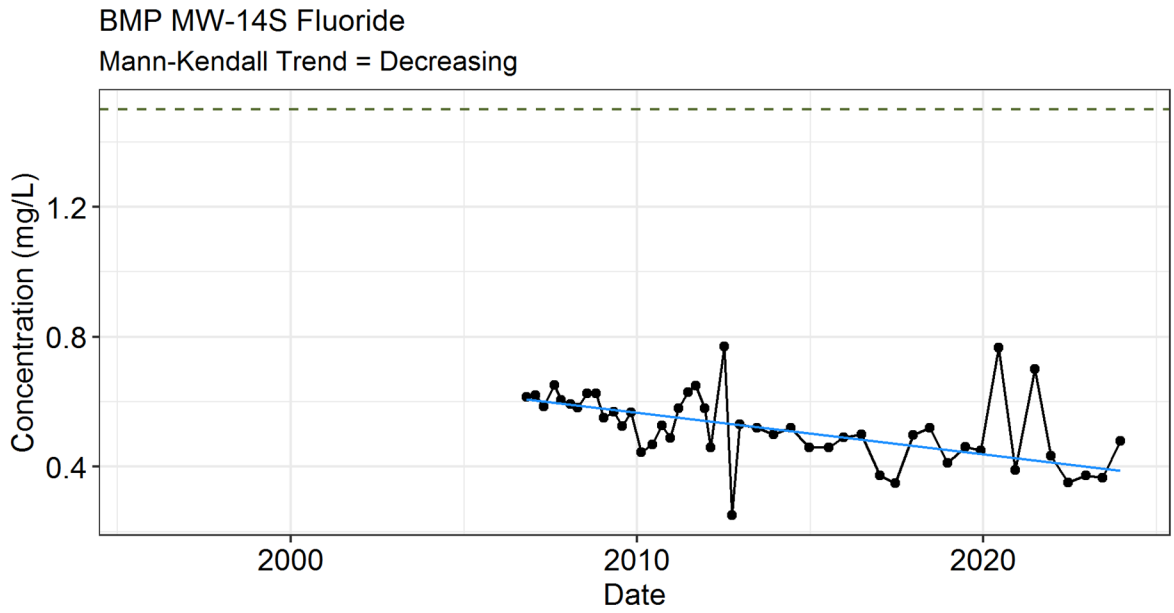
Trend testing not conducted because more than half of observations are nondetects.
Non-detects are shown as open circles at 1/2 of the reporting limit



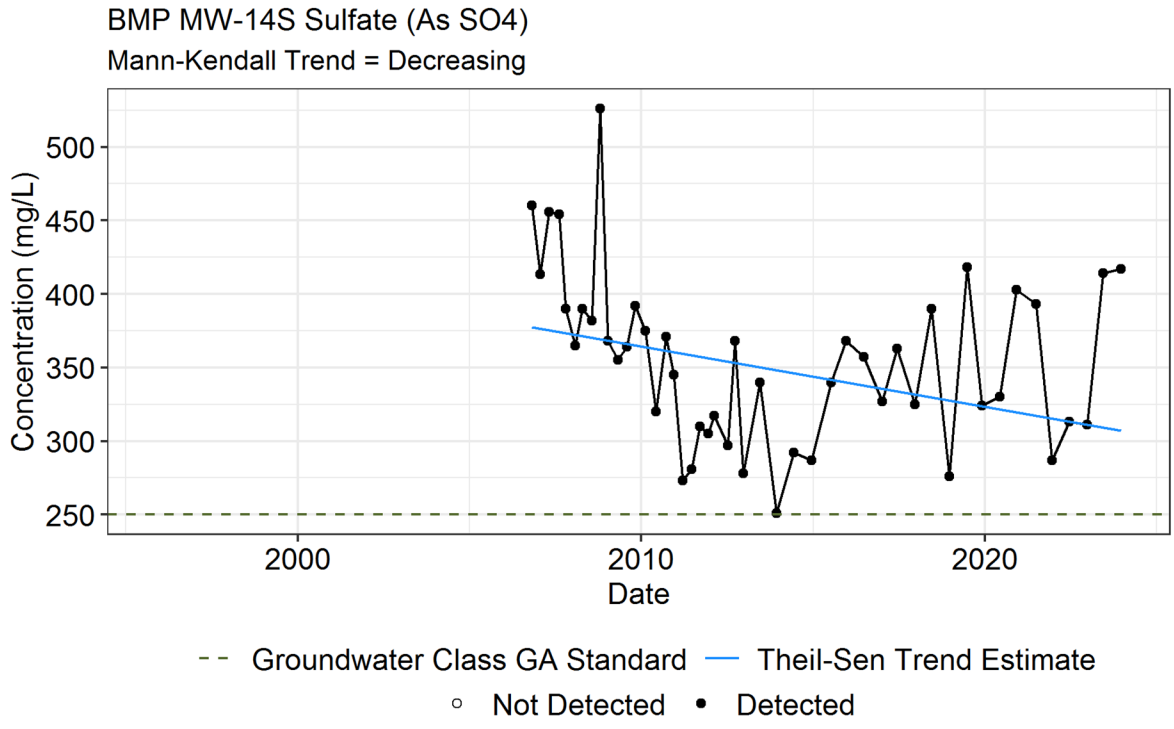
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



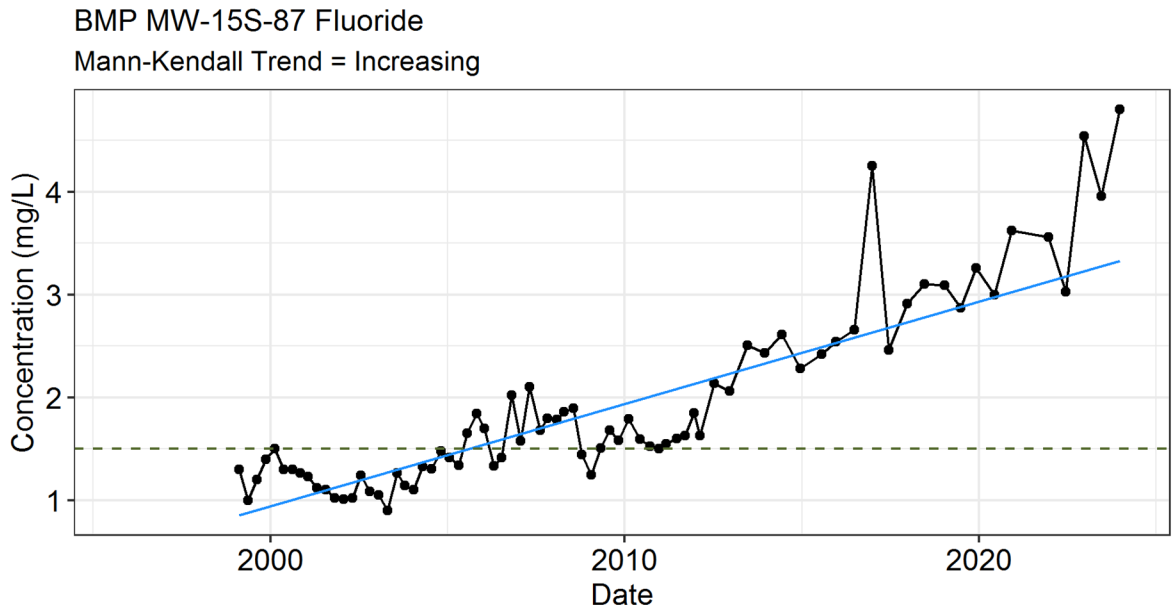
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



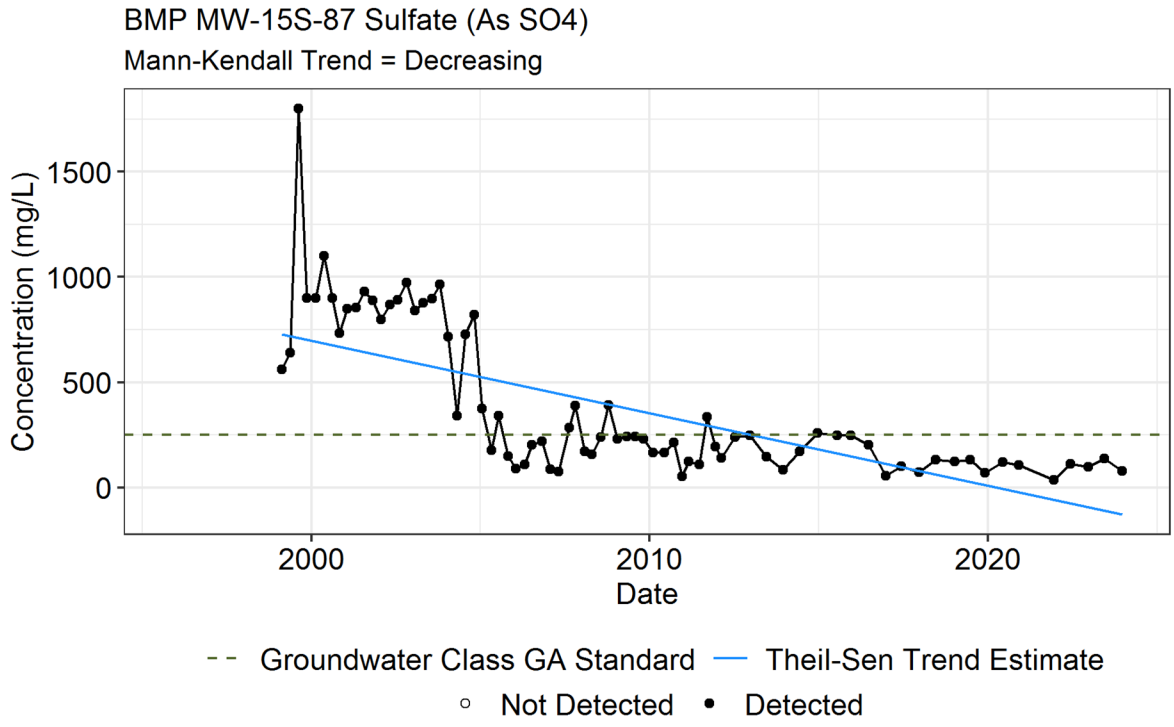
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

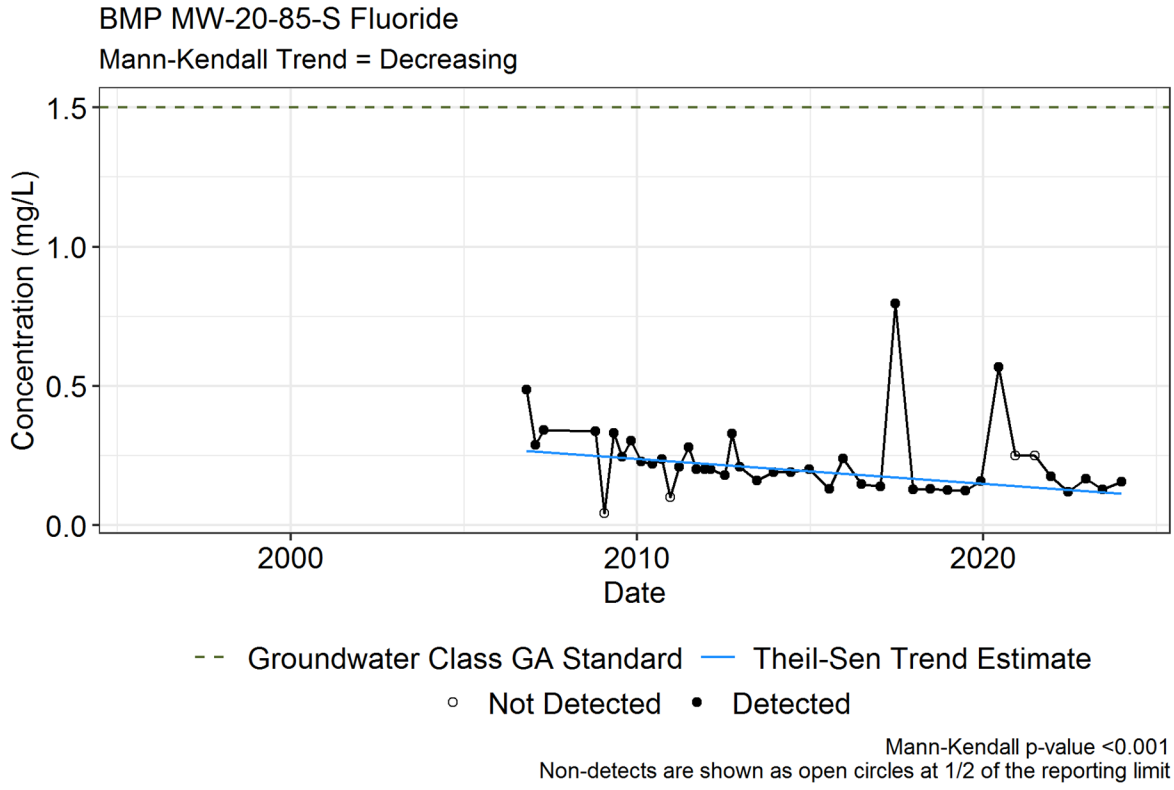


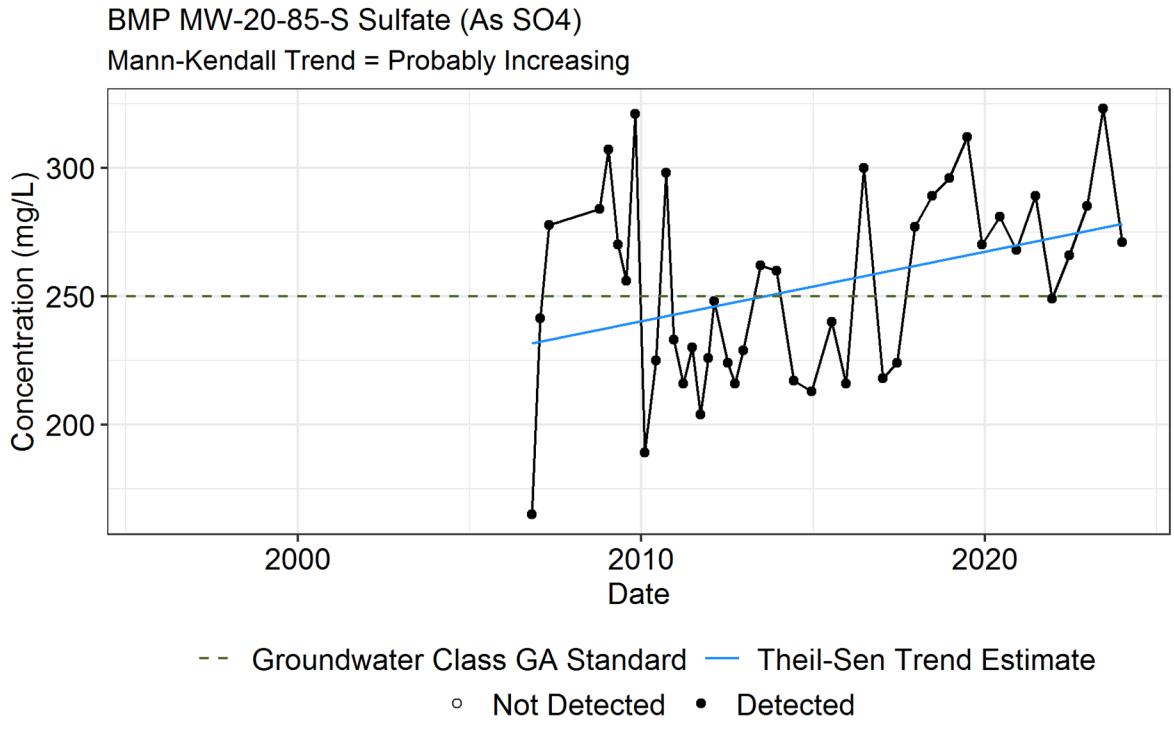
Mann-Kendall p-value = 0.029
Non-detects are shown as open circles at 1/2 of the reporting limit



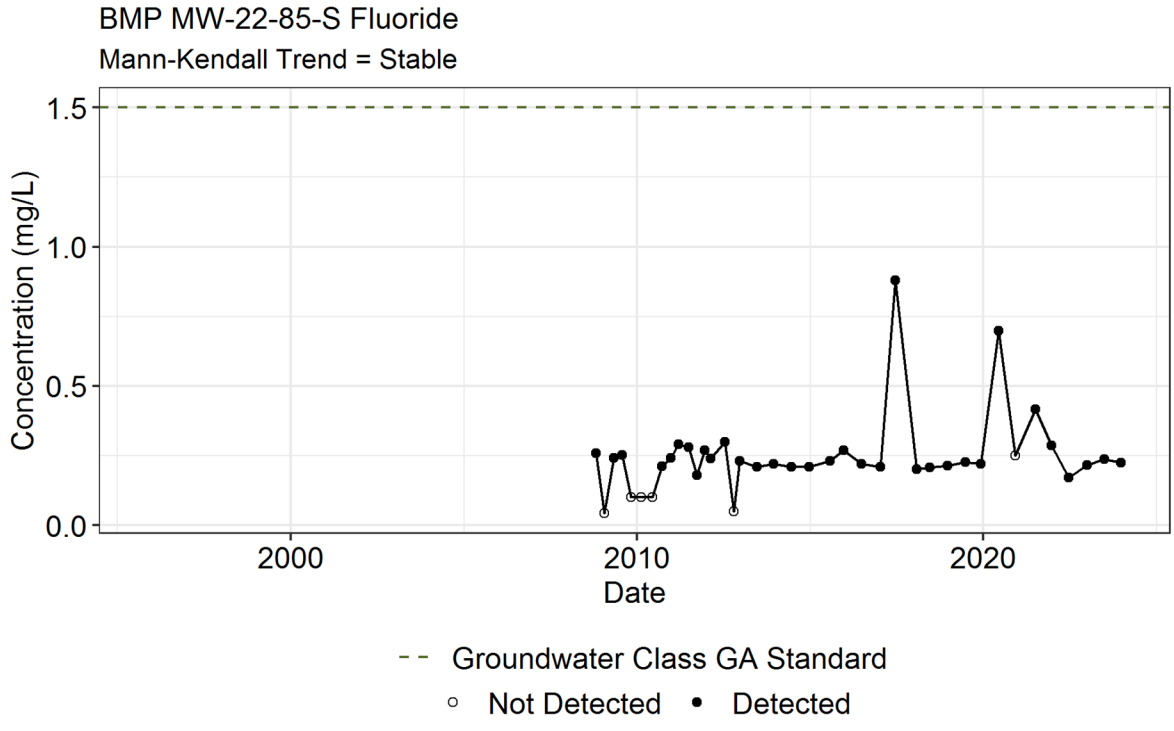
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit


BMP MW-15S-87 Sulfate (As SO4)
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
1500
1000
500
0
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

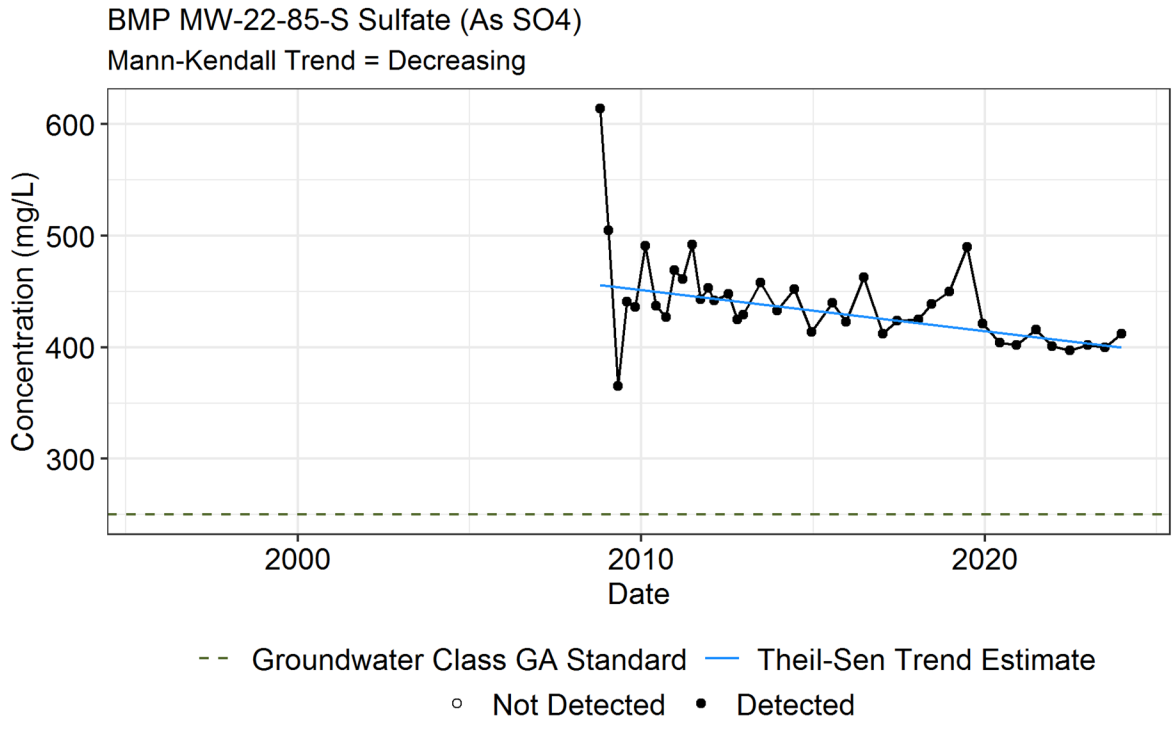

BMP MW-20-85-S Fluoride
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
1.5
1.0
0.5
0.0
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



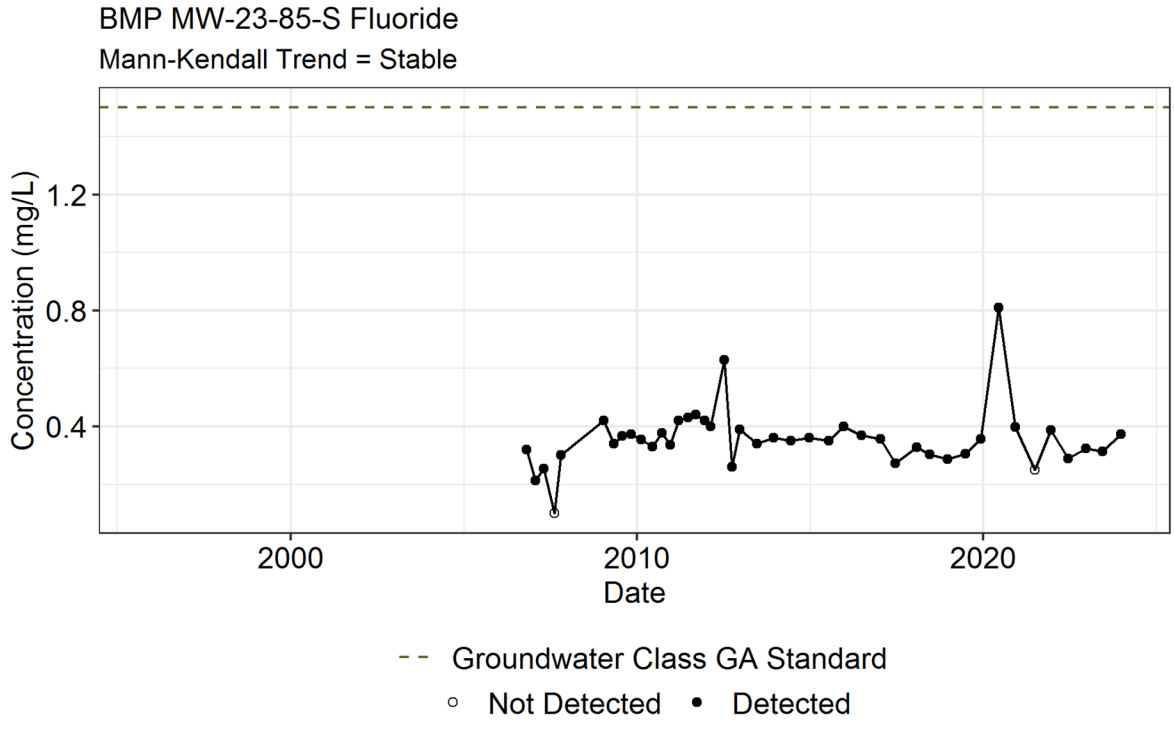
Mann-Kendall p-value = 0.069
Non-detects are shown as open circles at 1/2 of the reporting limit



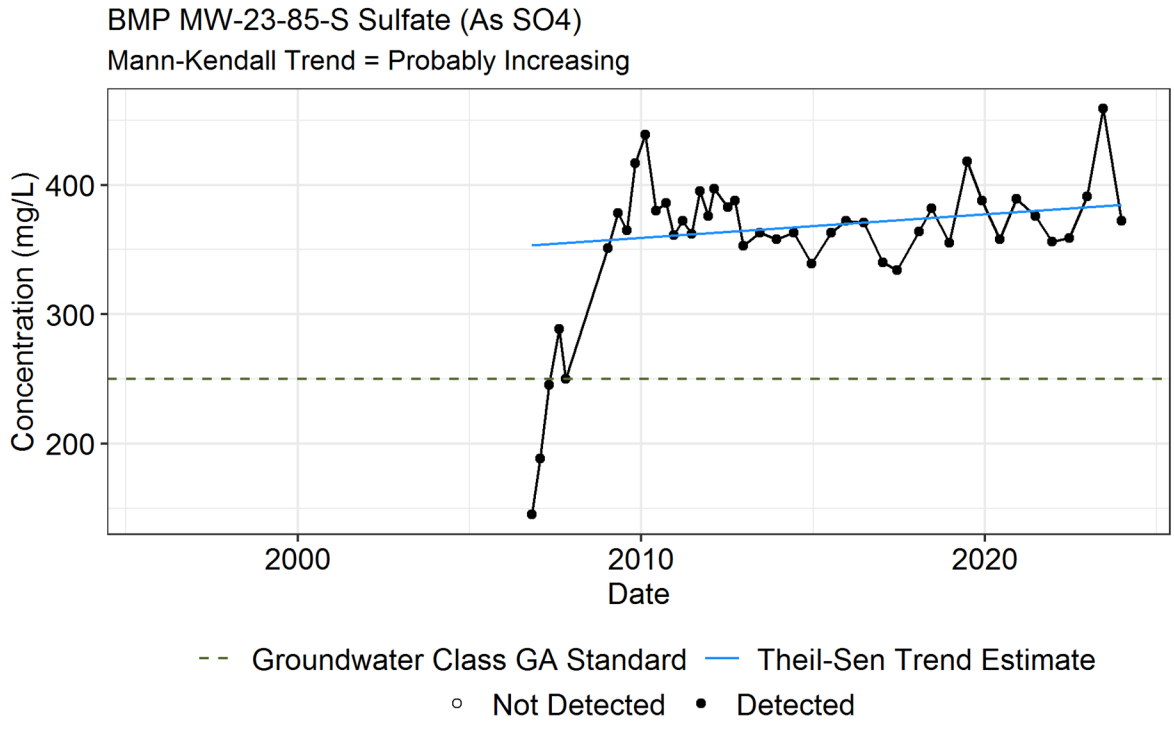
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

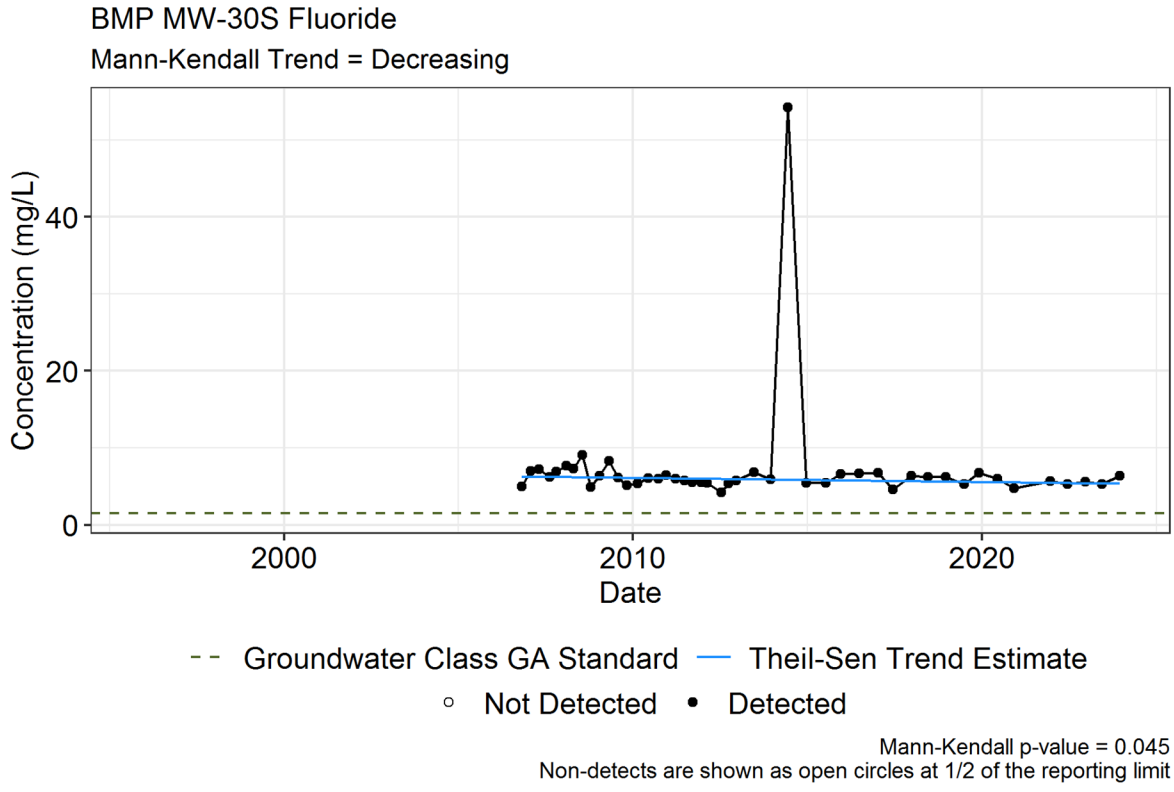


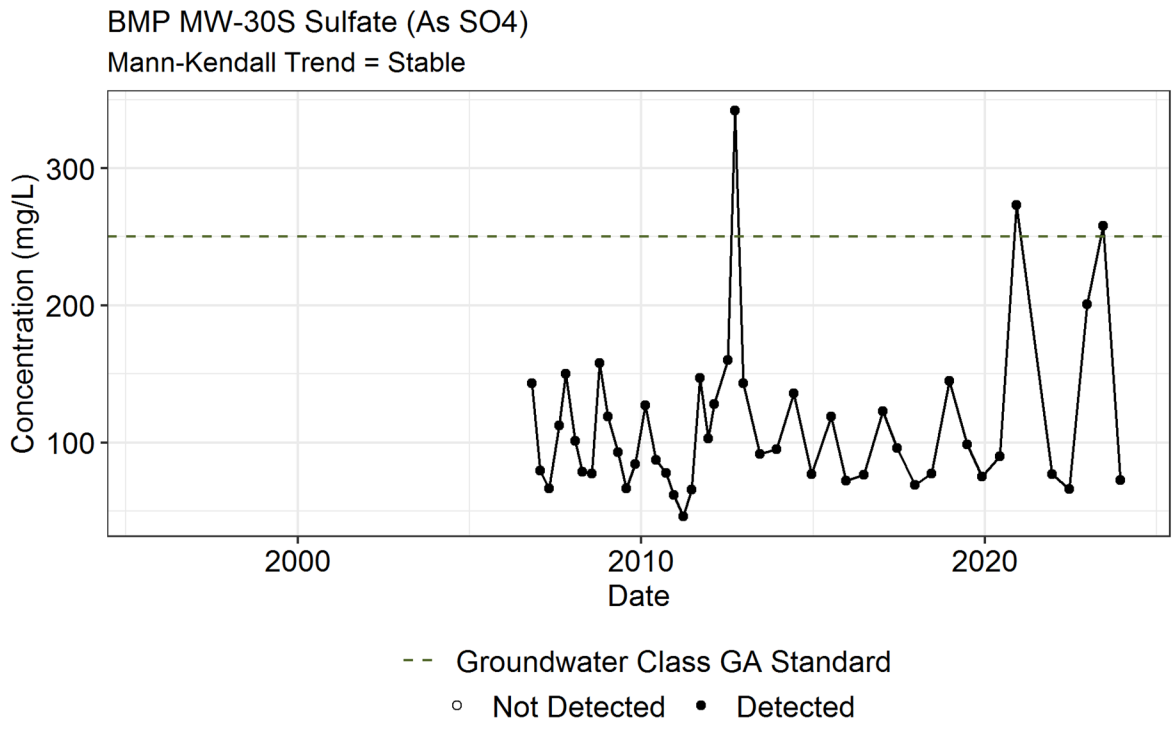
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



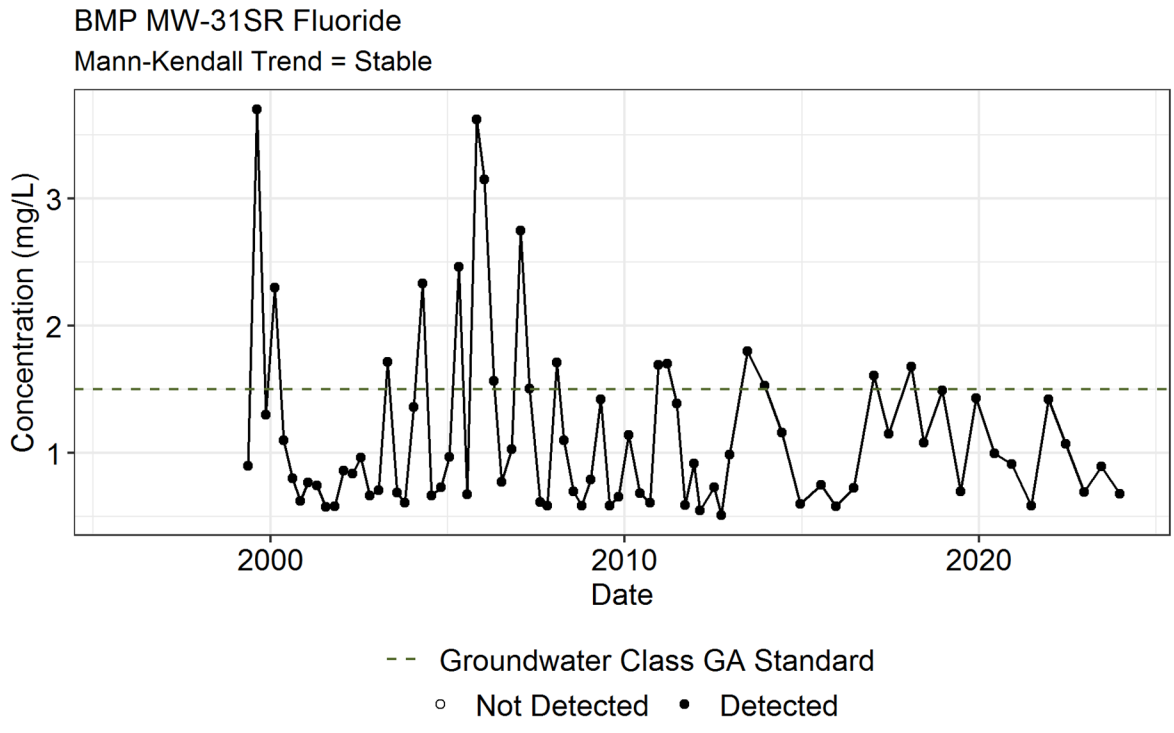
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit


BMP MW-23-85-S Sulfate (As SO4)
Mann-Kendall Trend = Probably Increasing
Concentration (mg/L)
400
300
200
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value = 0.067
Non-detects are shown as open circles at 1/2 of the reporting limit

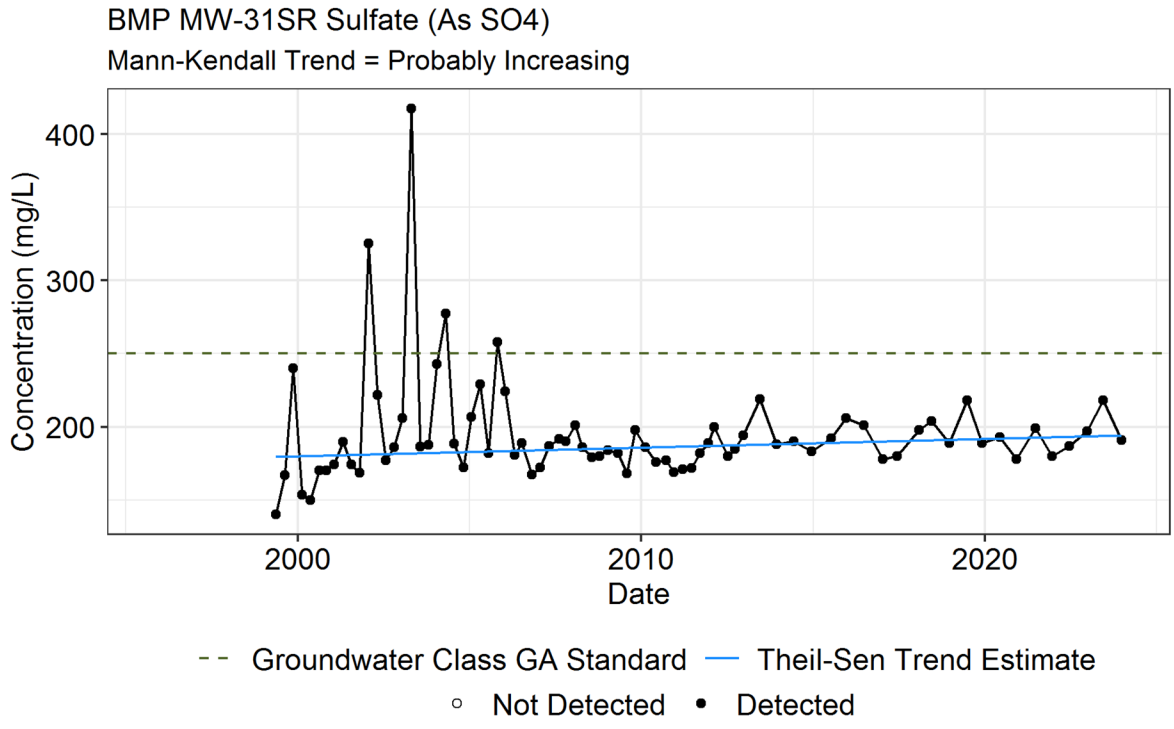

BMP MW-30S Fluoride
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
40
20
0
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value = 0.045
Non-detects are shown as open circles at 1/2 of the reporting limit



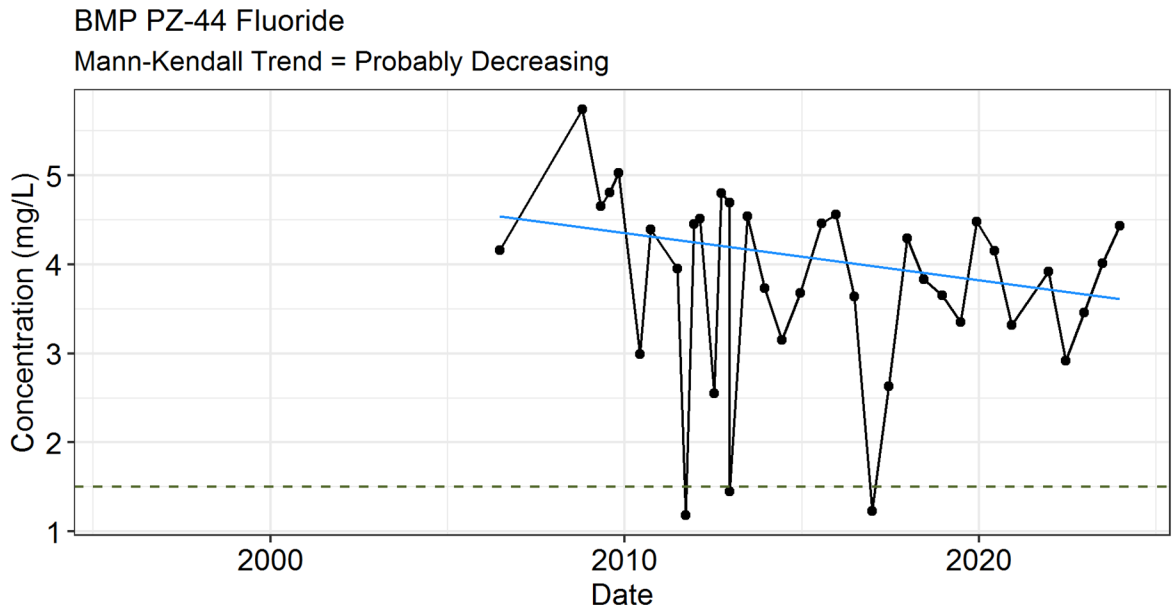
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



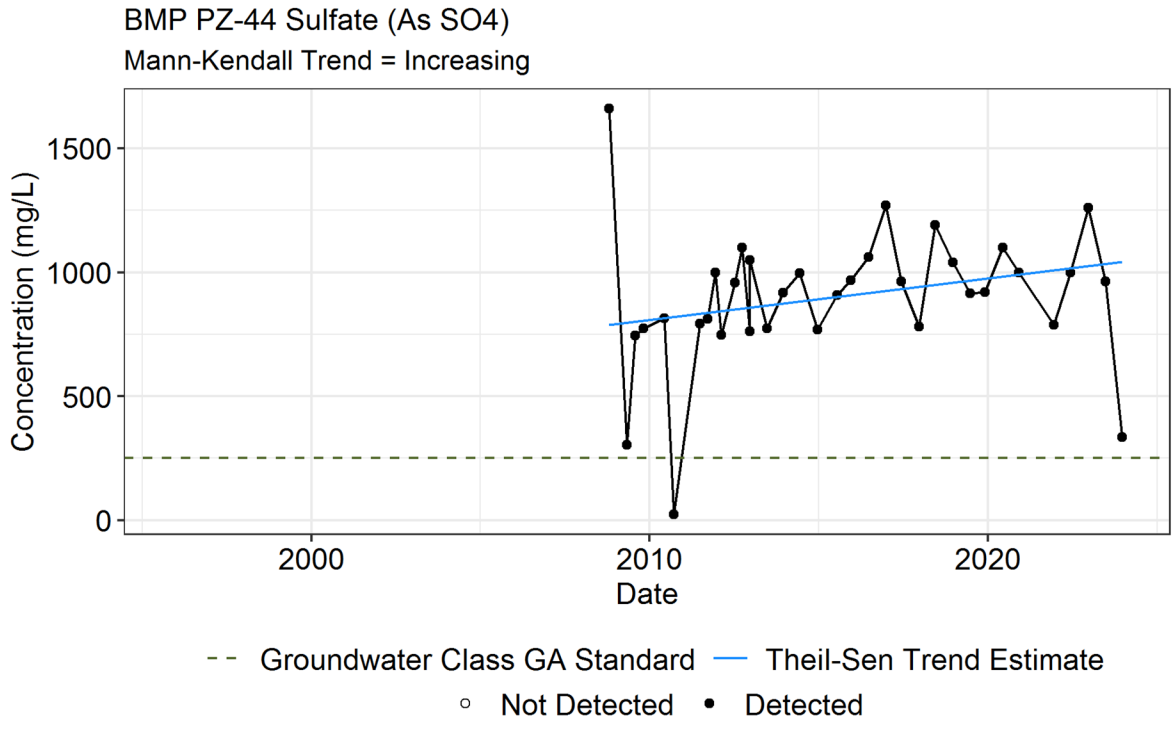
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



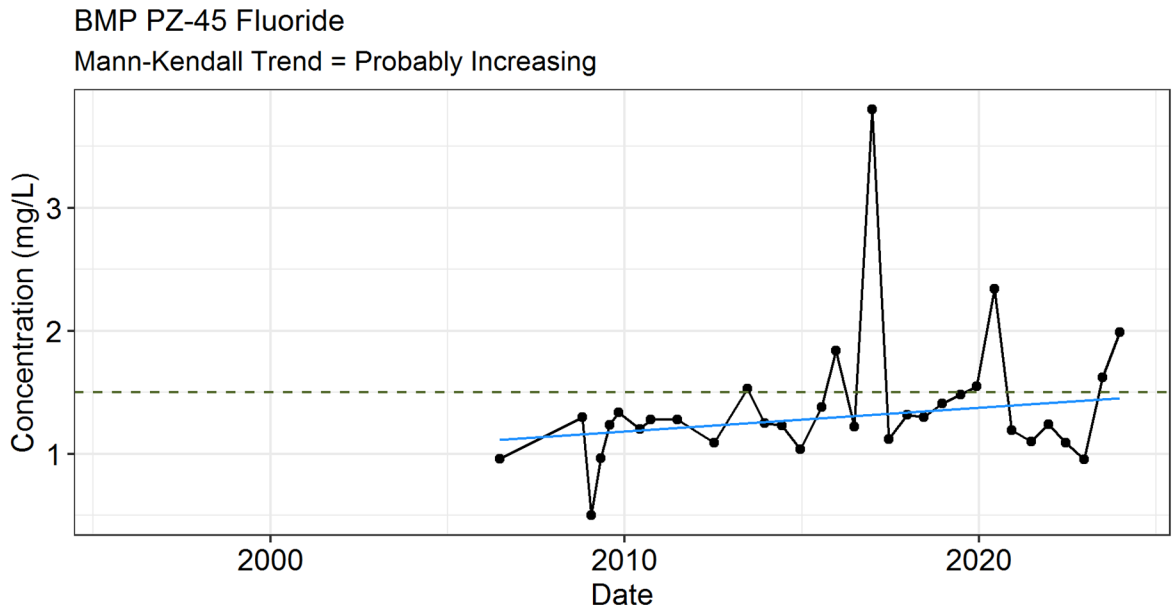
Mann-Kendall p-value = 0.053
Non-detects are shown as open circles at 1/2 of the reporting limit



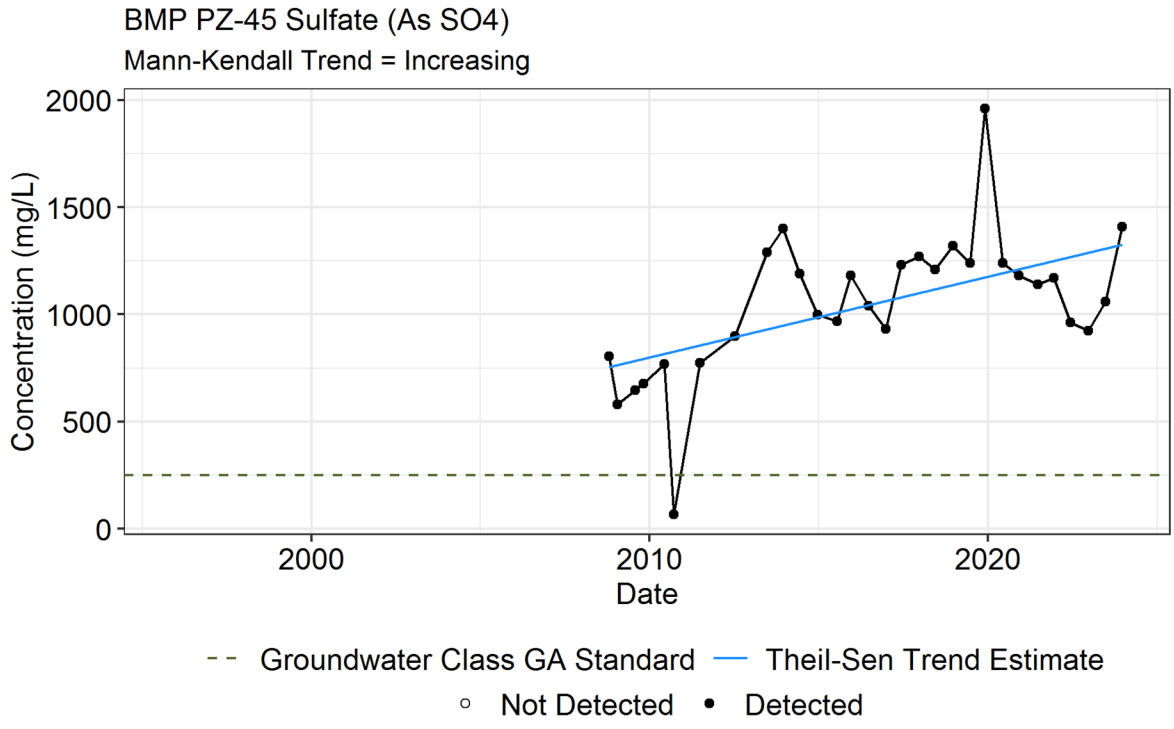
Mann-Kendall p-value = 0.058
Non-detects are shown as open circles at 1/2 of the reporting limit



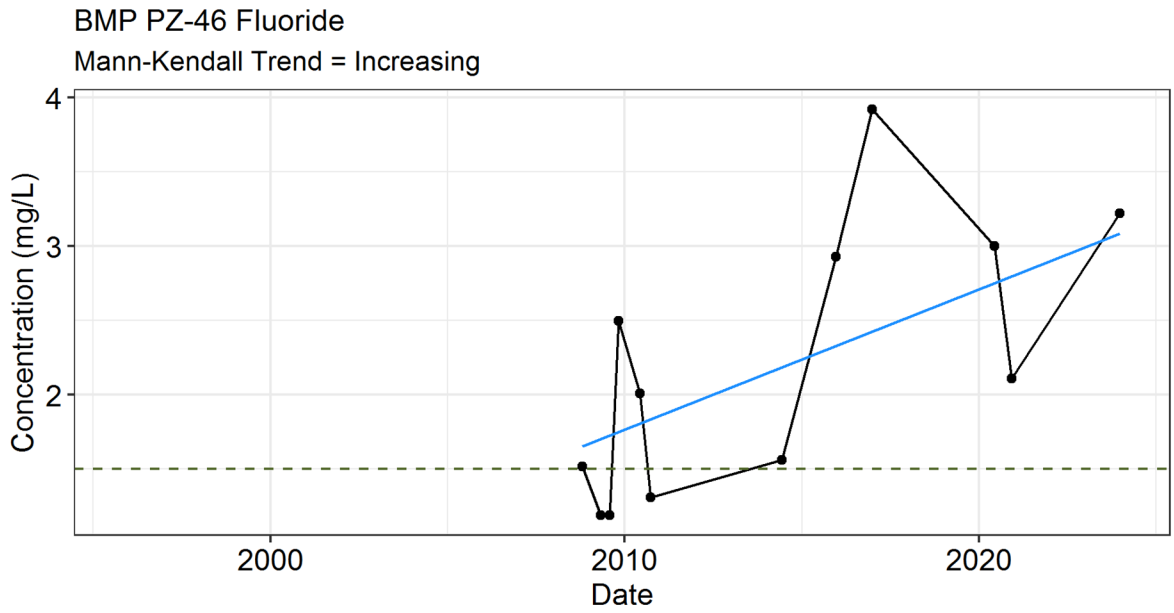
Mann-Kendall p-value = 0.037
Non-detects are shown as open circles at 1/2 of the reporting limit



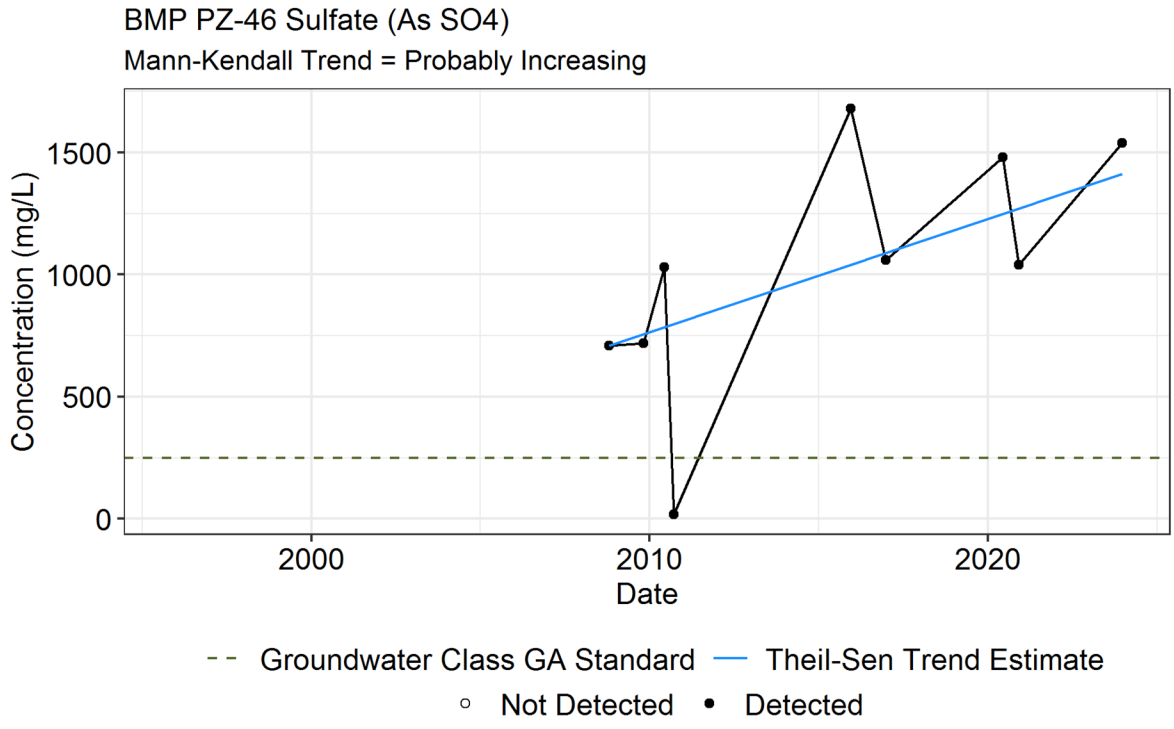
Mann-Kendall p-value = 0.092
Non-detects are shown as open circles at 1/2 of the reporting limit



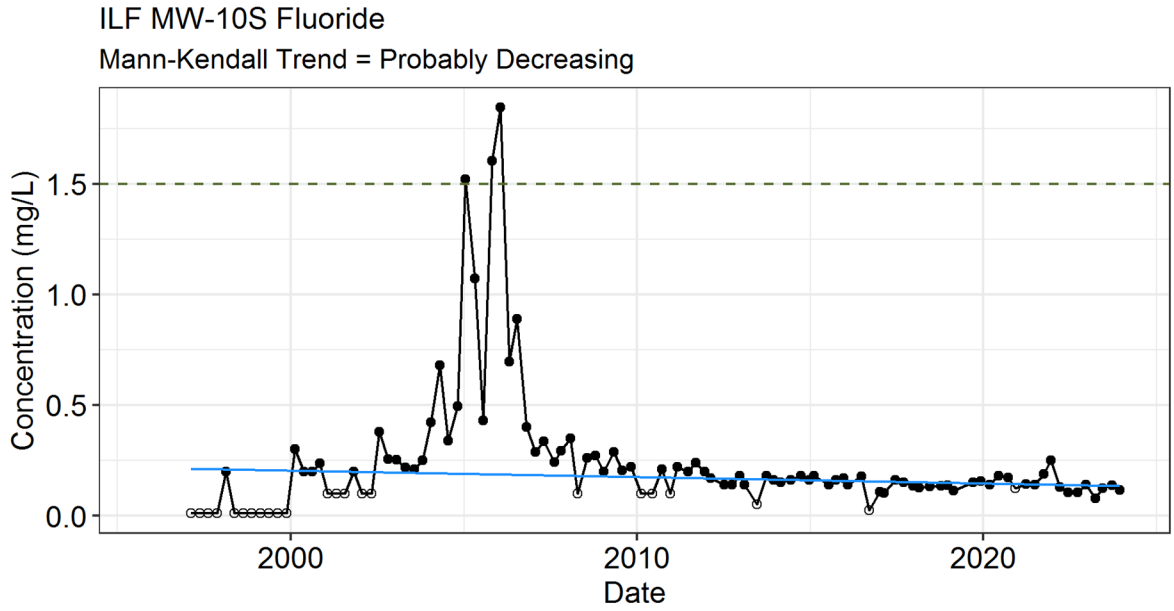
Mann-Kendall p-value = 0.004
Non-detects are shown as open circles at 1/2 of the reporting limit



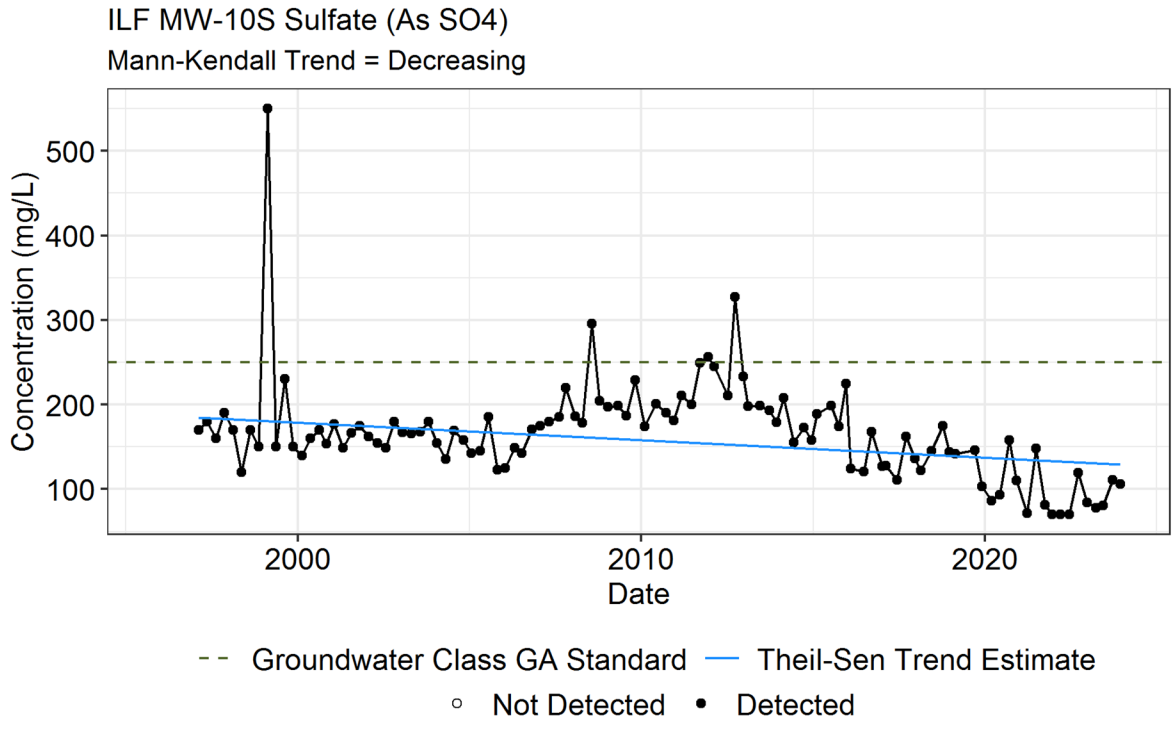
Mann-Kendall p-value = 0.013
Non-detects are shown as open circles at 1/2 of the reporting limit



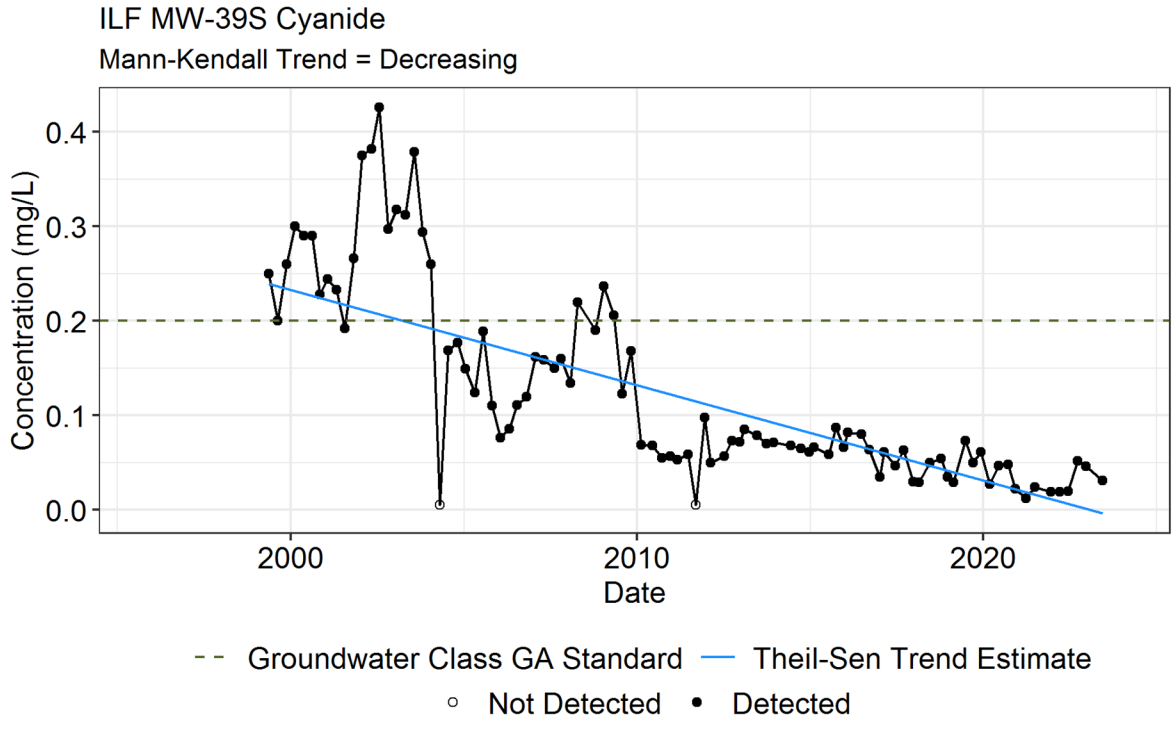
Mann-Kendall p-value = 0.076
Non-detects are shown as open circles at 1/2 of the reporting limit



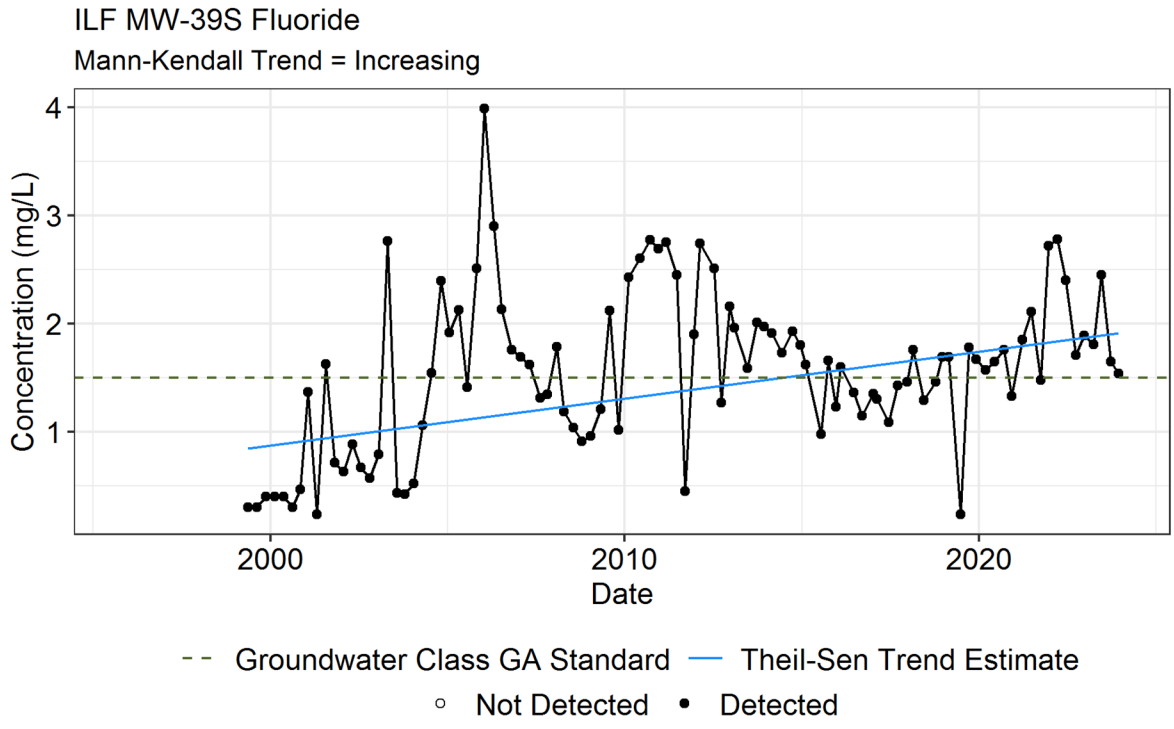
Mann-Kendall p-value = 0.066
Non-detects are shown as open circles at 1/2 of the reporting limit

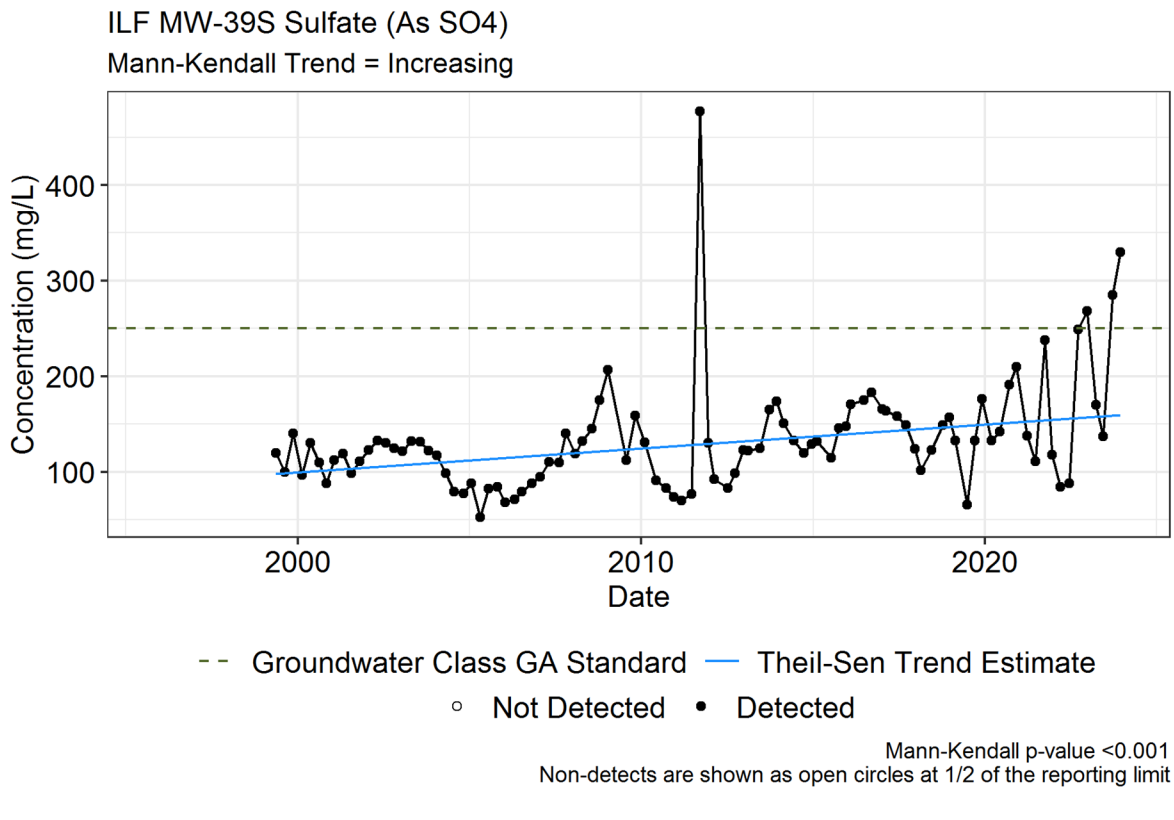


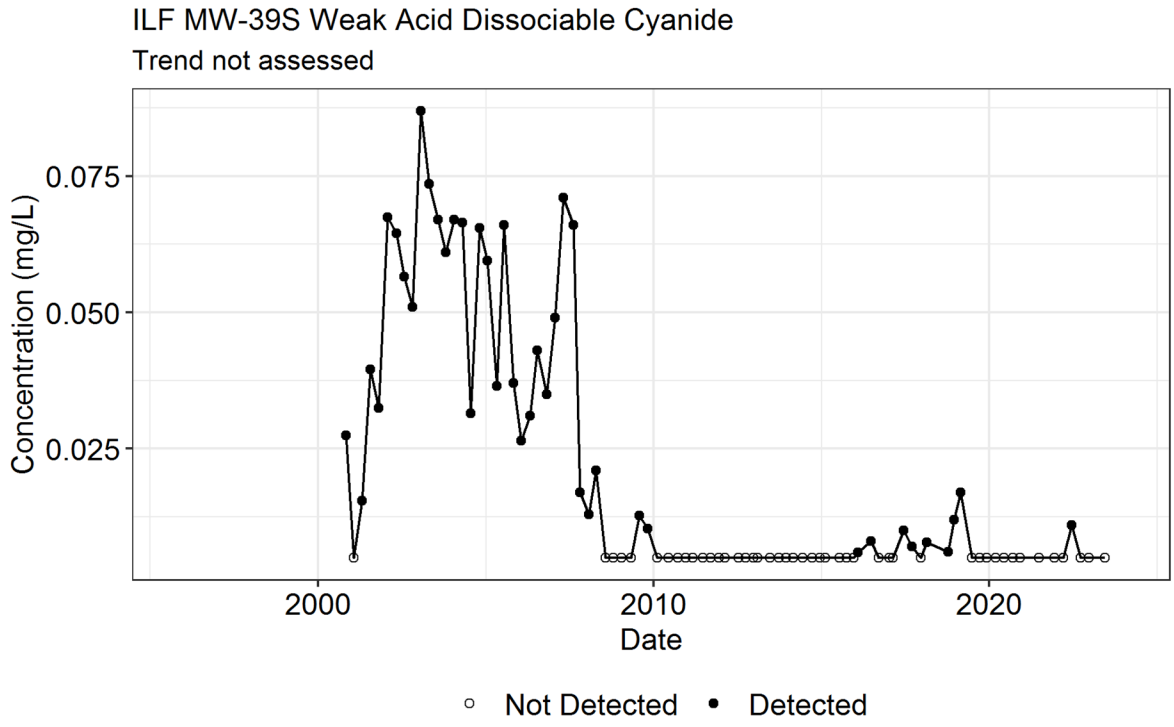
Mann-Kendall p-value = 0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



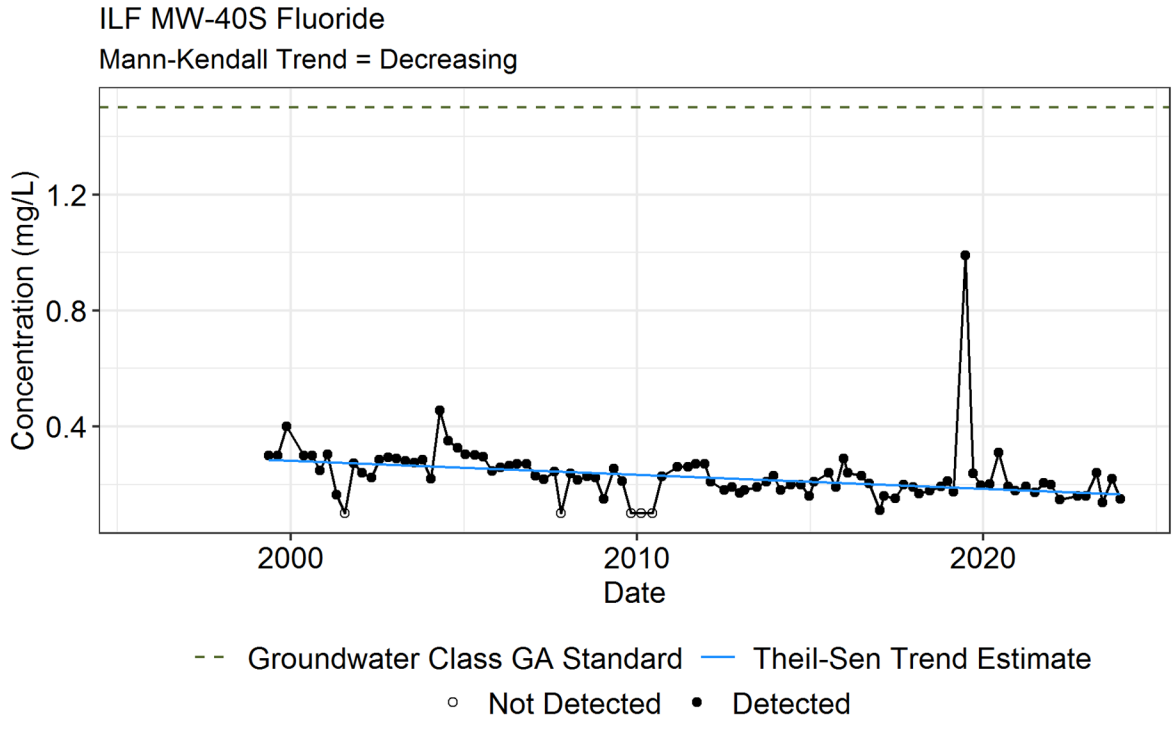
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit


ILF MW-39S Fluoride
Mann-Kendall Trend = Increasing
Concentration (mg/L)
4
3
2
1
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

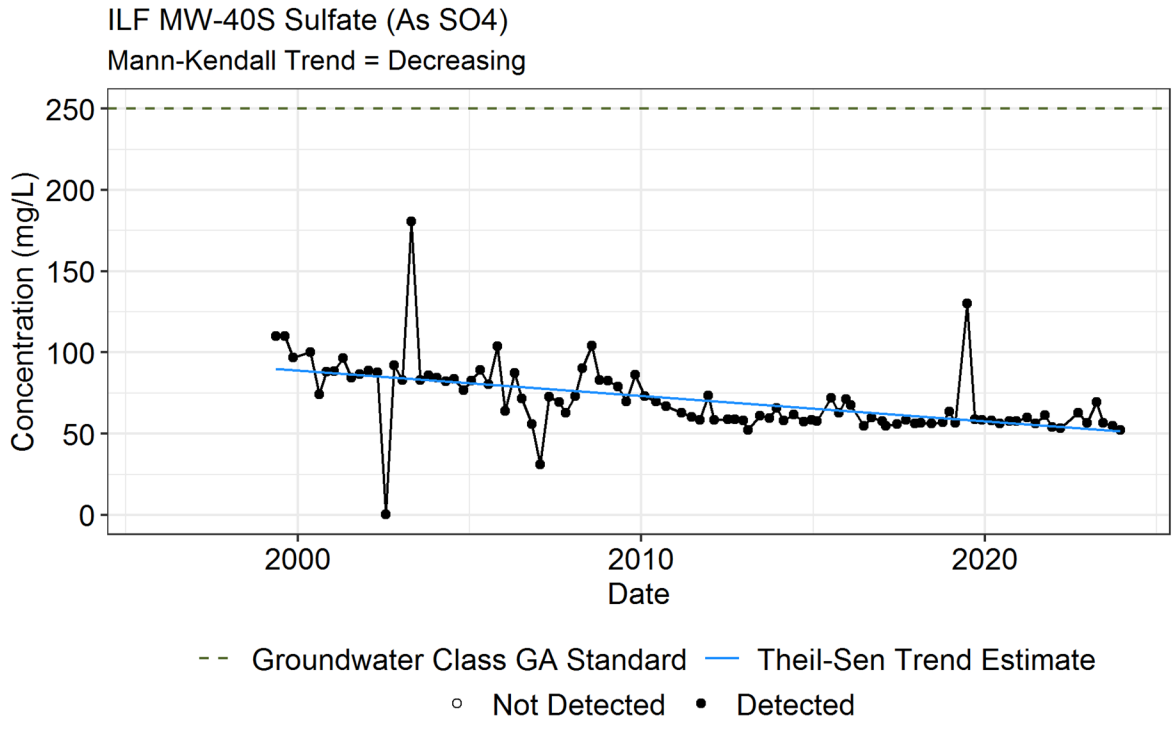

ILF MW-39S Sulfate (As SO4)
Mann-Kendall Trend = Increasing
Concentration (mg/L)
400
300
200
100
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

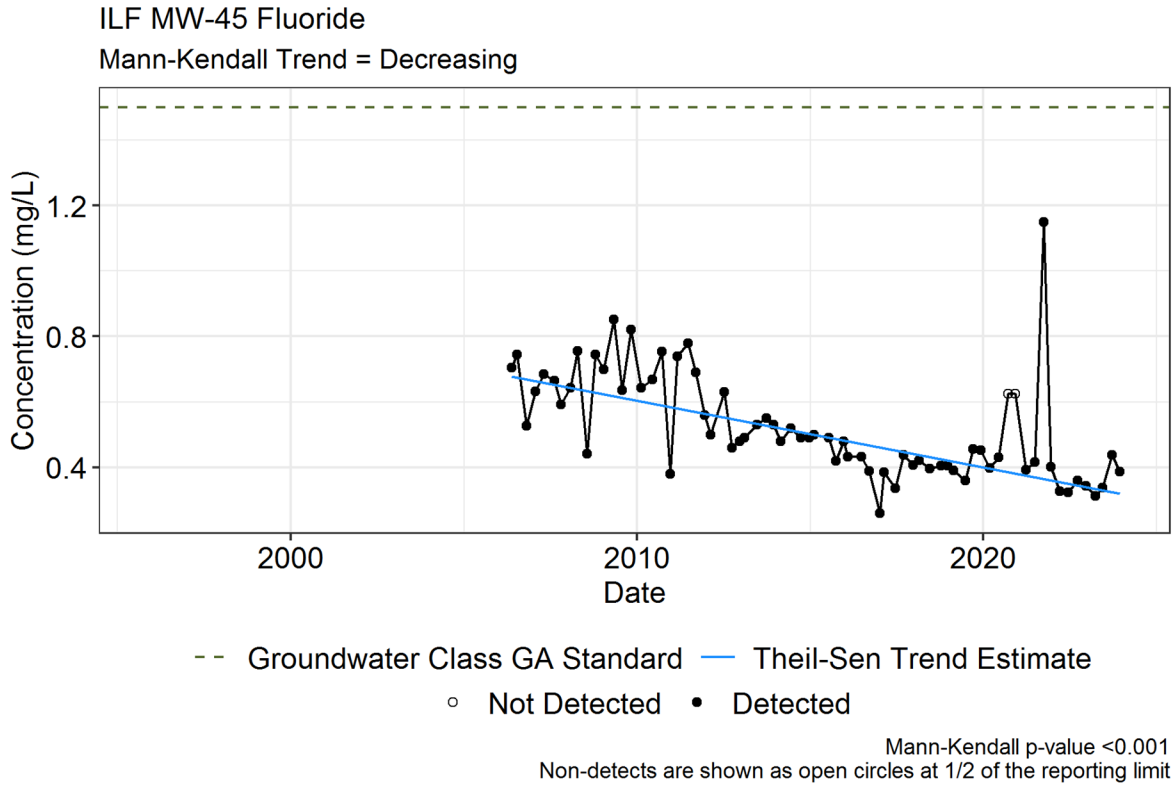


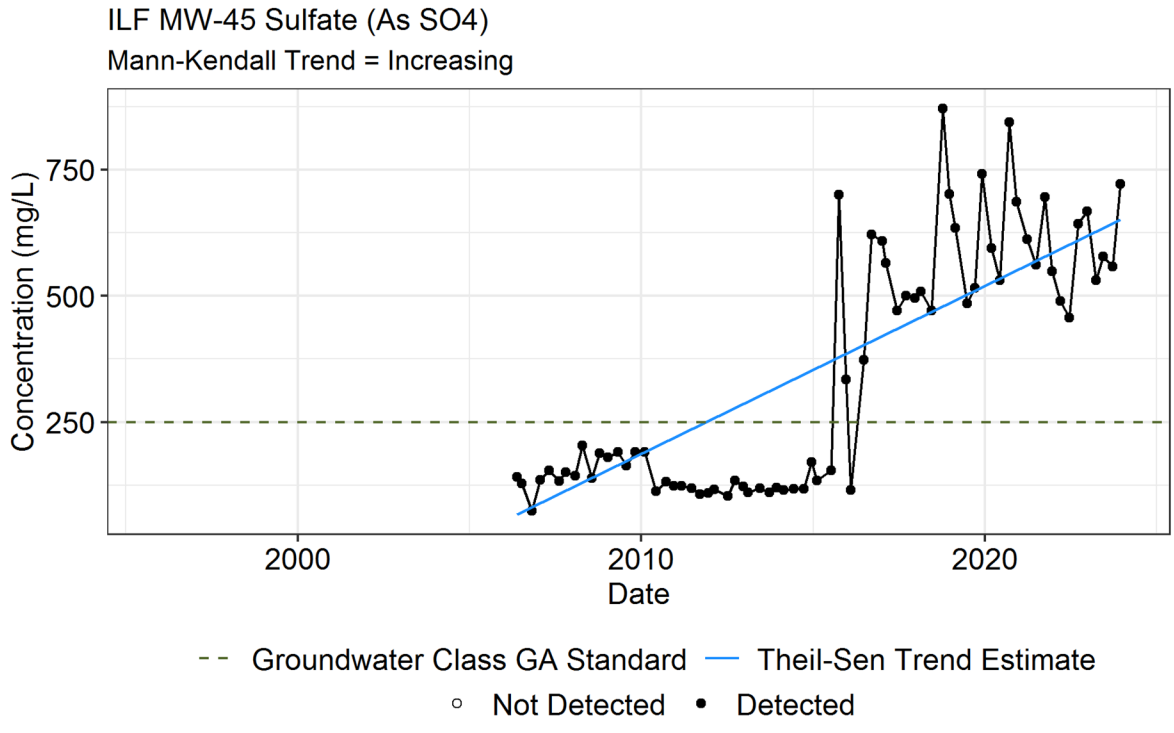
Trend testing not conducted because more than half of observations are nondetects.
Non-detects are shown as open circles at 1/2 of the reporting limit



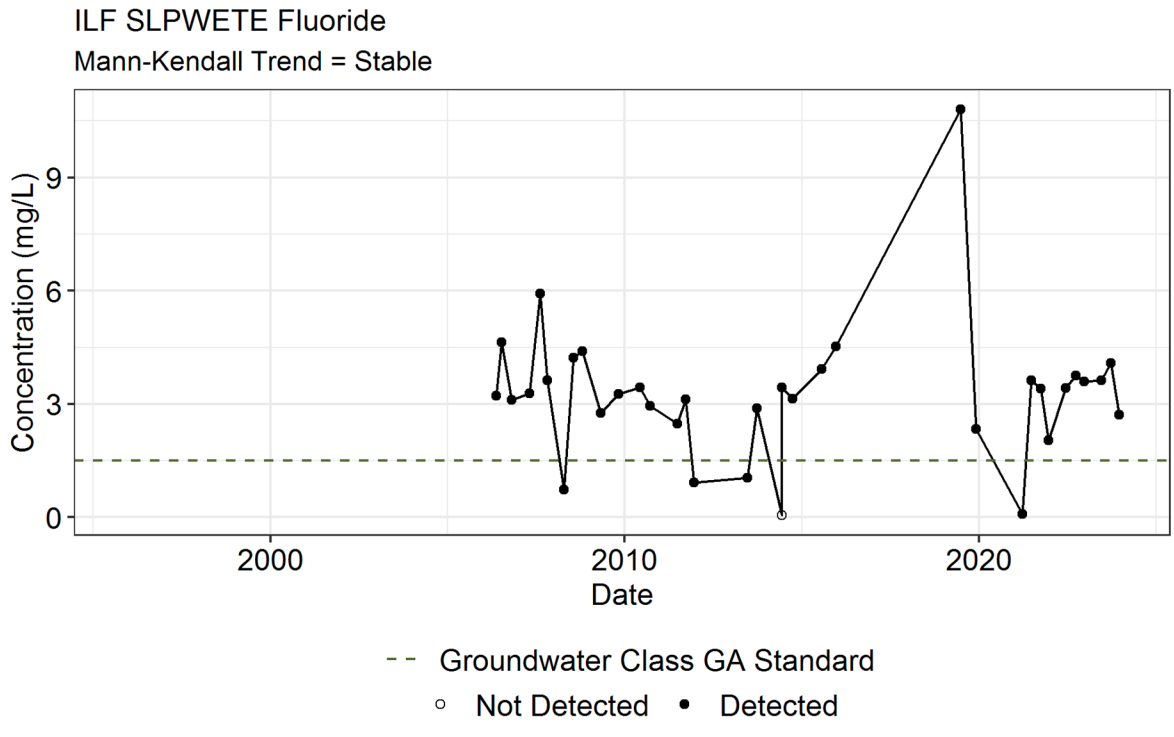
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit


ILF MW-40S Sulfate (As SO4)
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
250
200
150
100
50
0
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit


ILF MW-45 Fluoride
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
1.2
0.8
0.4
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



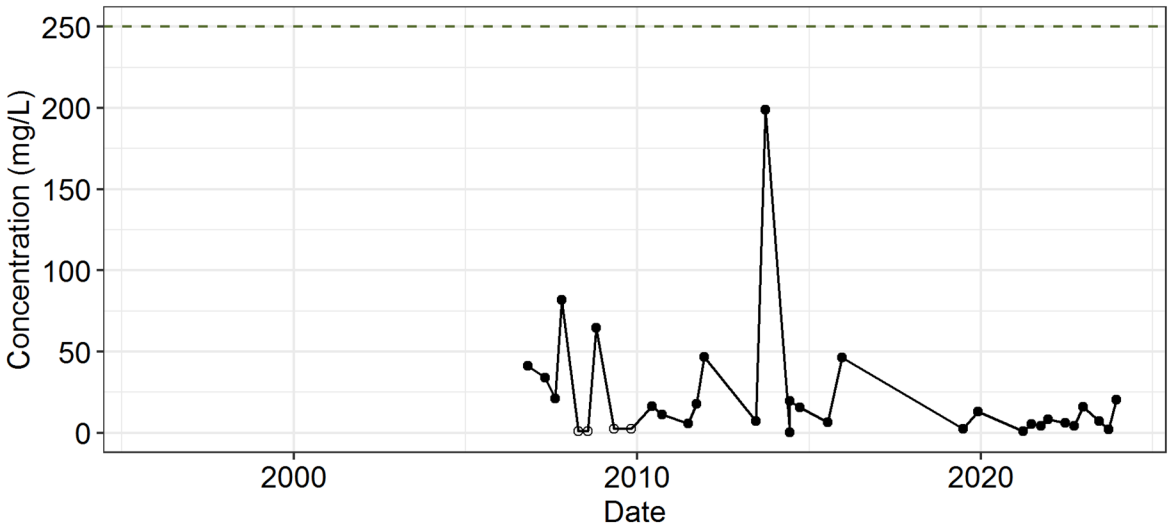
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

ILF SLPWETE Sulfate (As SO4)

Mann-Kendall Trend = No Trend



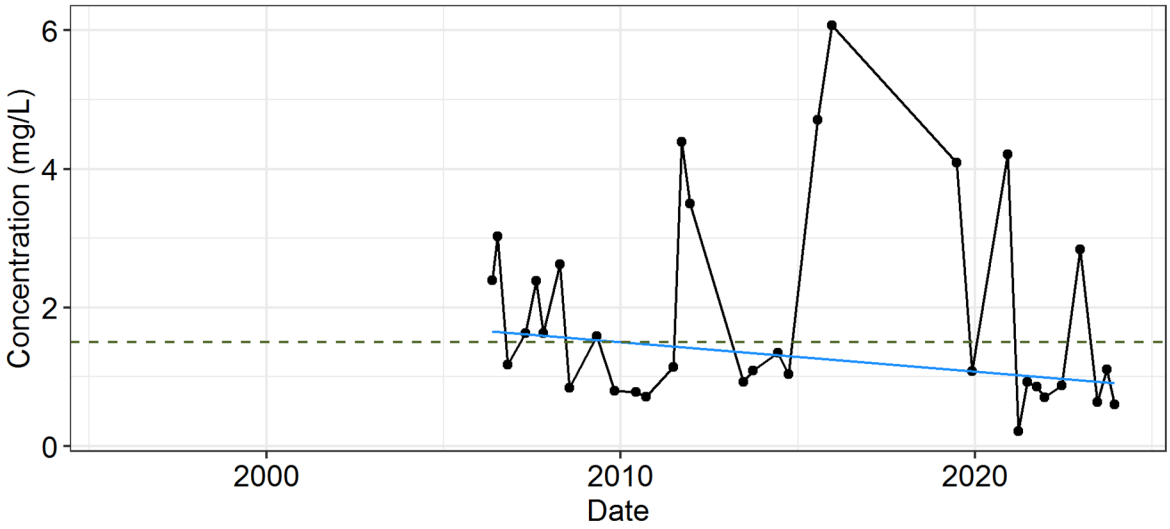
Groundwater Class GA Standard

Not Detected • Detected

Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

ILF SLPWETW Fluoride

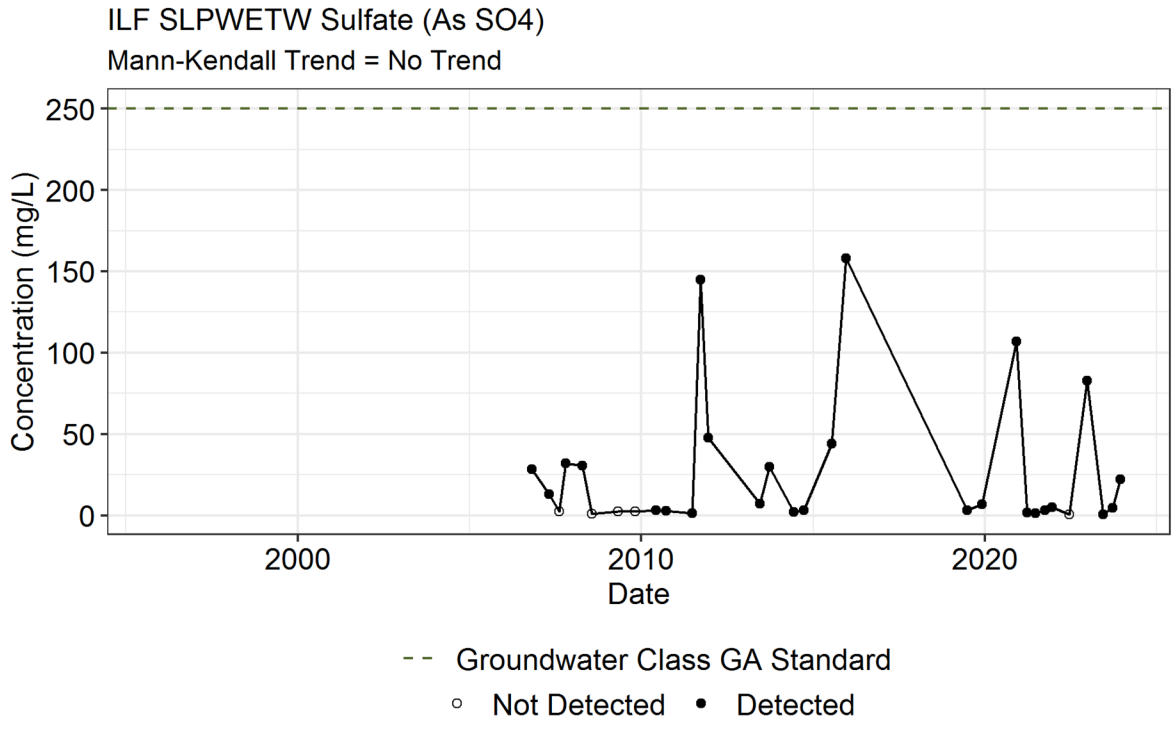
Mann-Kendall Trend = Probably Decreasing



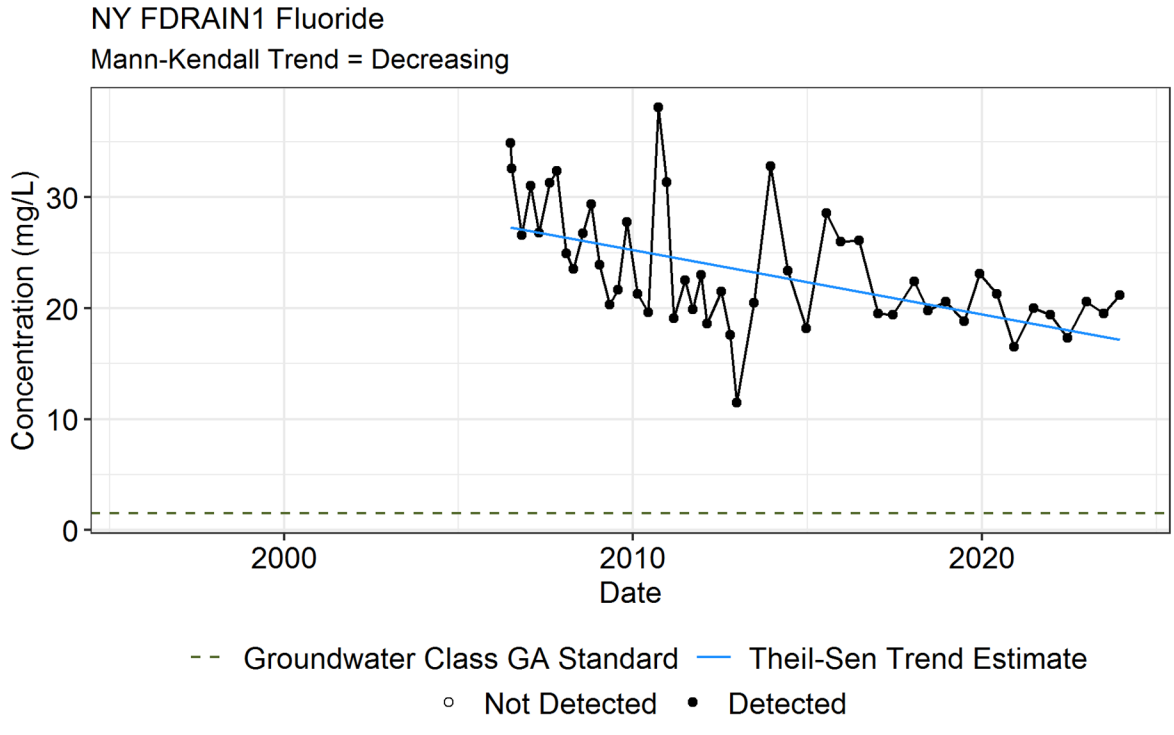
Groundwater Class GA Standard — Theil-Sen Trend Estimate

Not Detected • Detected

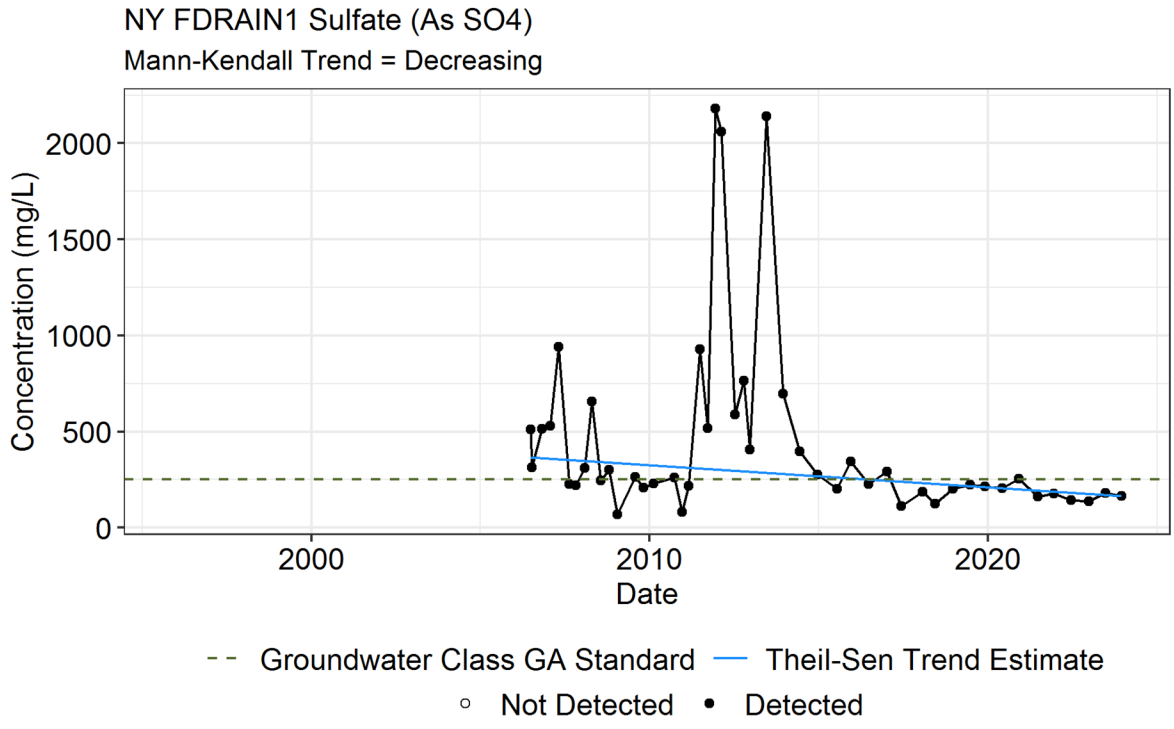
Mann-Kendall p-value = 0.065
Non-detects are shown as open circles at 1/2 of the reporting limit



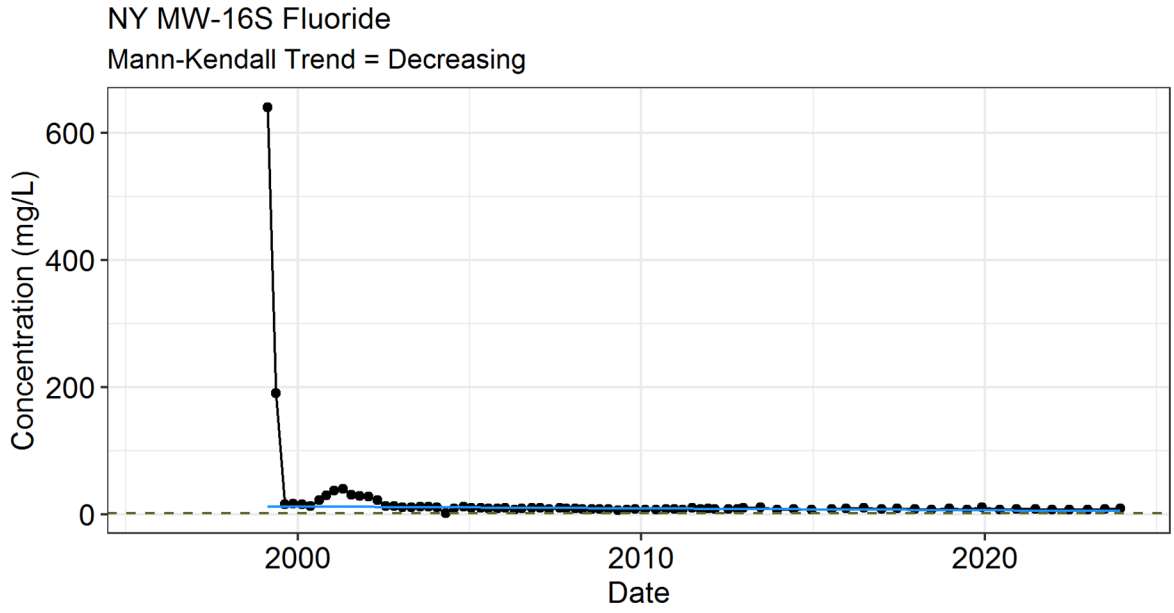
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



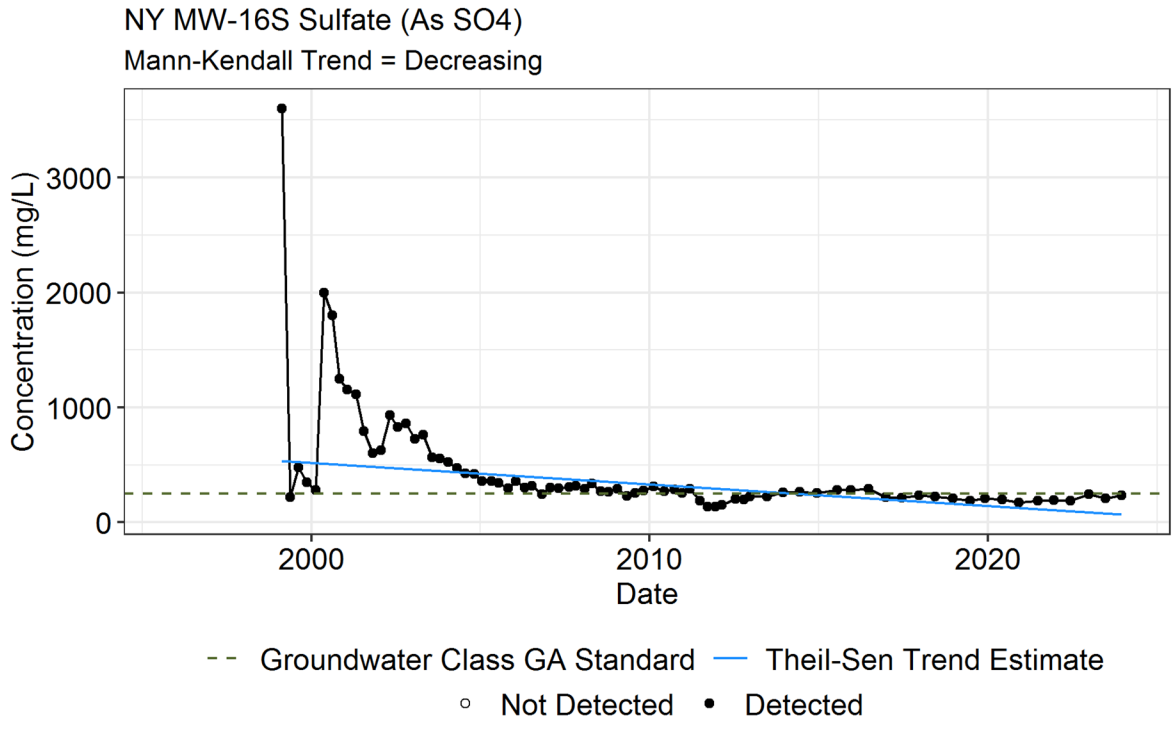
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



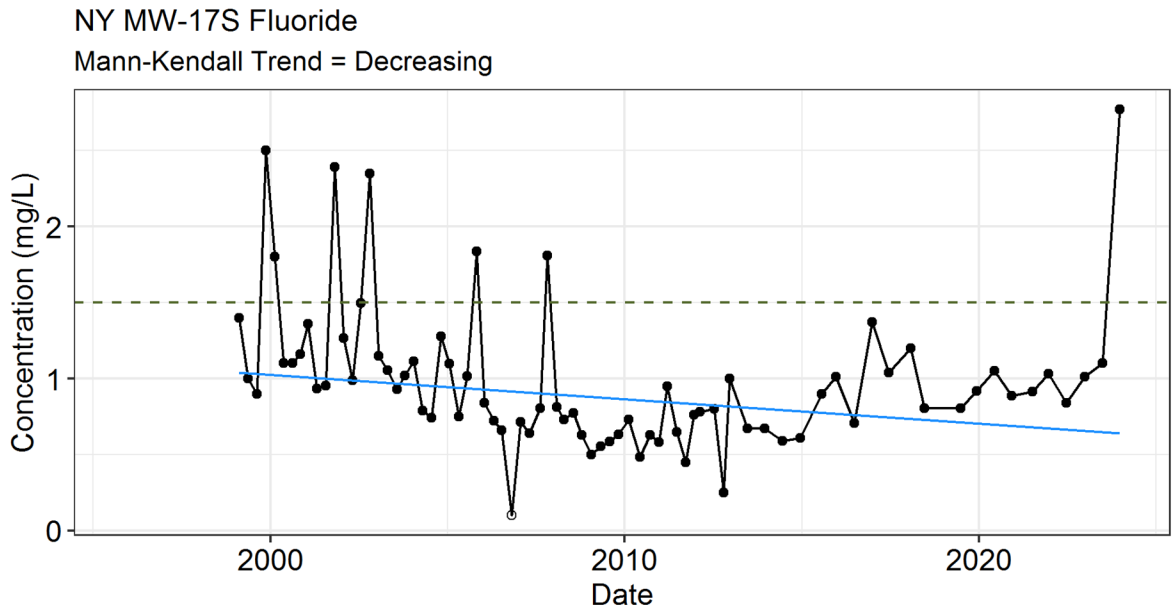
Mann-Kendall p-value = 0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



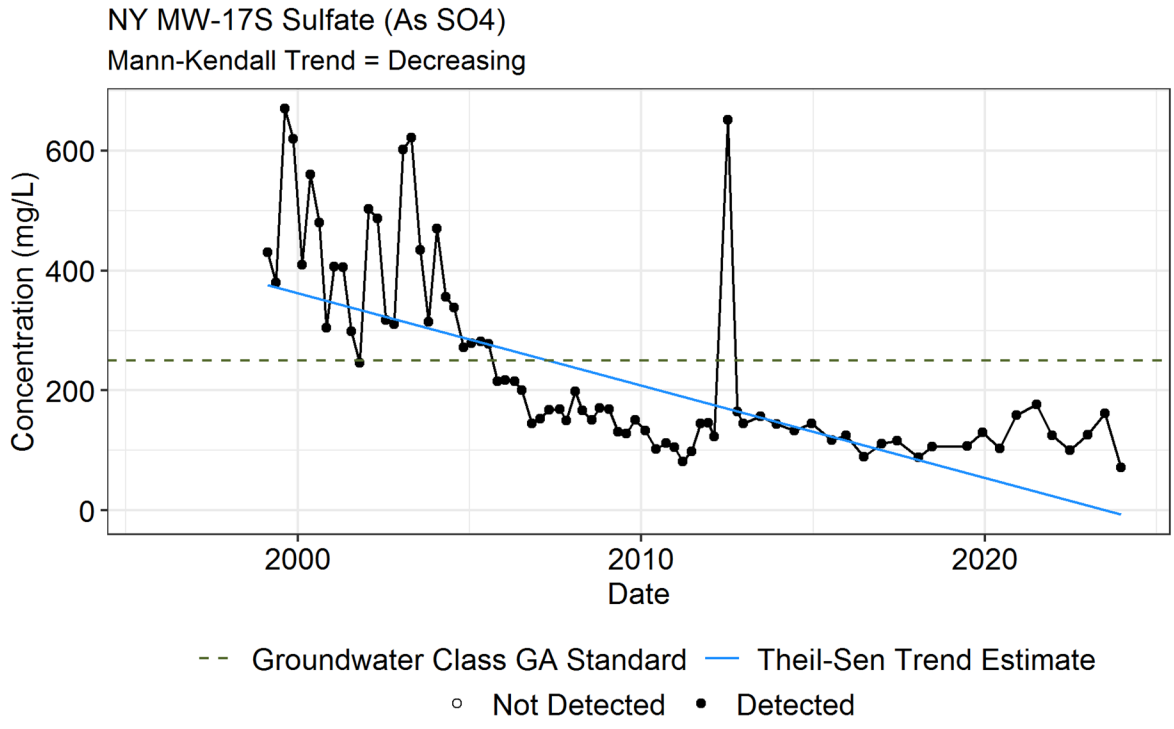
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

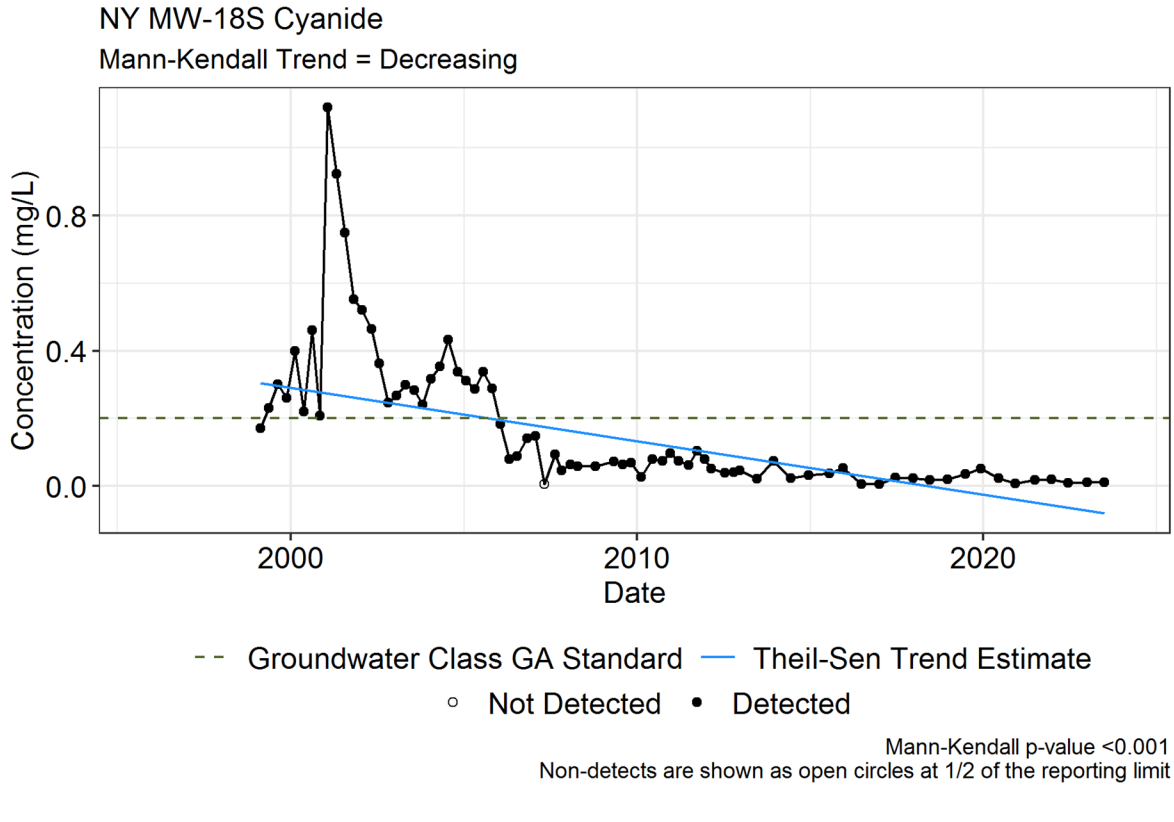


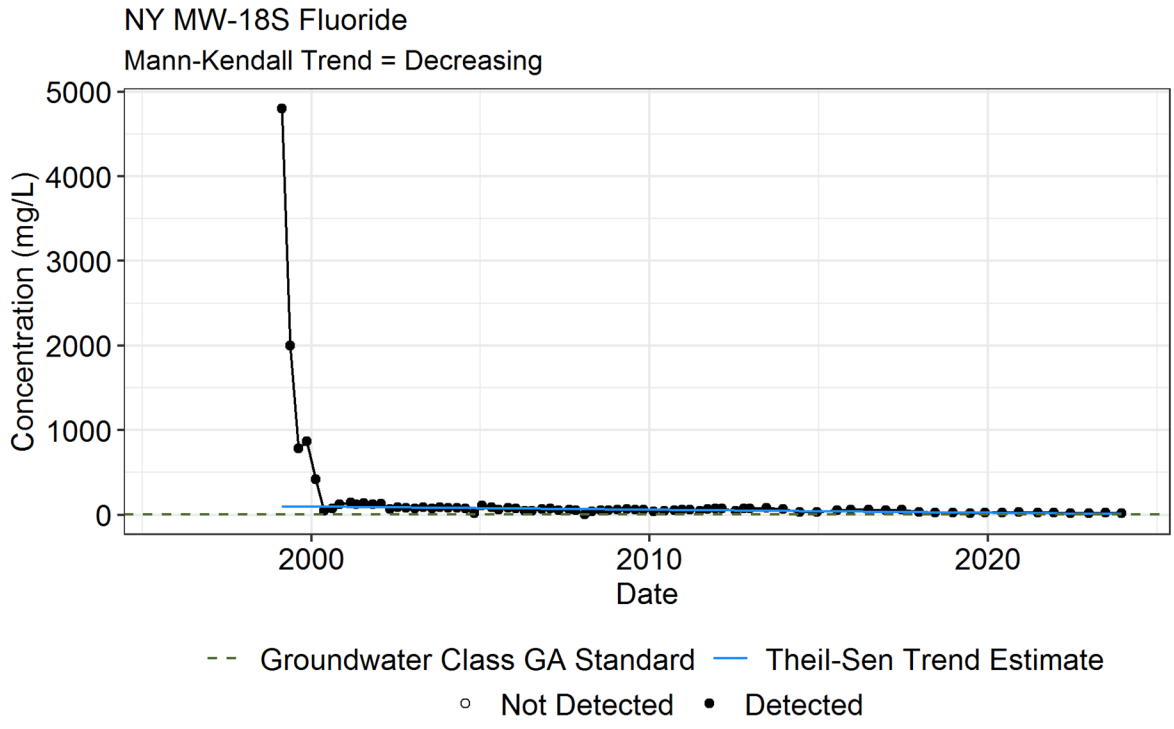
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

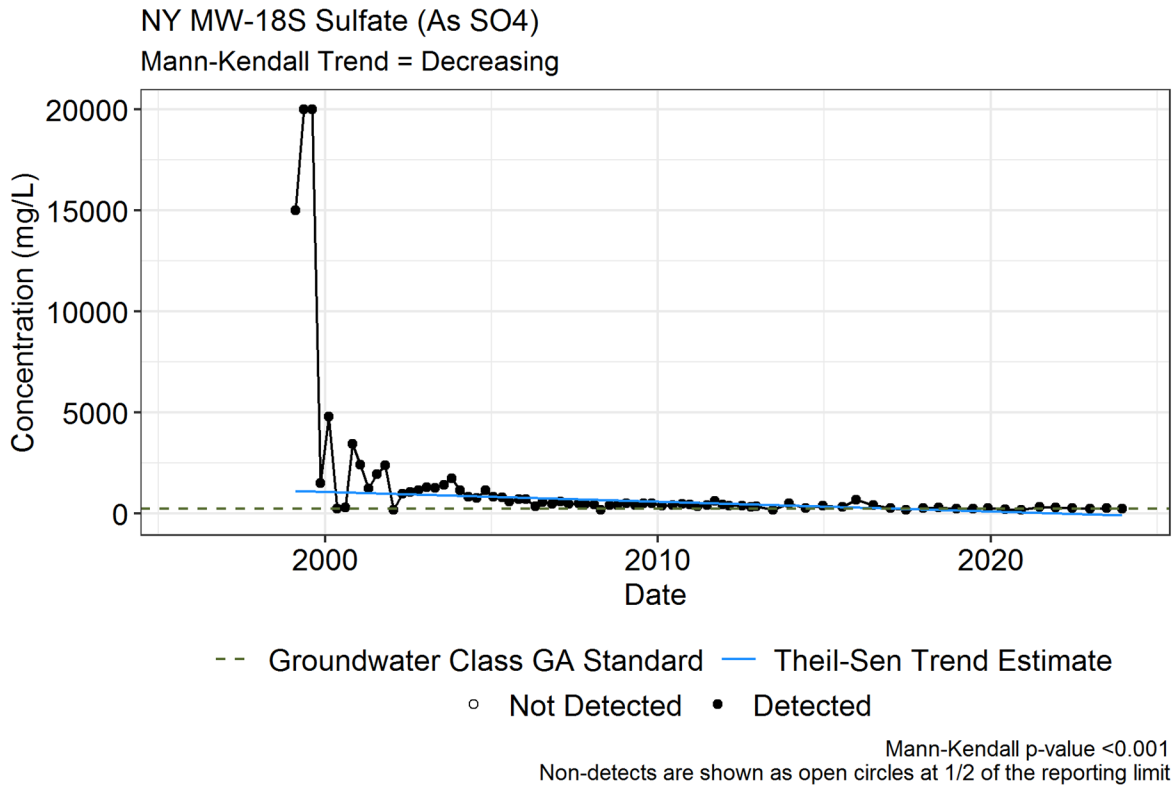


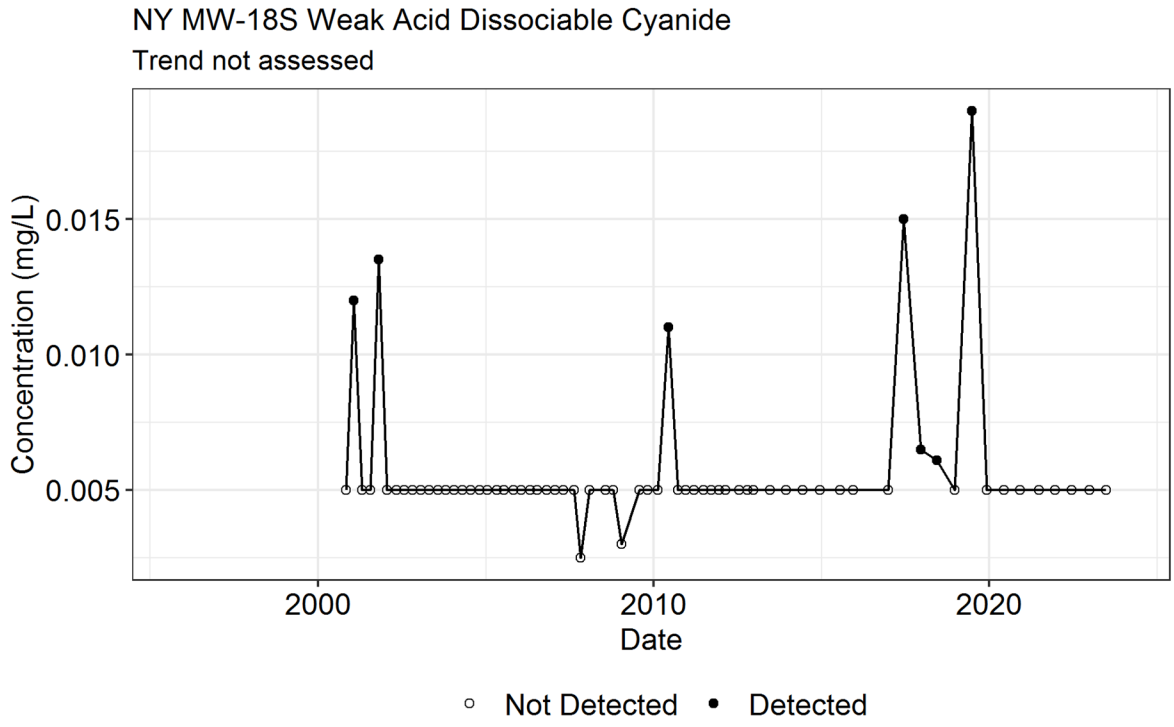
Mann-Kendall p-value = 0.01
Non-detects are shown as open circles at 1/2 of the reporting limit


NY MW-17S Sulfate (As SO4)
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
600
400
200
0
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

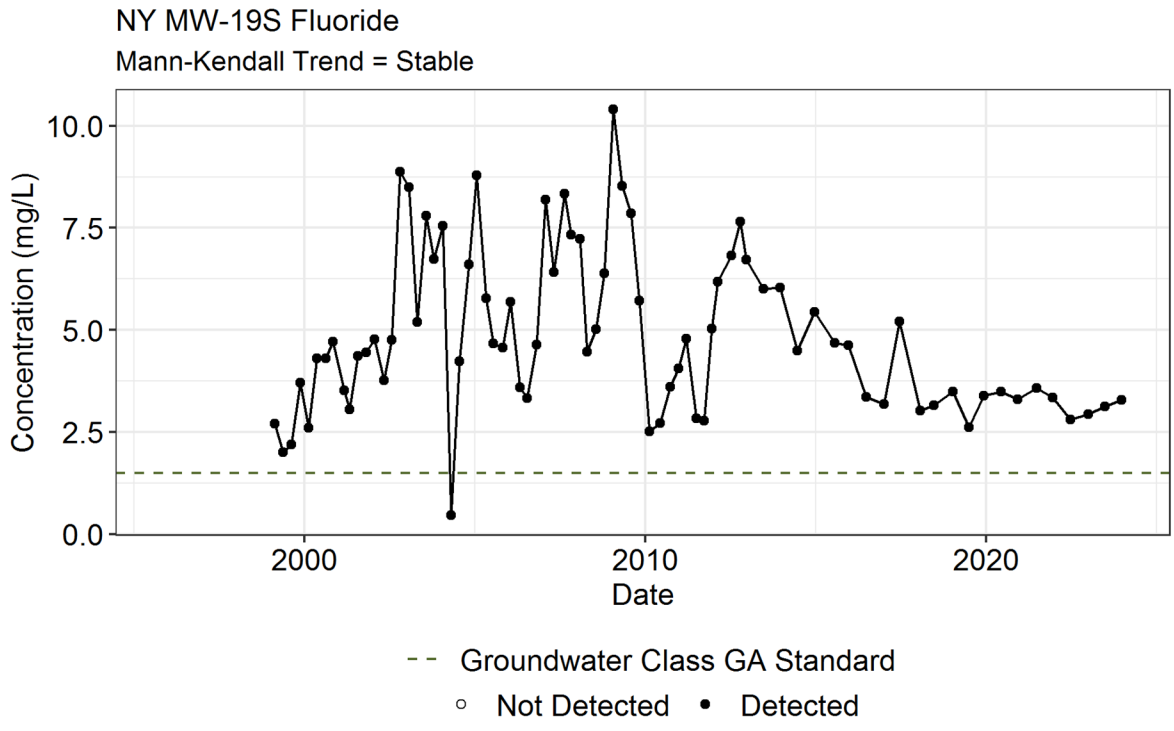

NY MW-18S Cyanide
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
0.8
0.4
0.0
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit


NY MW-18S Fluoride
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
5000
4000
3000
2000
1000
0
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

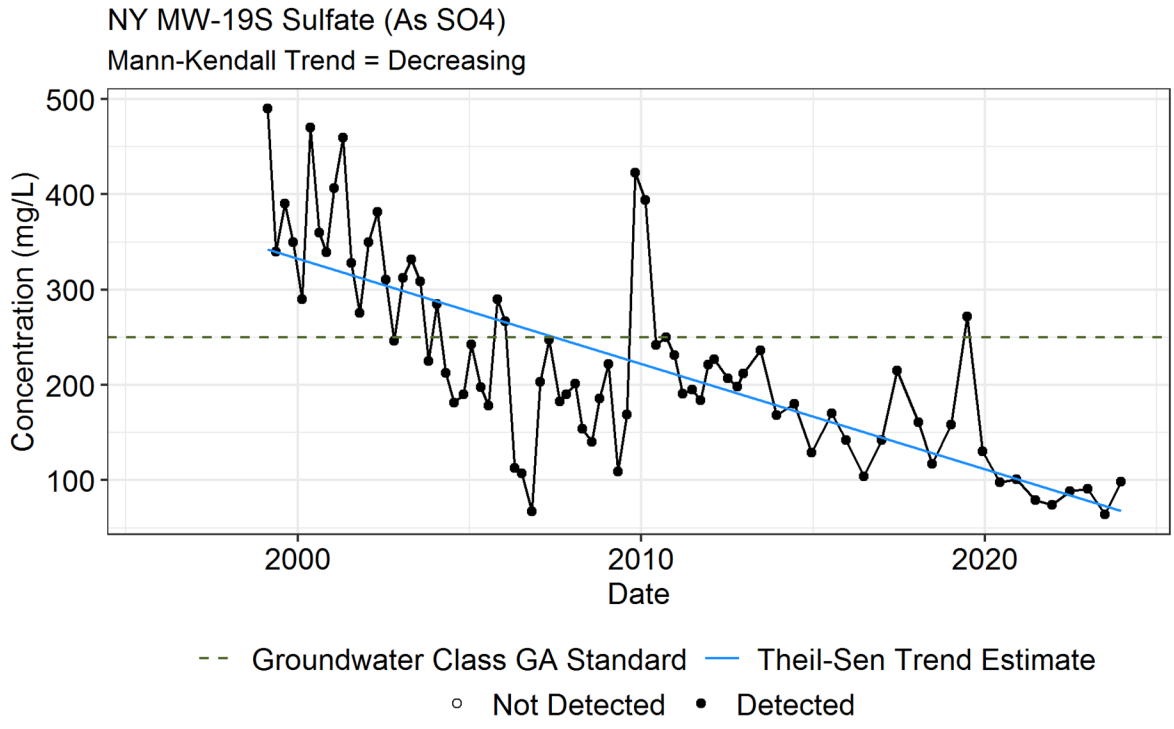

NY MW-18S Sulfate (As SO4)
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
20000
15000
10000
5000
0
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



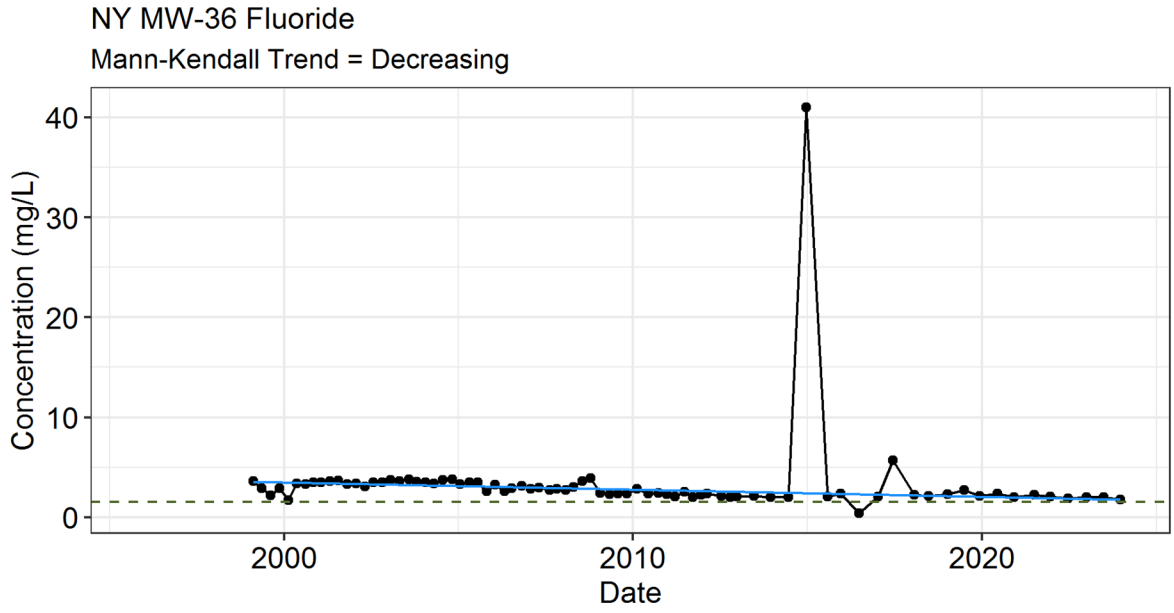
Trend testing not conducted because more than half of observations are nondetects.
Non-detects are shown as open circles at 1/2 of the reporting limit



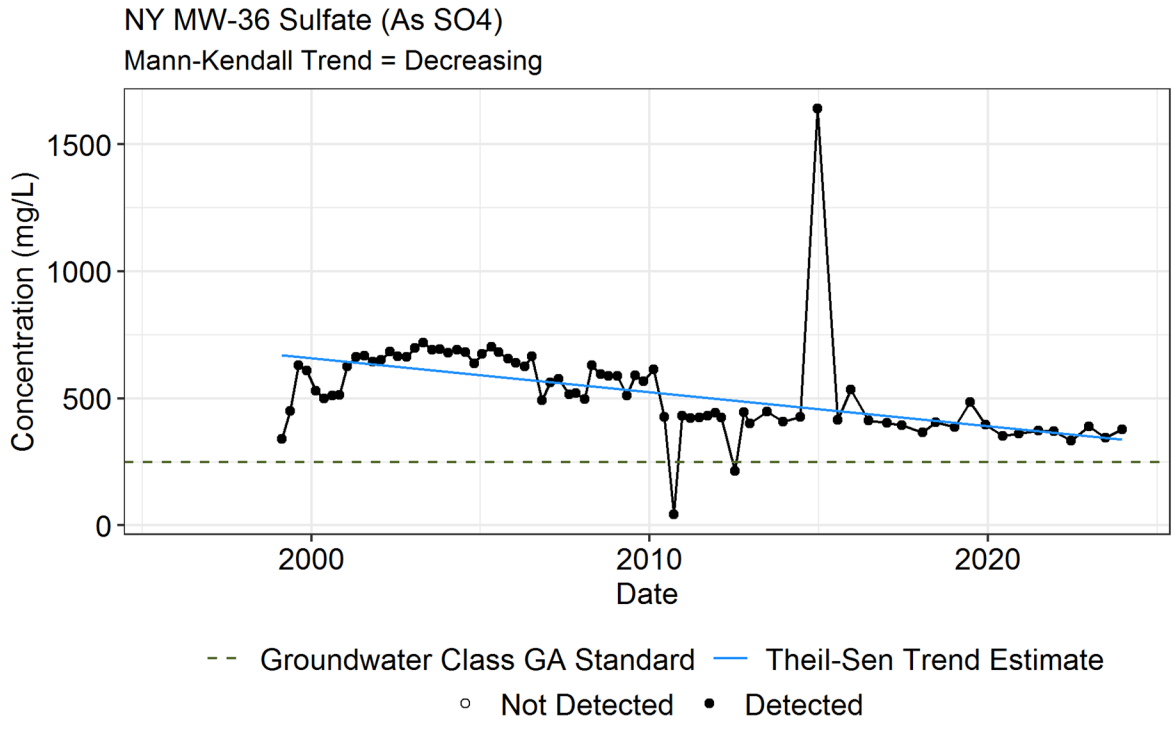
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



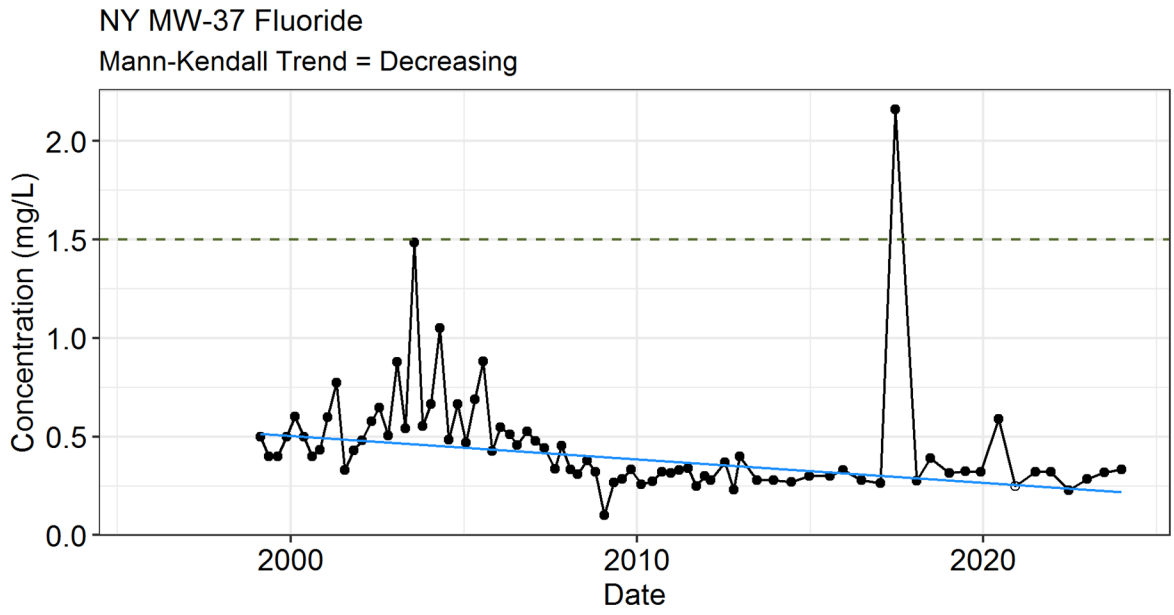
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



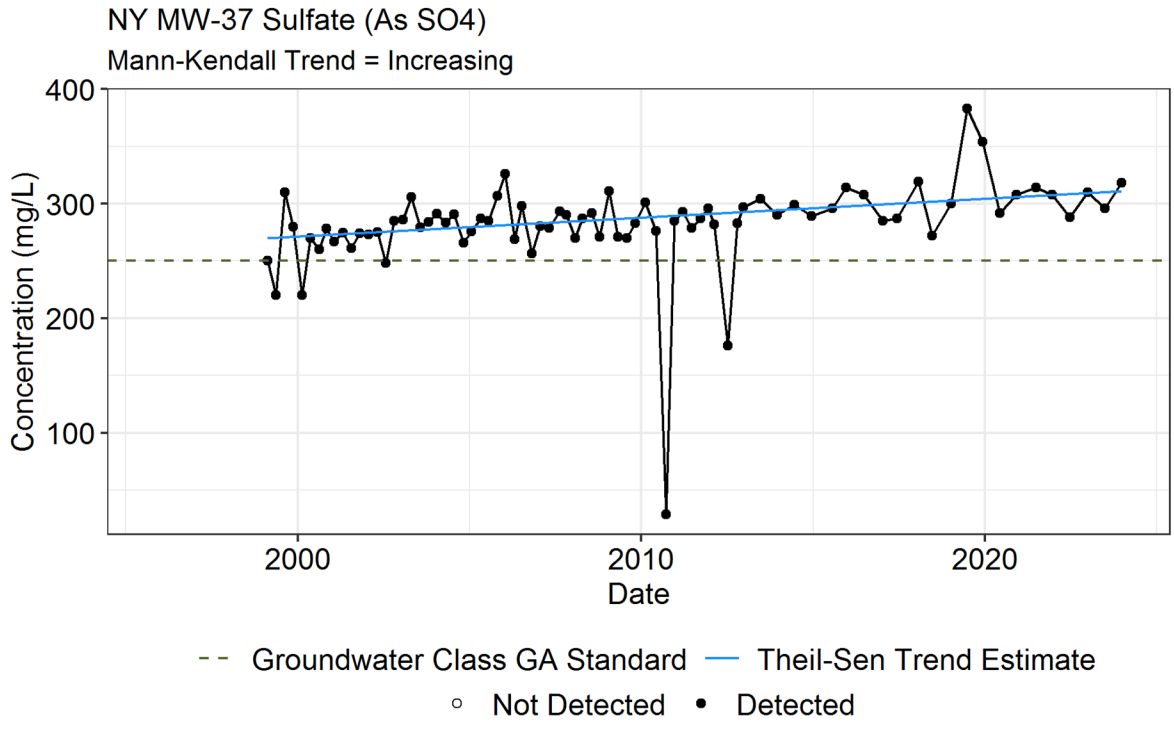
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



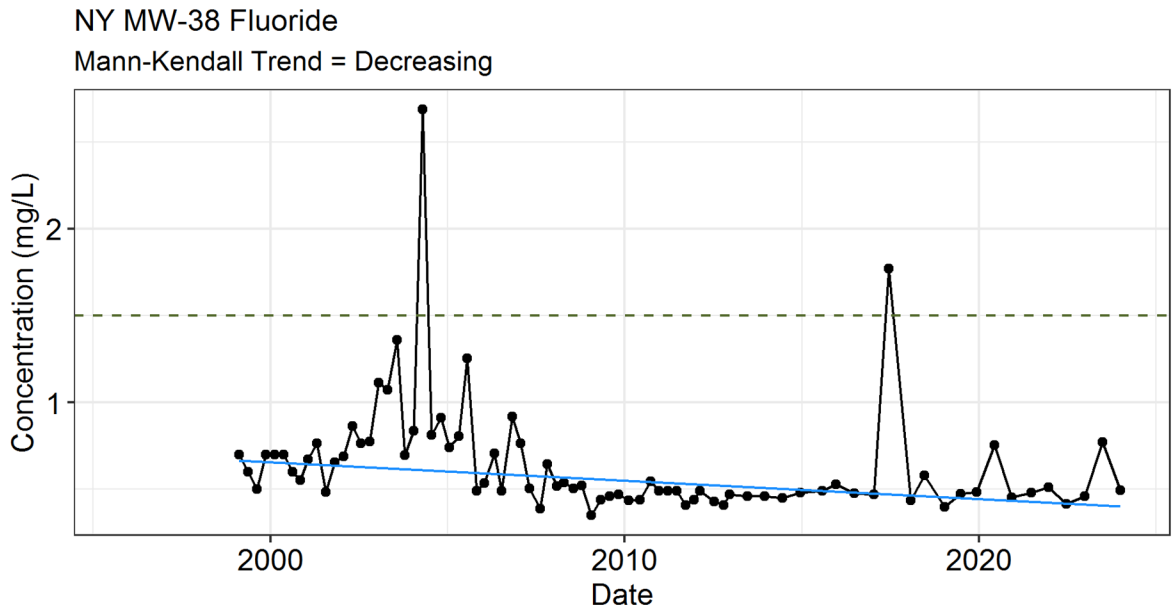
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



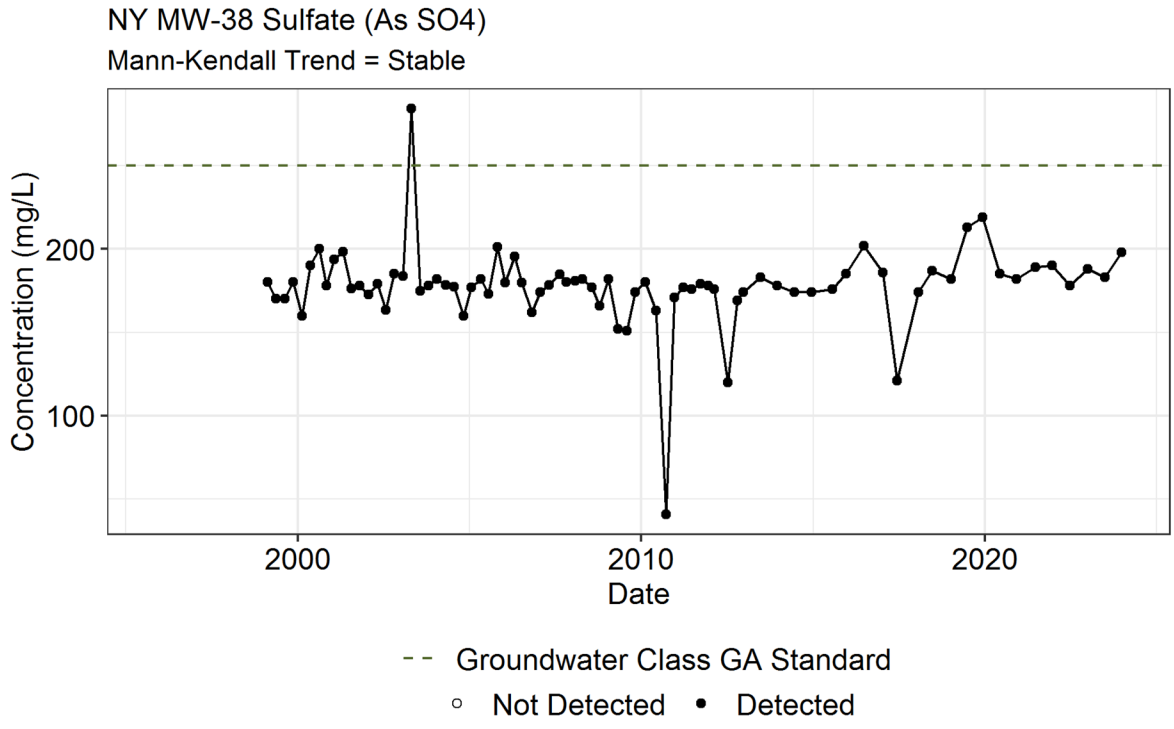
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



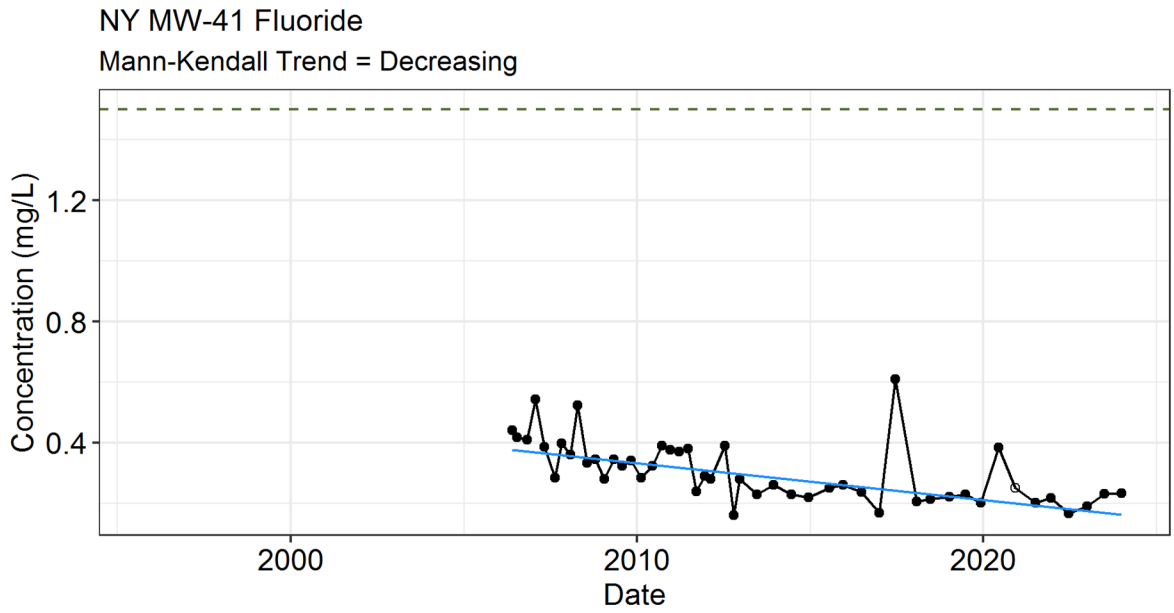
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



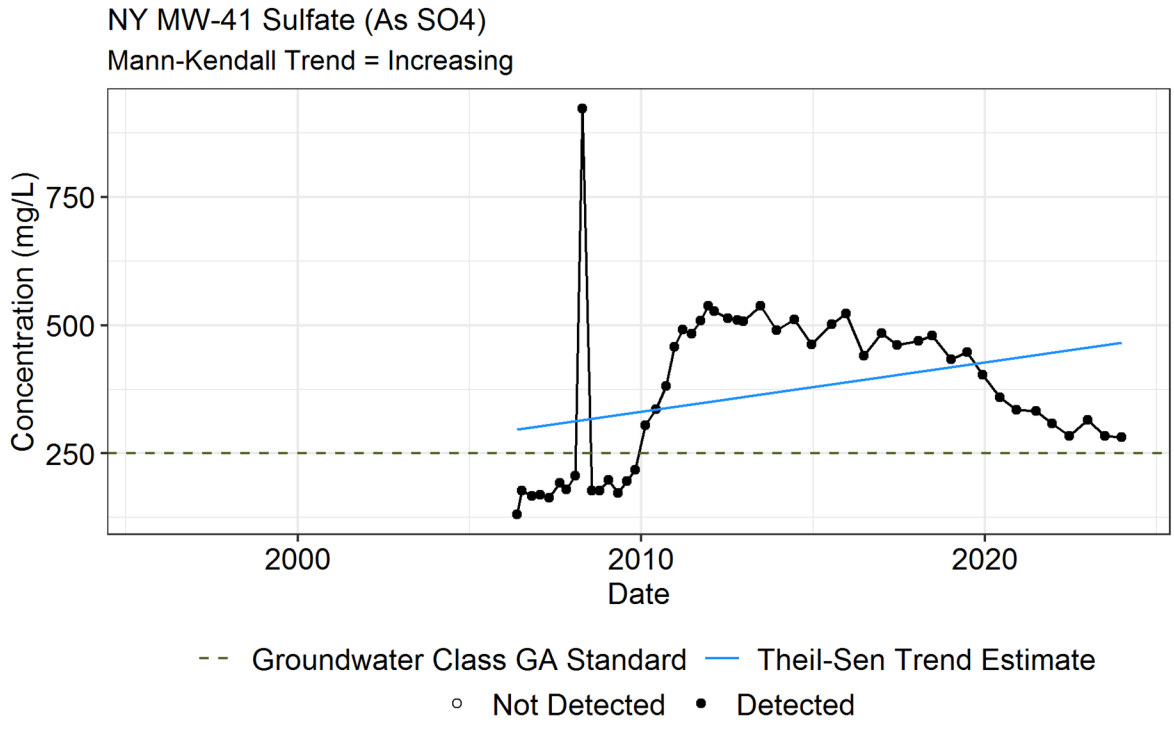
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



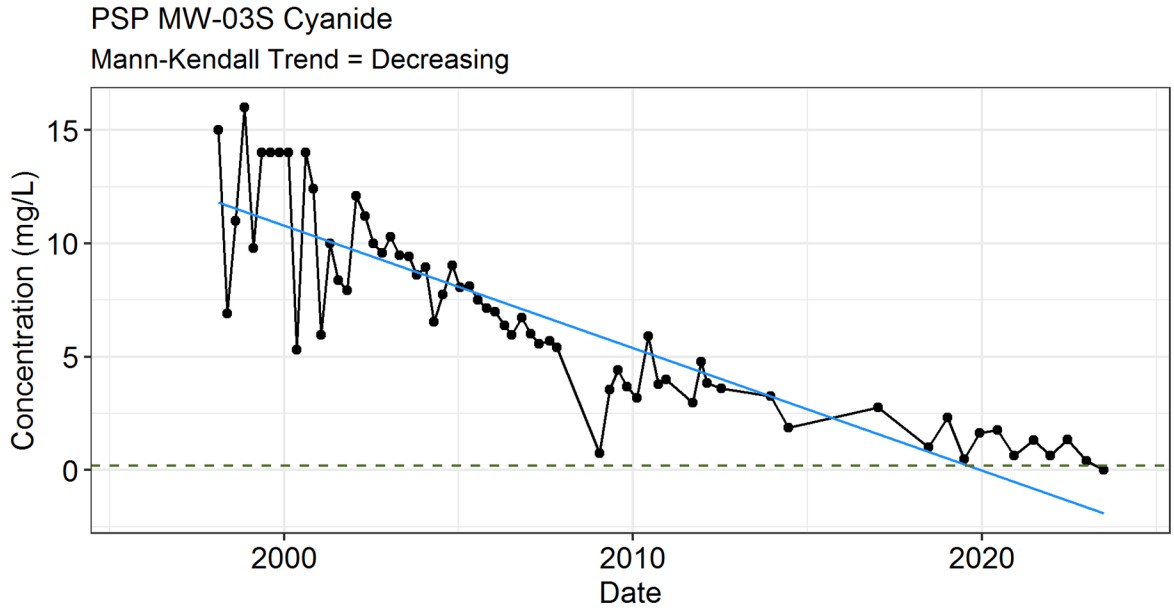
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



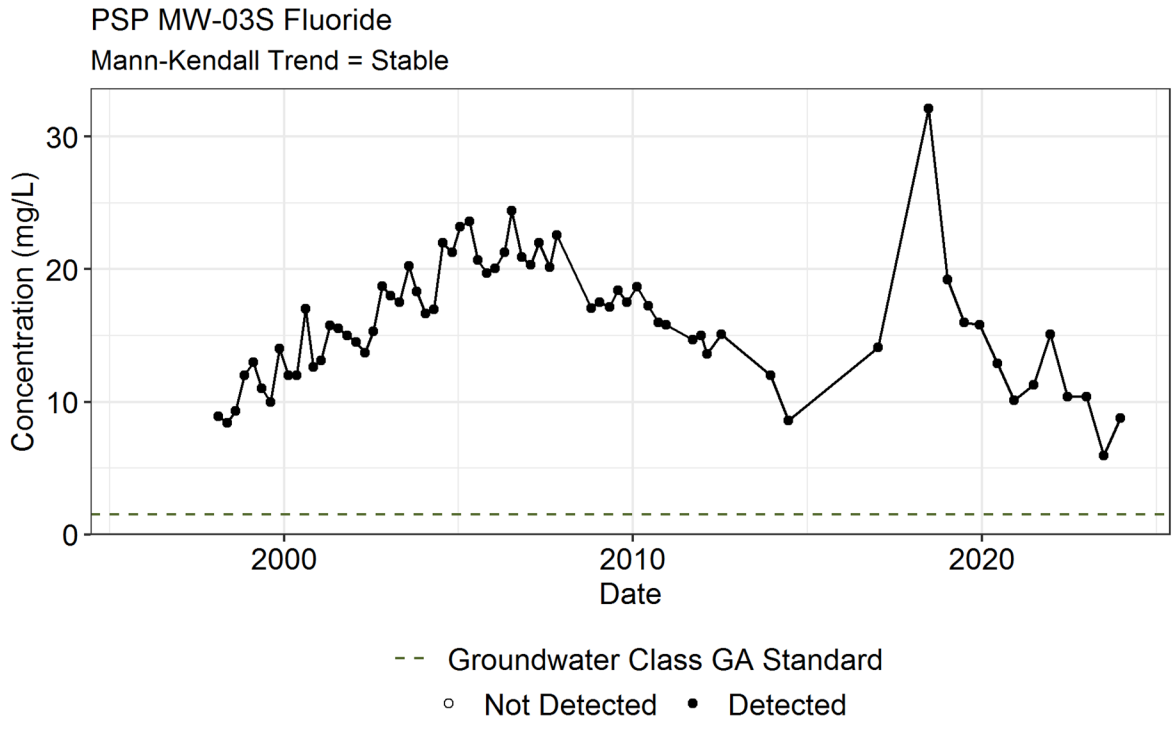
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



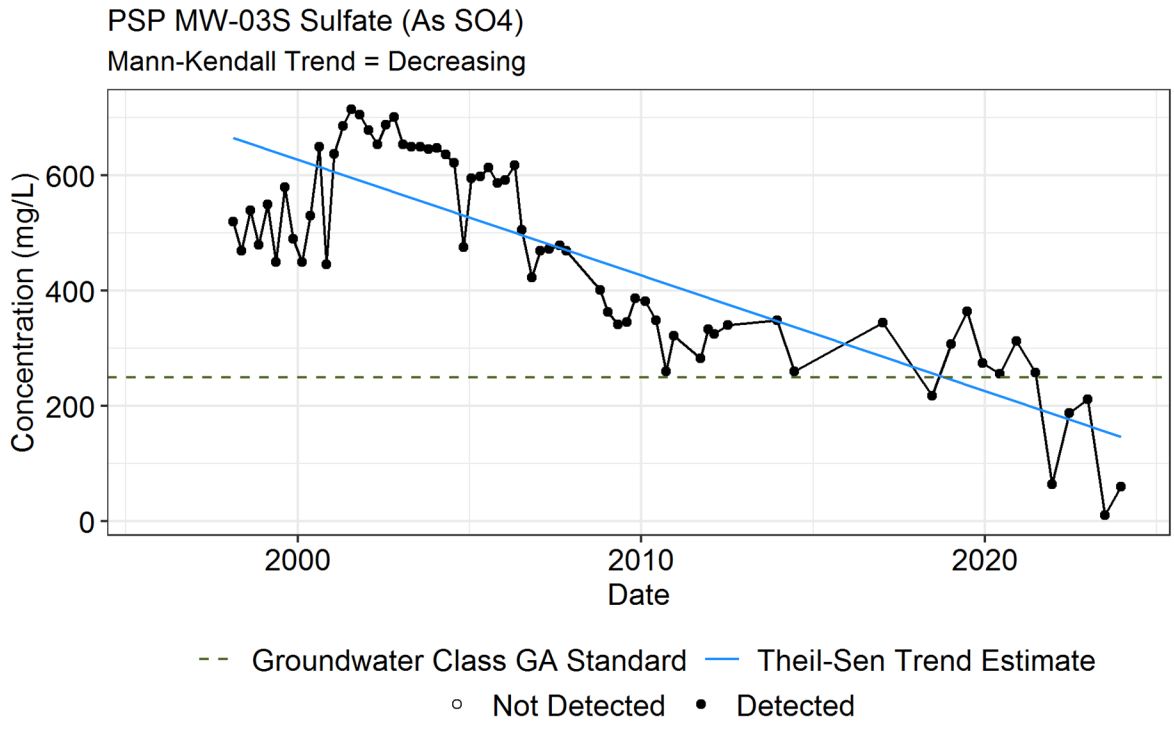
Mann-Kendall p-value = 0.042
Non-detects are shown as open circles at 1/2 of the reporting limit



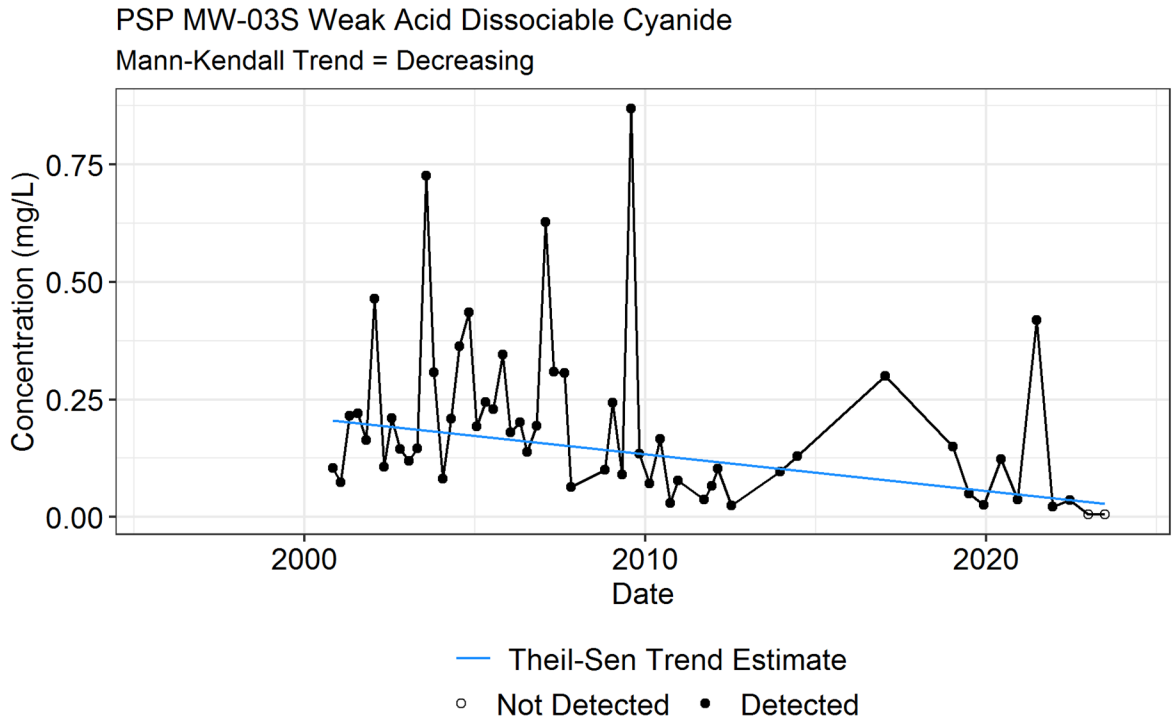
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

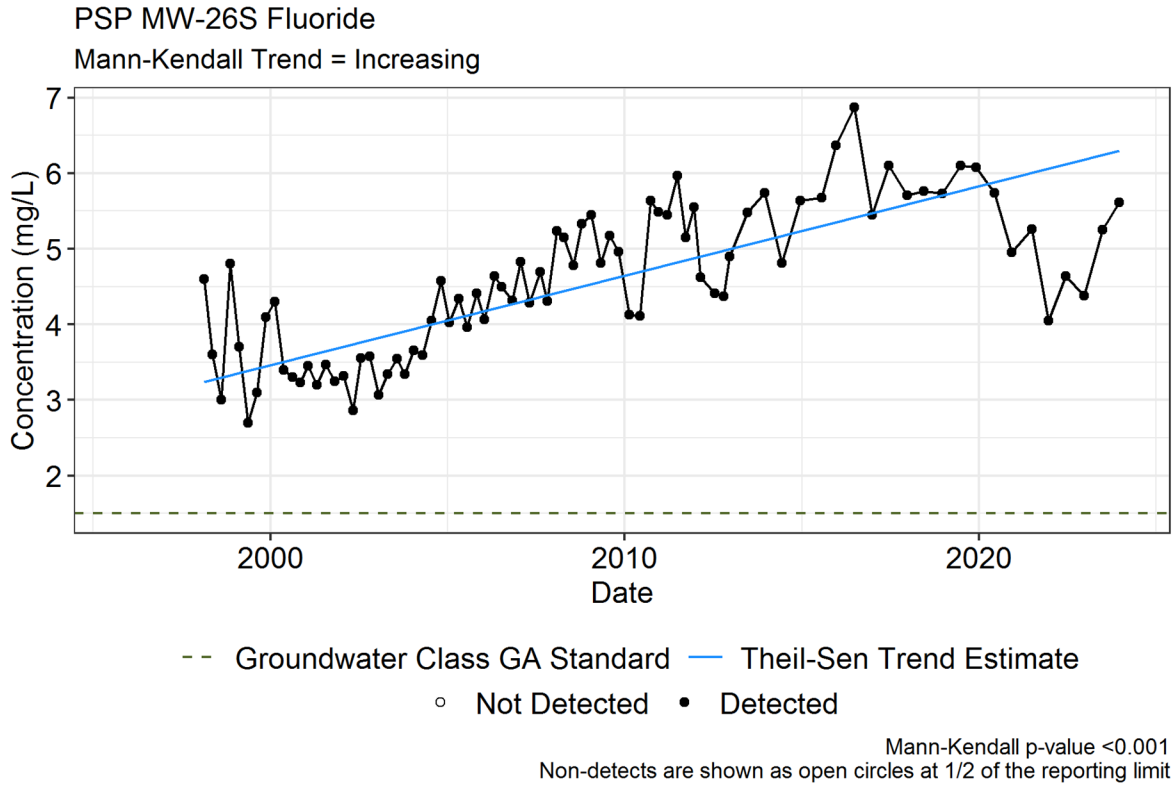


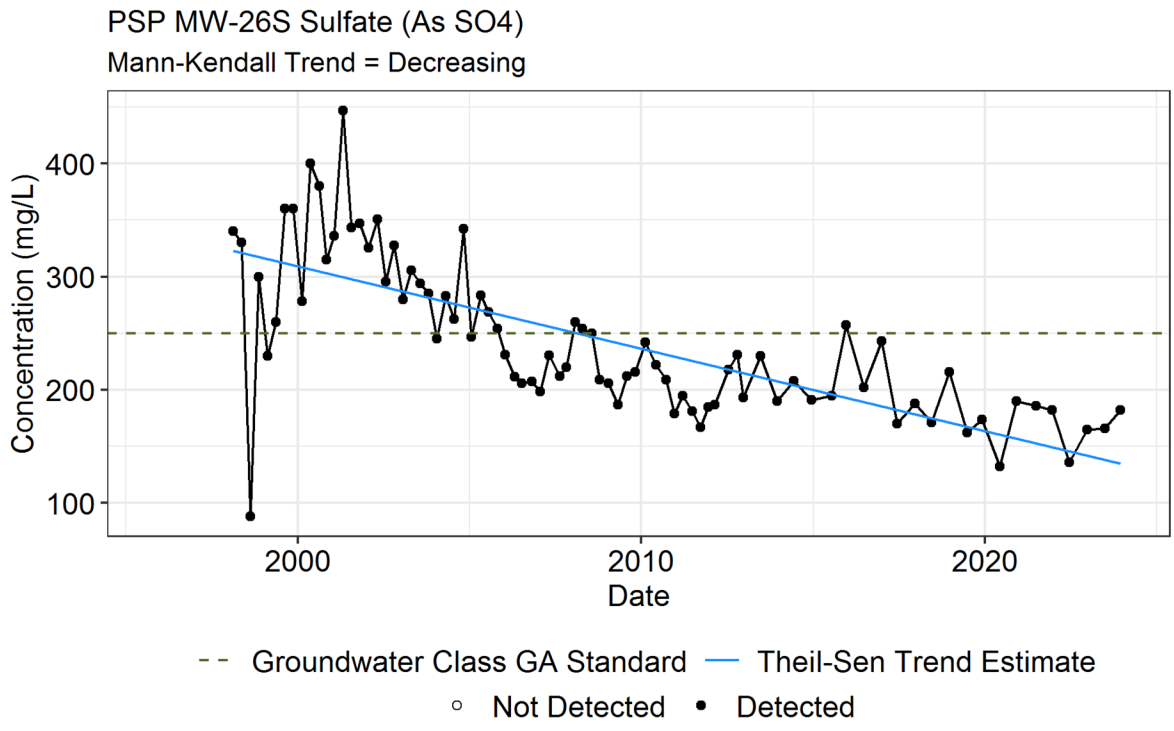
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



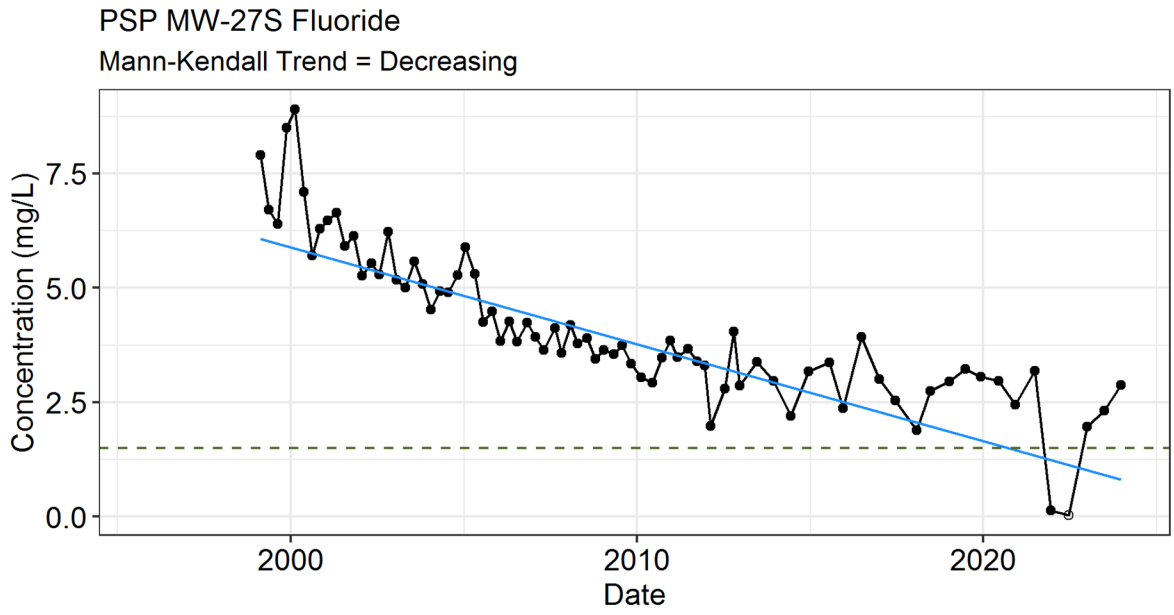
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit


PSP MW-03S Weak Acid Dissociable Cyanide
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
0.00
0.25
0.50
0.75
2000
2010
2020
Date
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

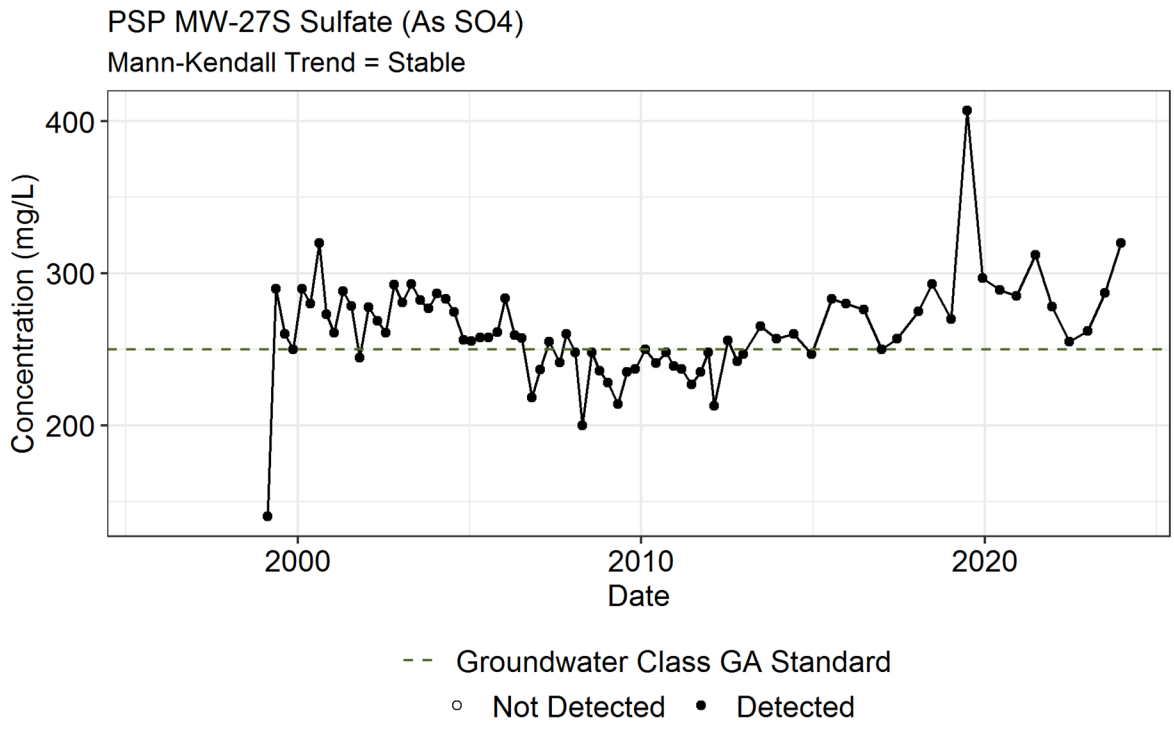

PSP MW-26S Fluoride
Mann-Kendall Trend = Increasing
Concentration (mg/L)
2
3
4
5
6
7
2000
2010
2020
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



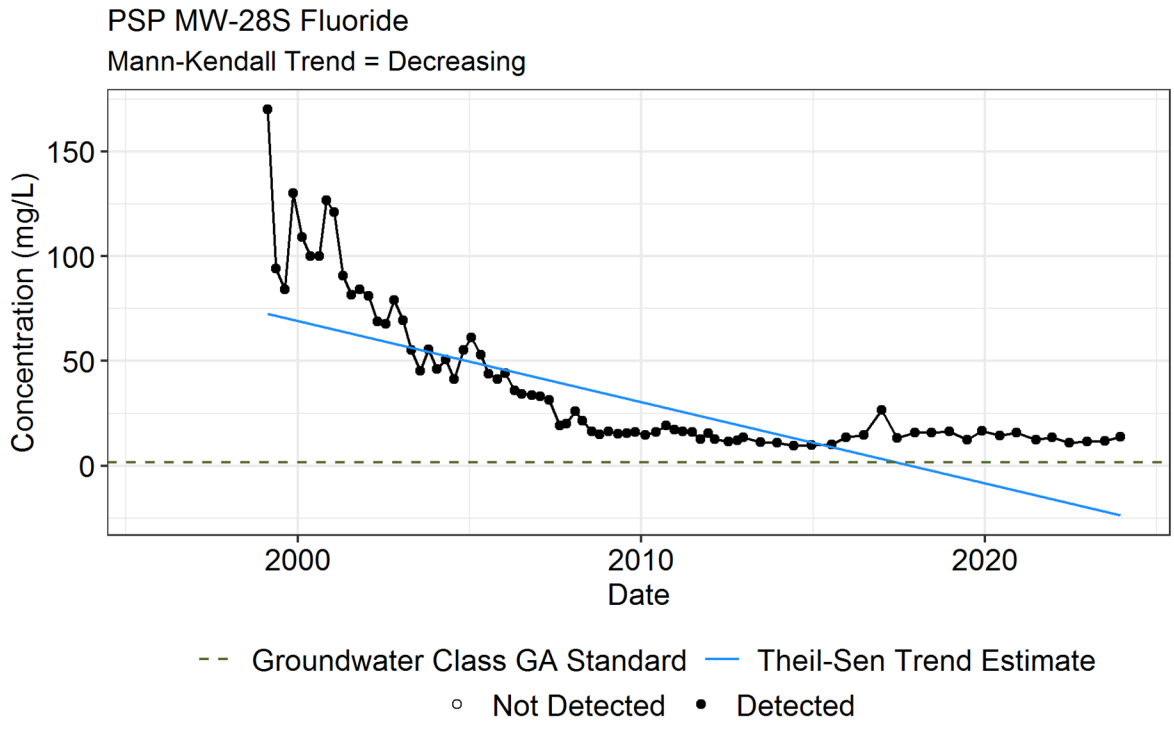
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

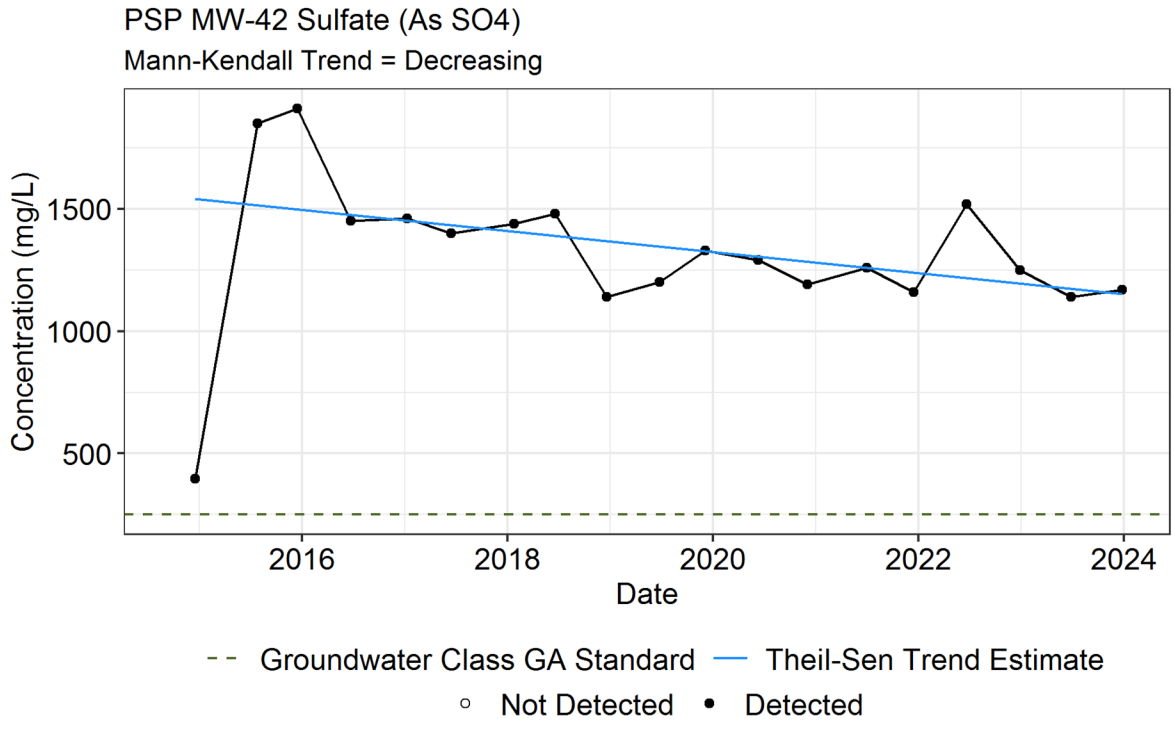


Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

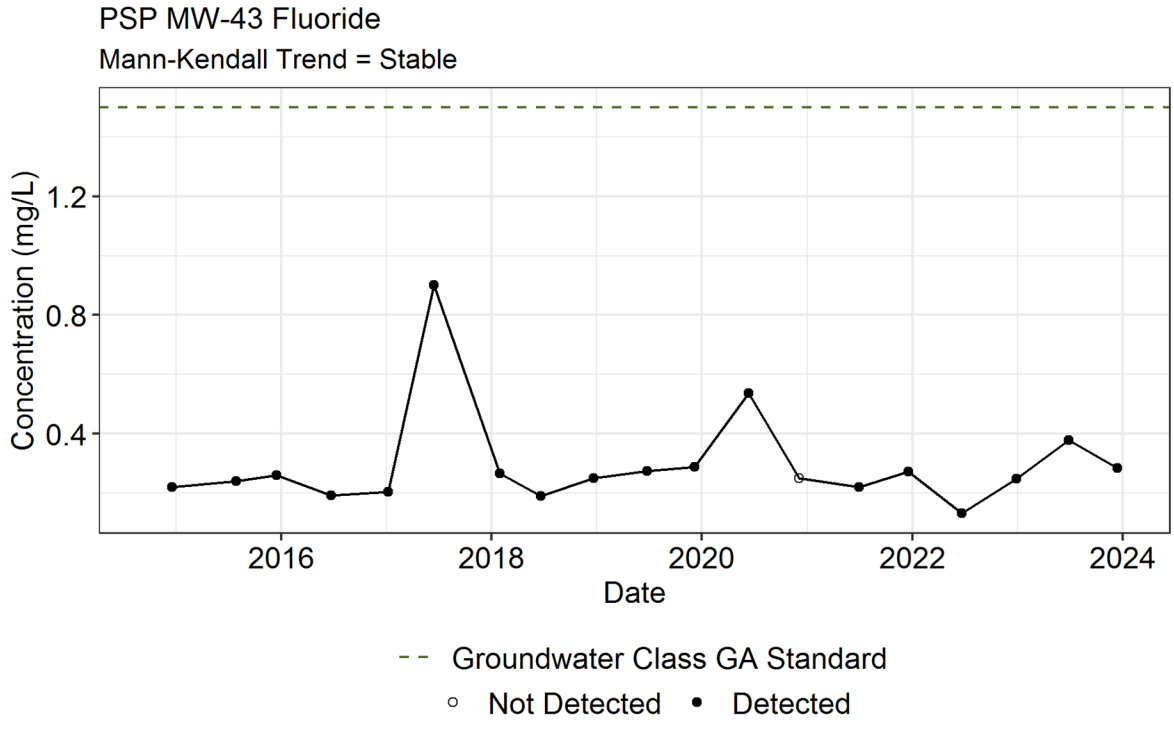


Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

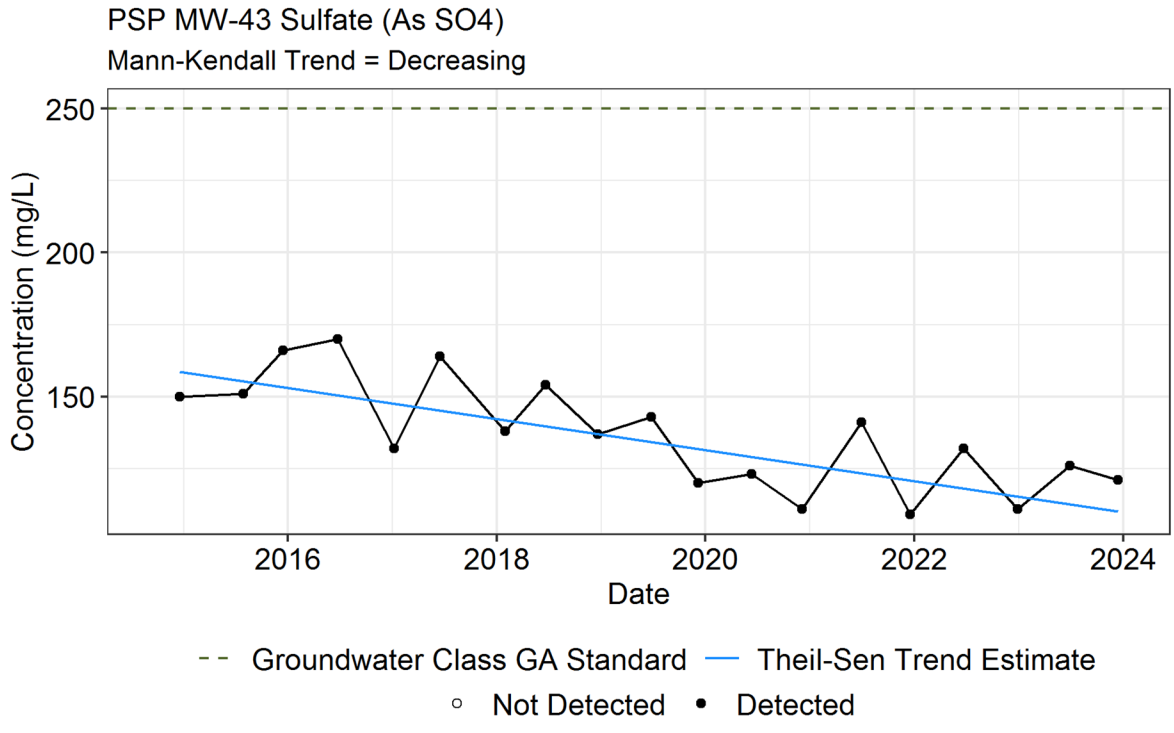
Appendix D3 Comparison



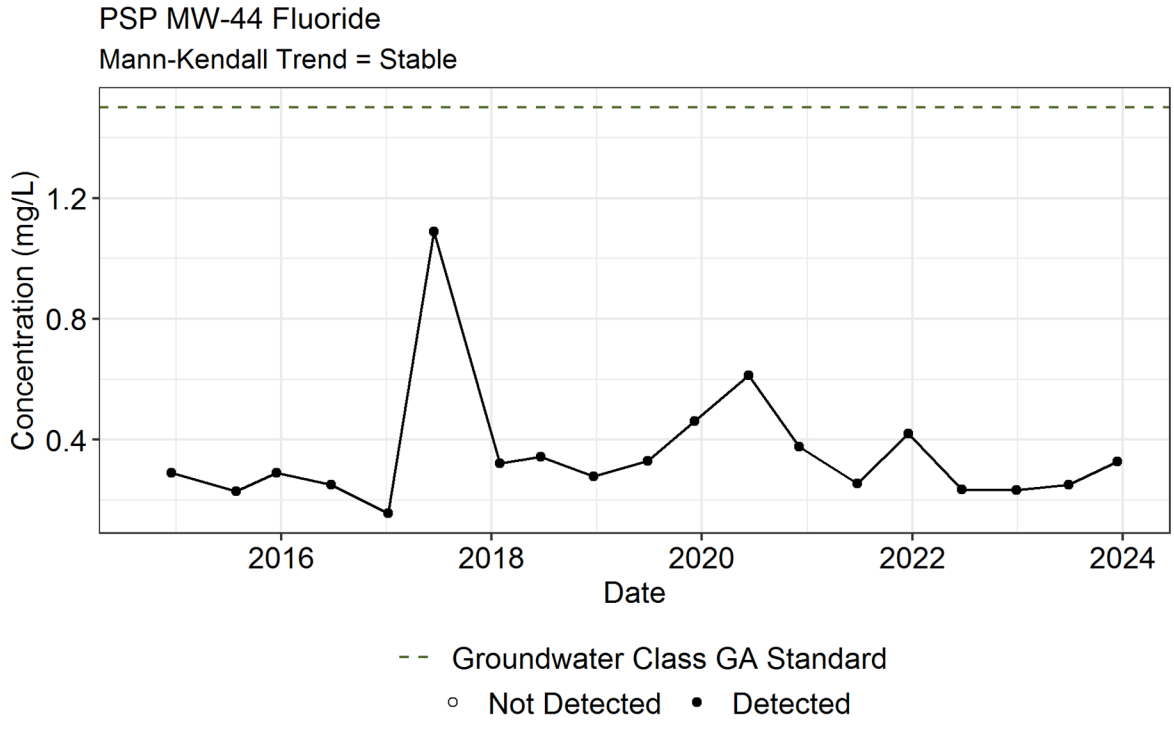
Mann-Kendall p-value = 0.033
Non-detects are shown as open circles at 1/2 of the reporting limit



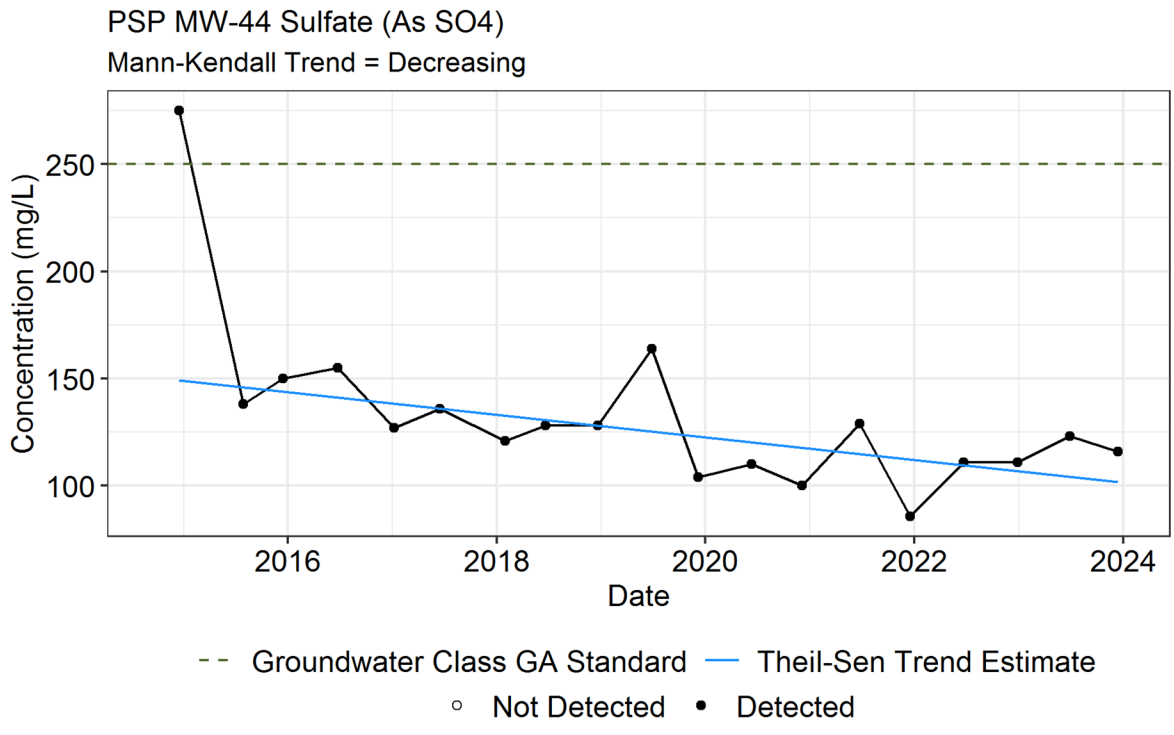
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



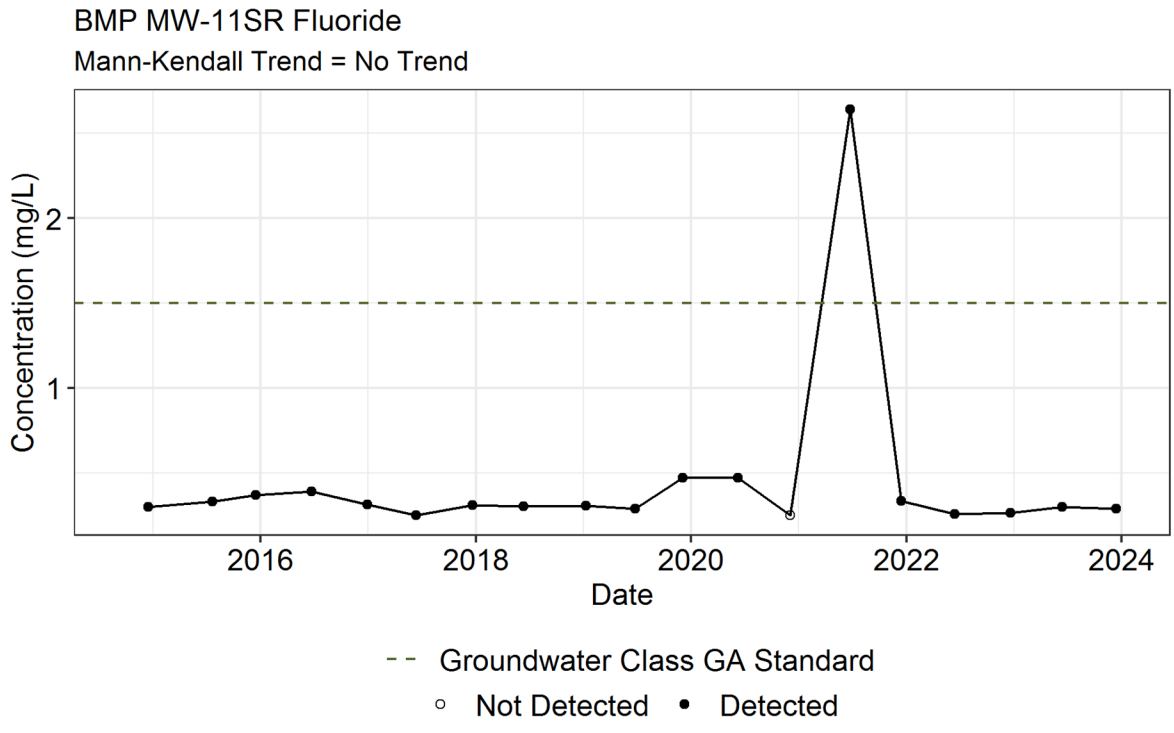
Mann-Kendall p-value = 0.002
Non-detects are shown as open circles at 1/2 of the reporting limit



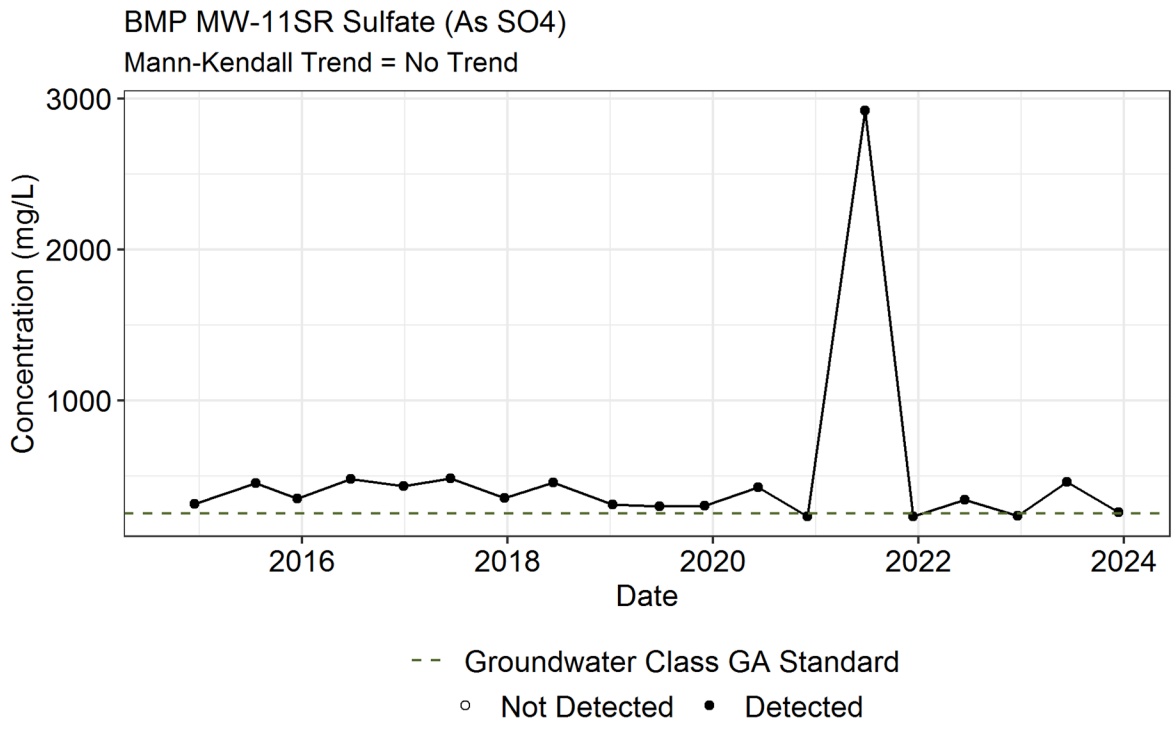
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



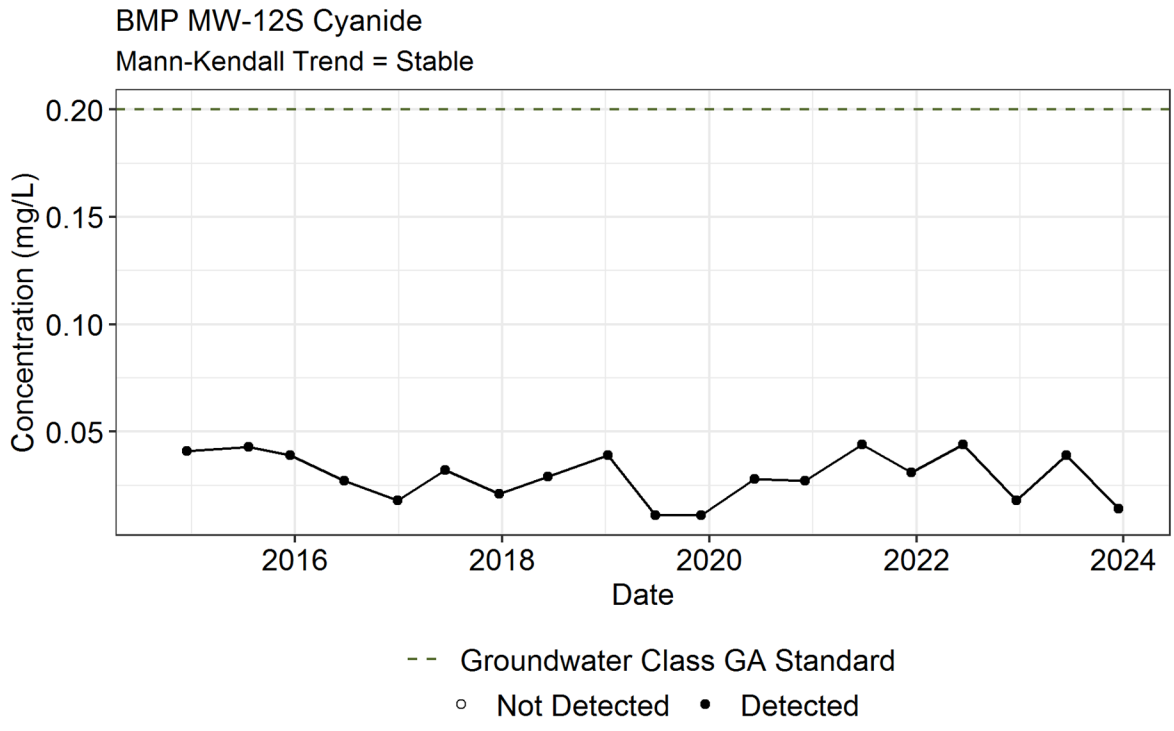
Mann-Kendall p-value = 0.006
Non-detects are shown as open circles at 1/2 of the reporting limit



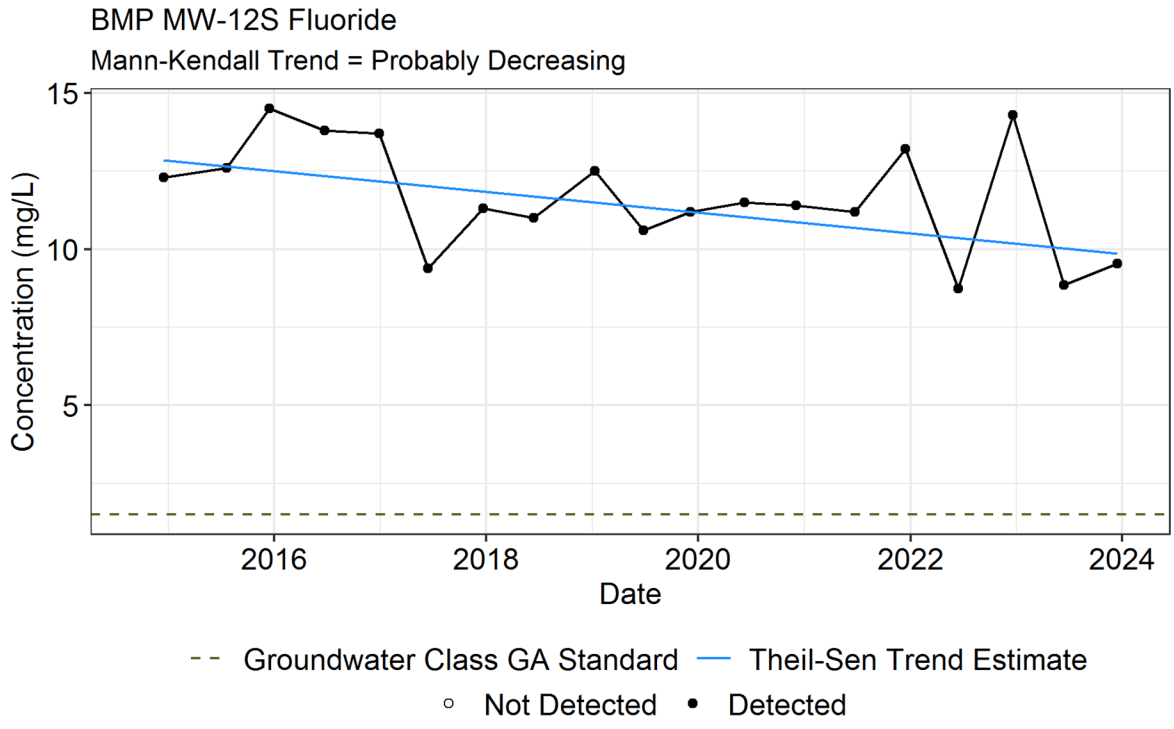
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



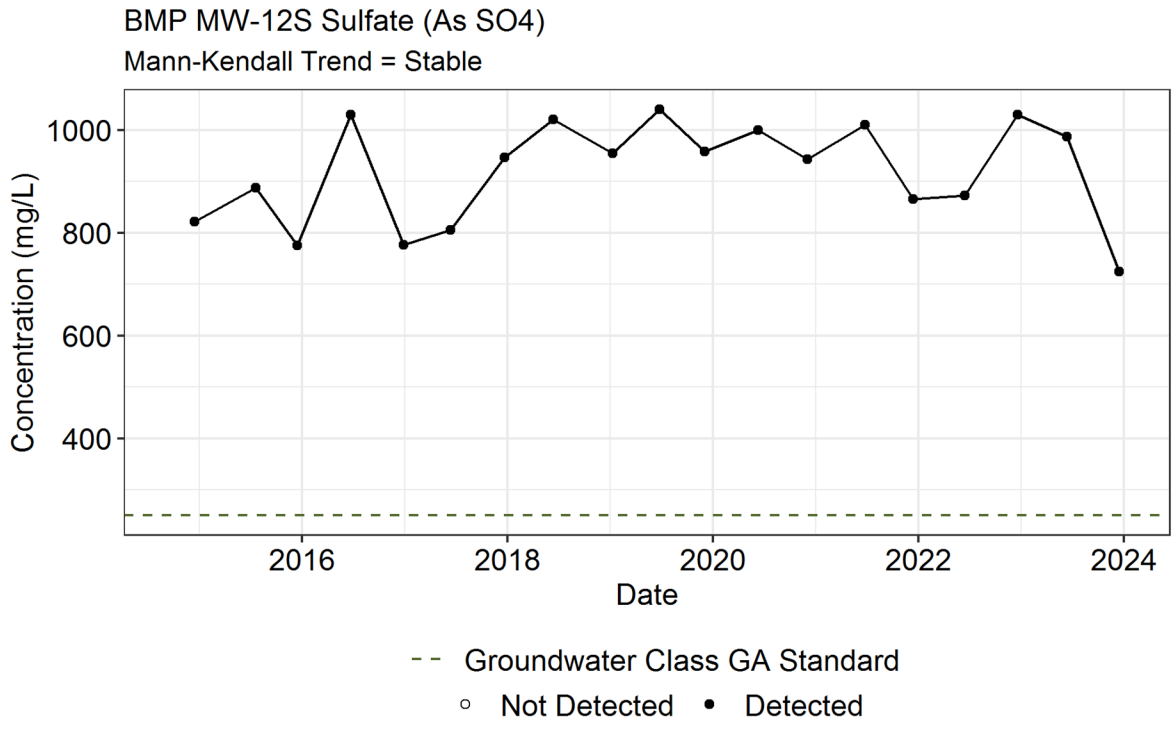
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



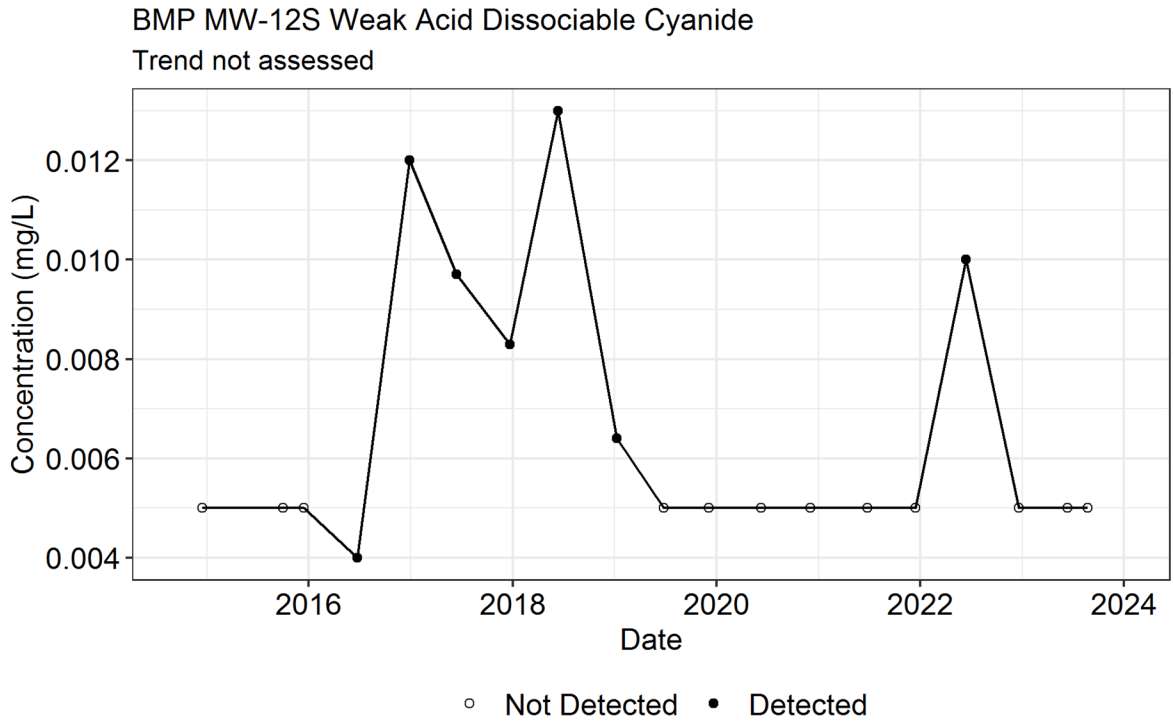
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



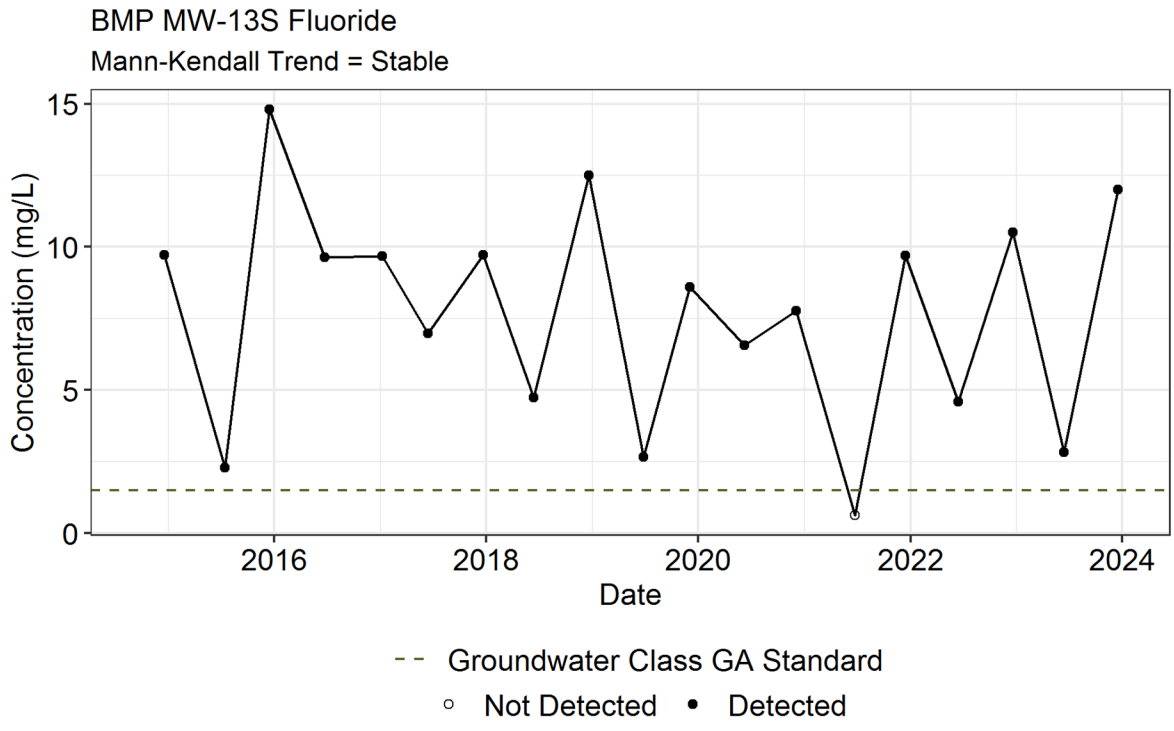
Mann-Kendall p-value = 0.086
Non-detects are shown as open circles at 1/2 of the reporting limit



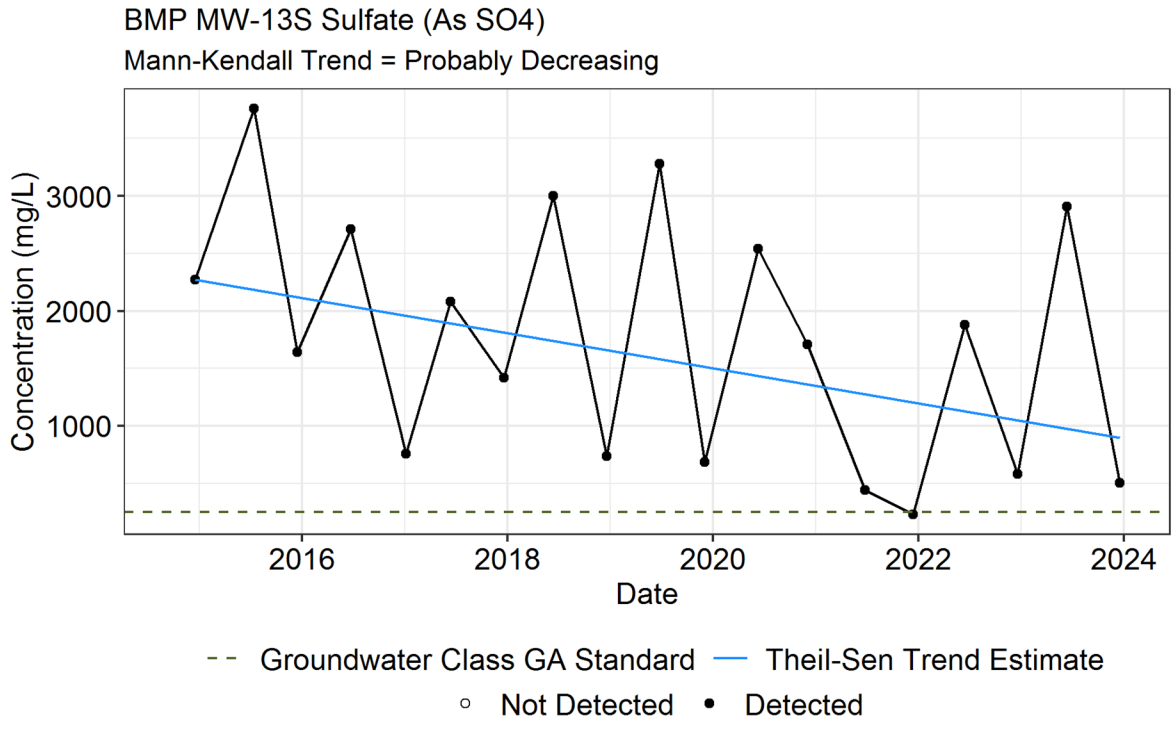
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



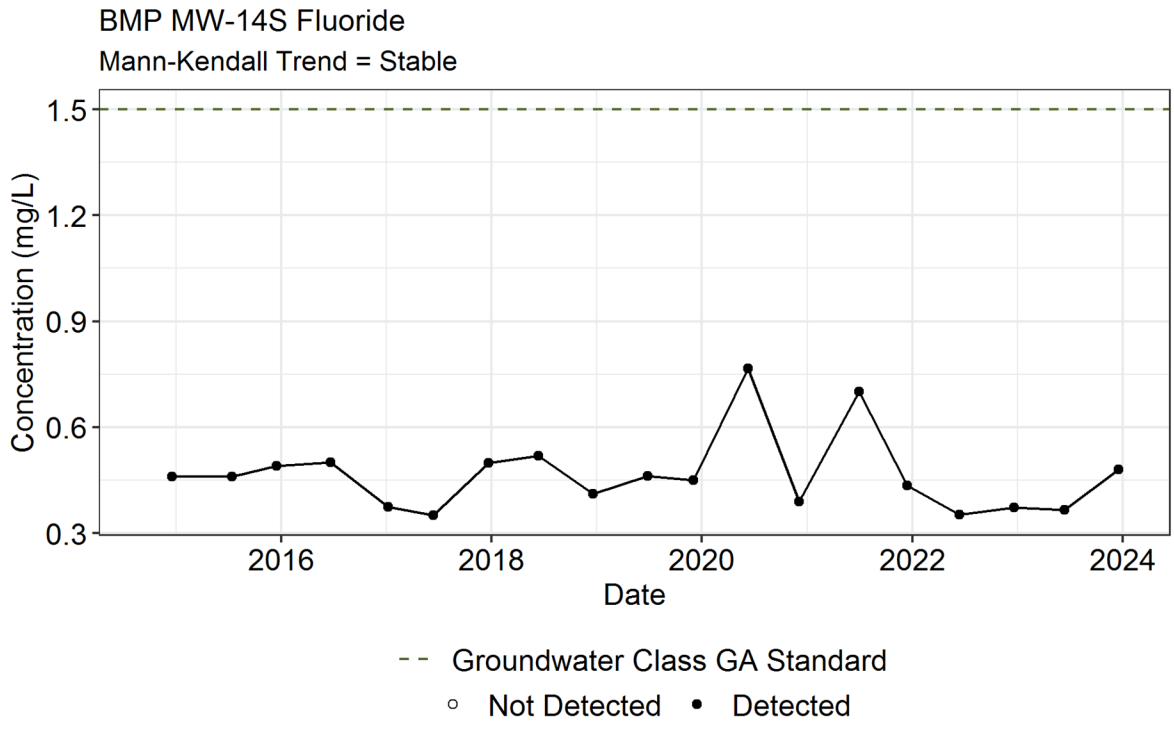
Trend testing not conducted because more than half of observations are nondetects.
Non-detects are shown as open circles at 1/2 of the reporting limit



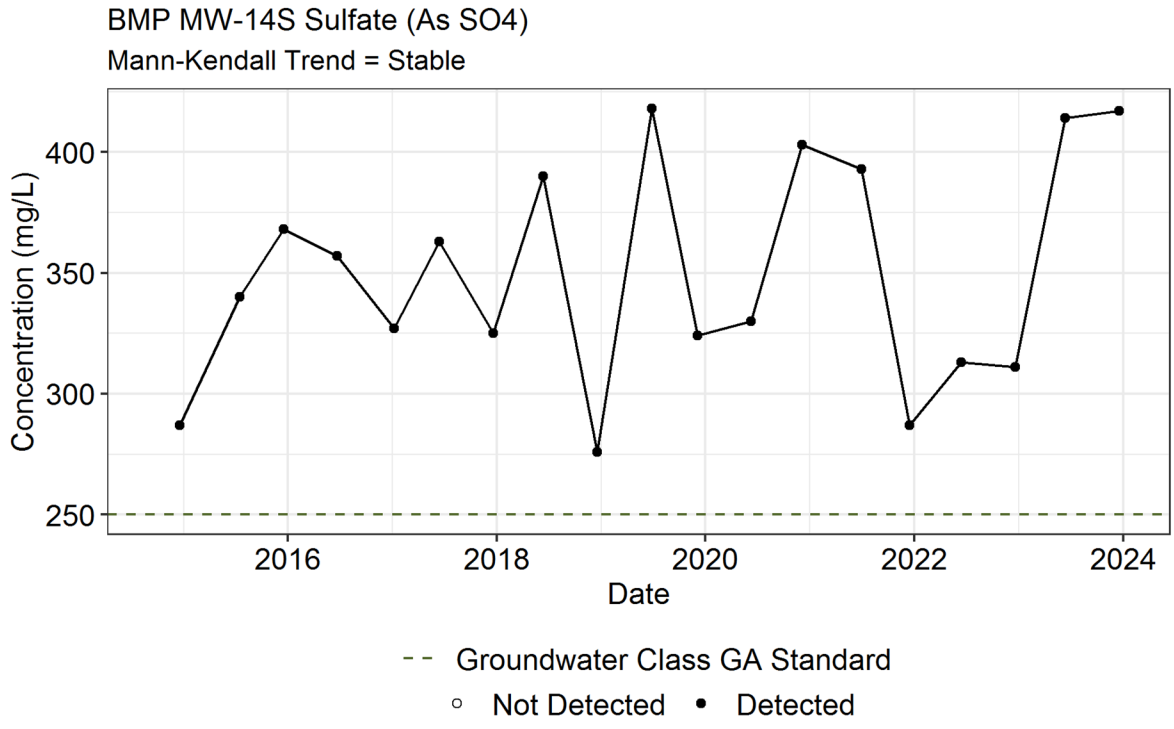
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



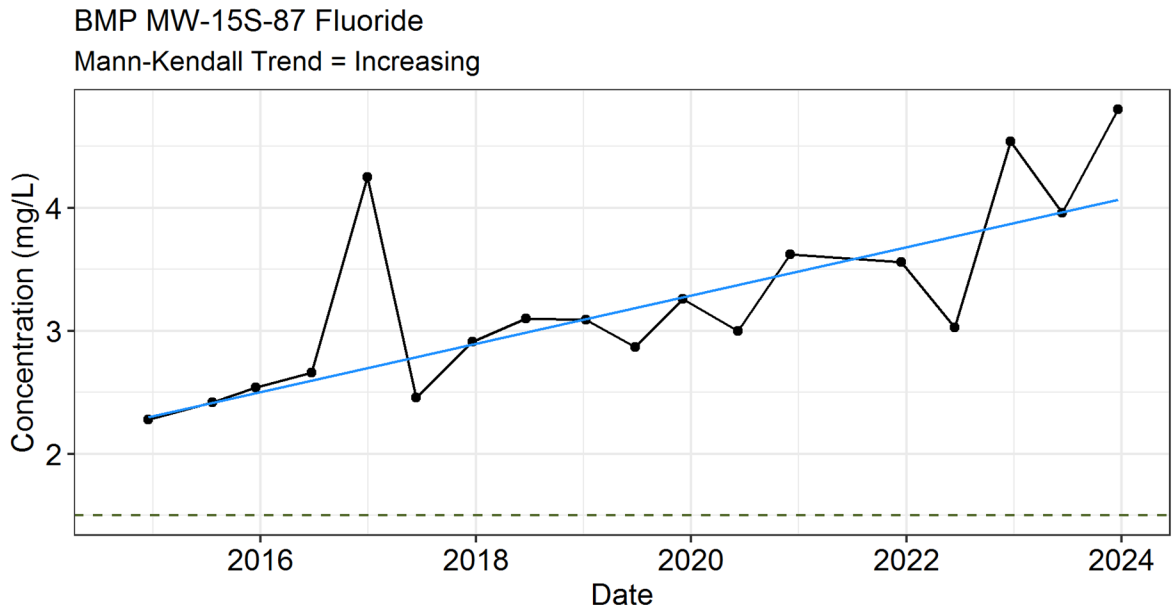
Mann-Kendall p-value = 0.059
Non-detects are shown as open circles at 1/2 of the reporting limit



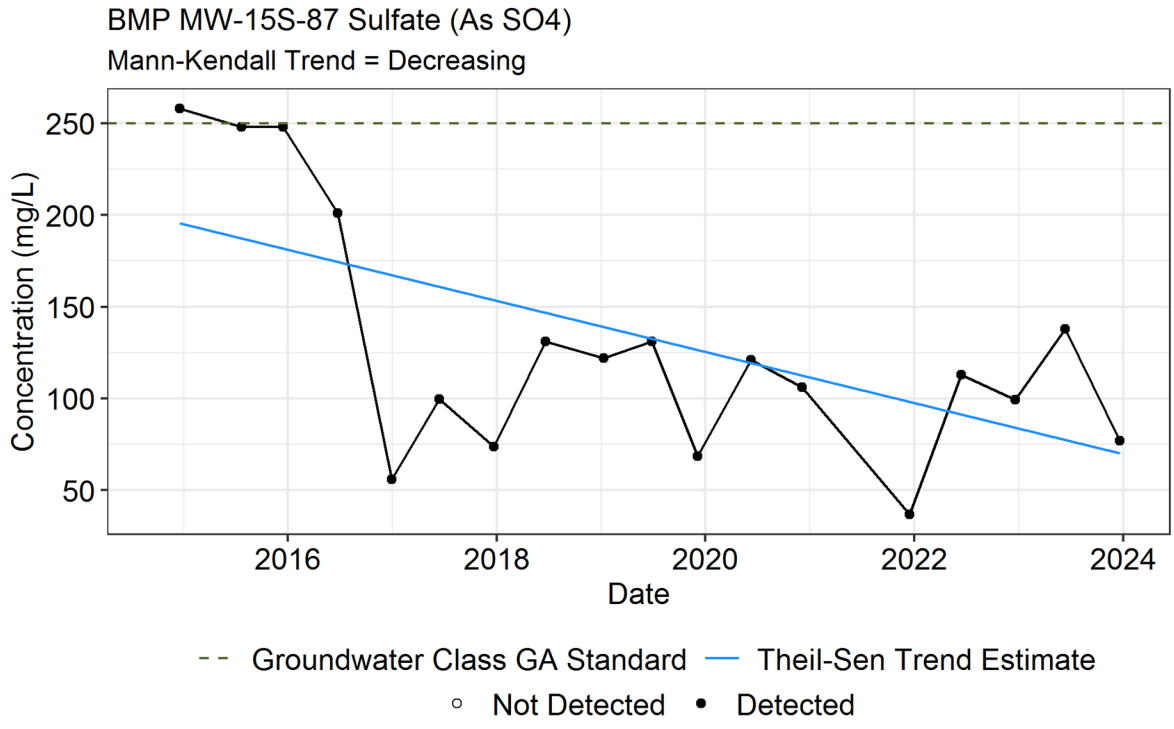
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



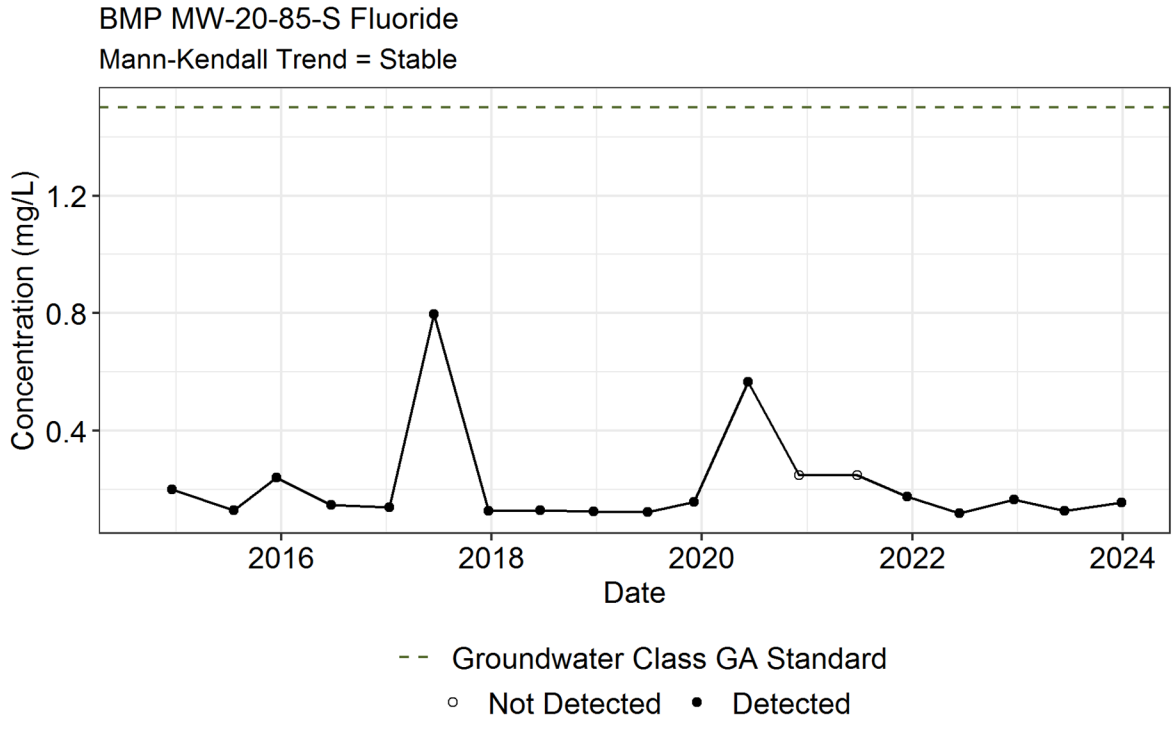
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



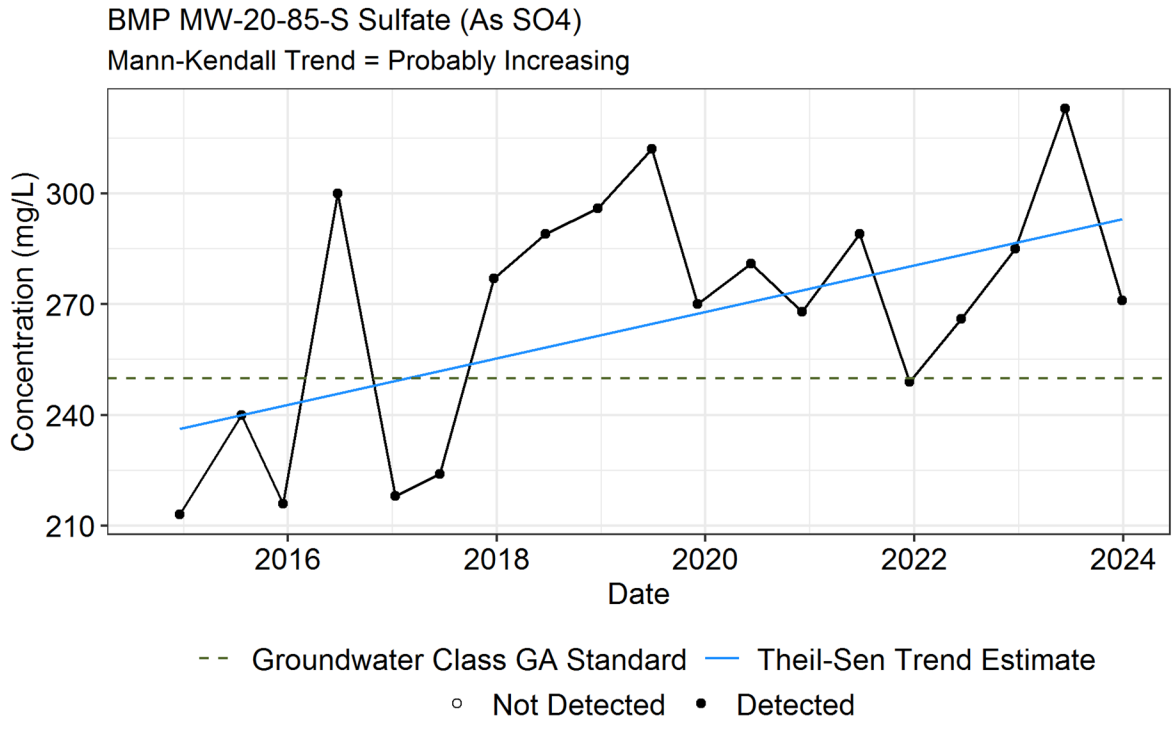
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



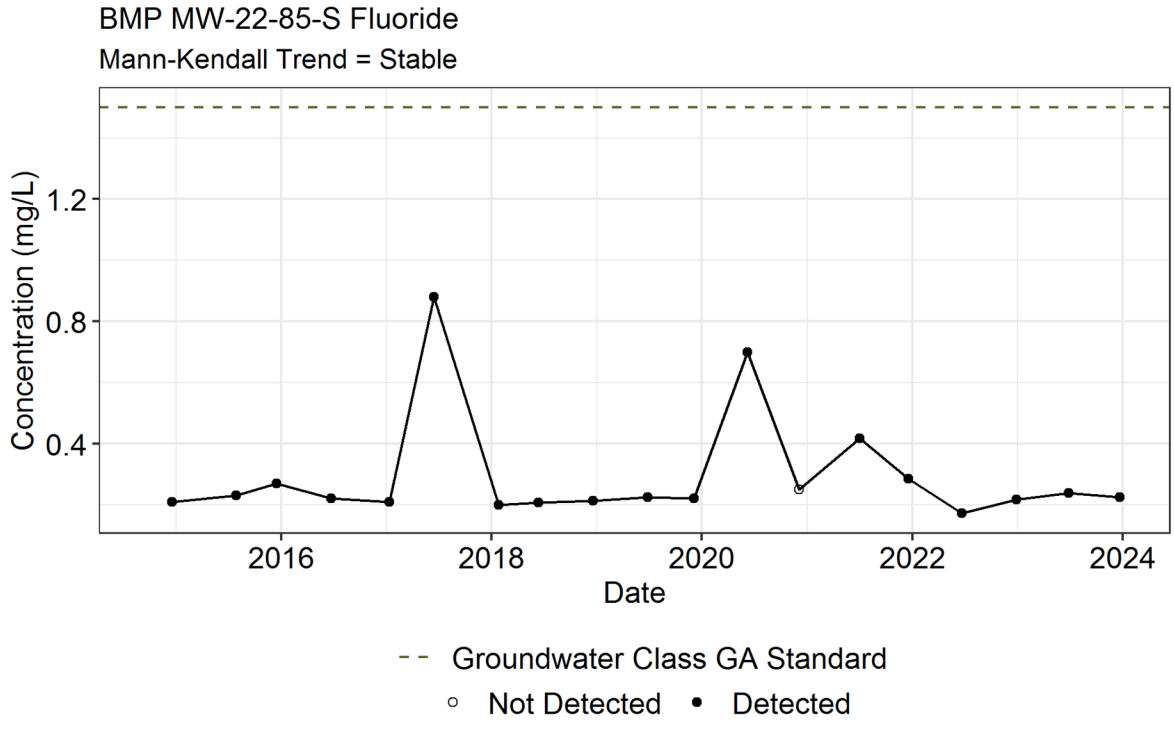
Mann-Kendall p-value = 0.034
Non-detects are shown as open circles at 1/2 of the reporting limit



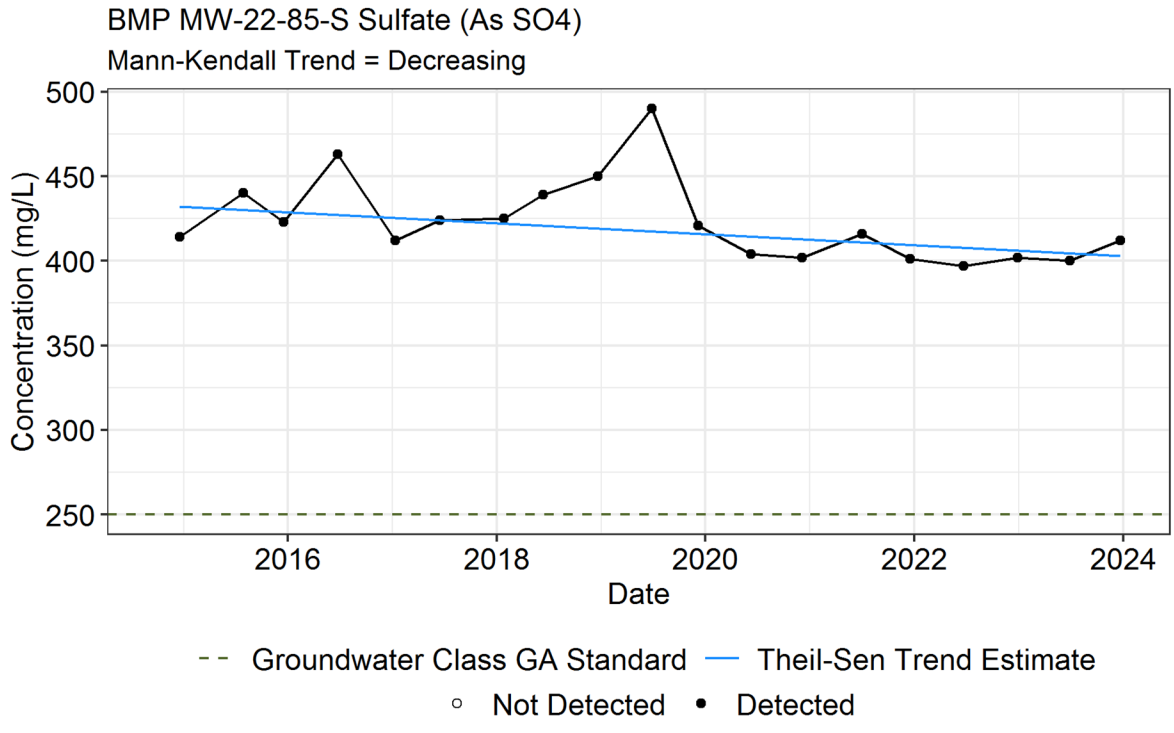
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



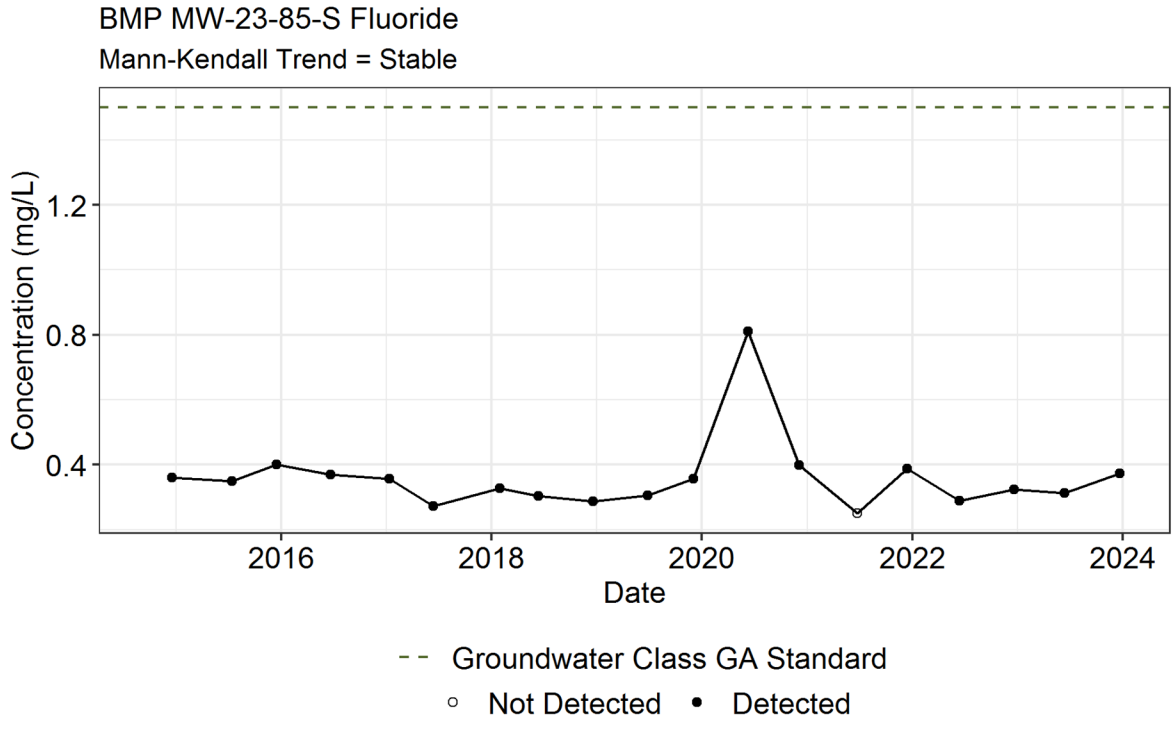
Mann-Kendall p-value = 0.074
Non-detects are shown as open circles at 1/2 of the reporting limit



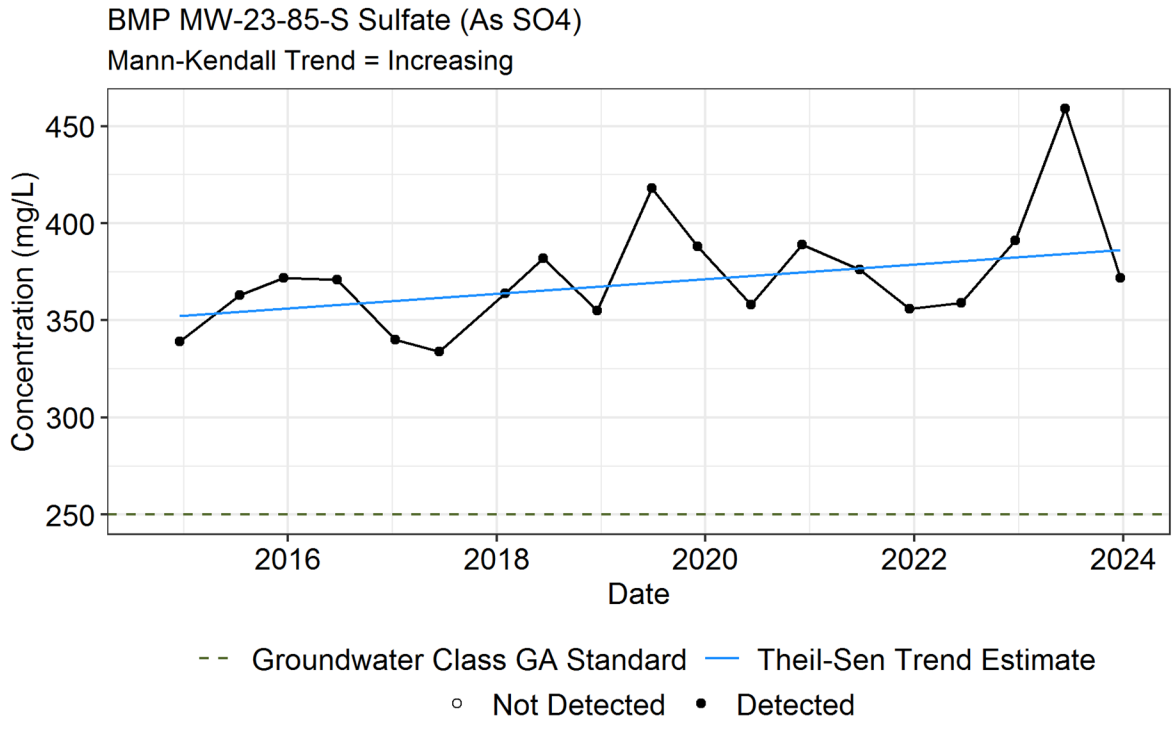
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



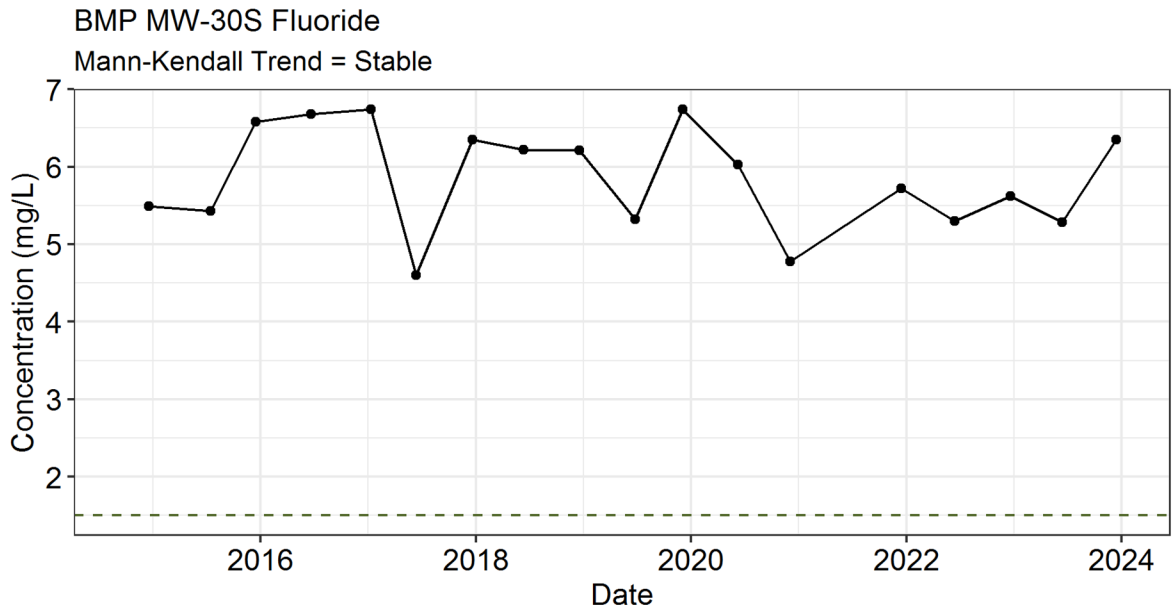
Mann-Kendall p-value = 0.012
Non-detects are shown as open circles at 1/2 of the reporting limit



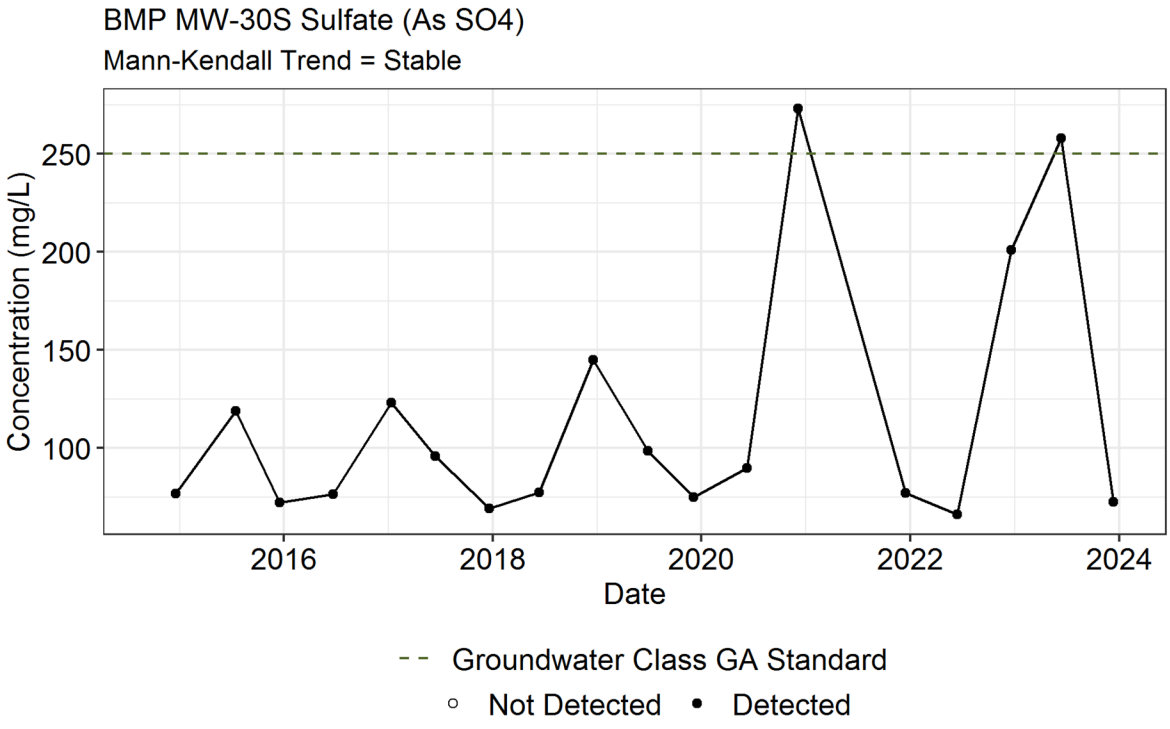
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



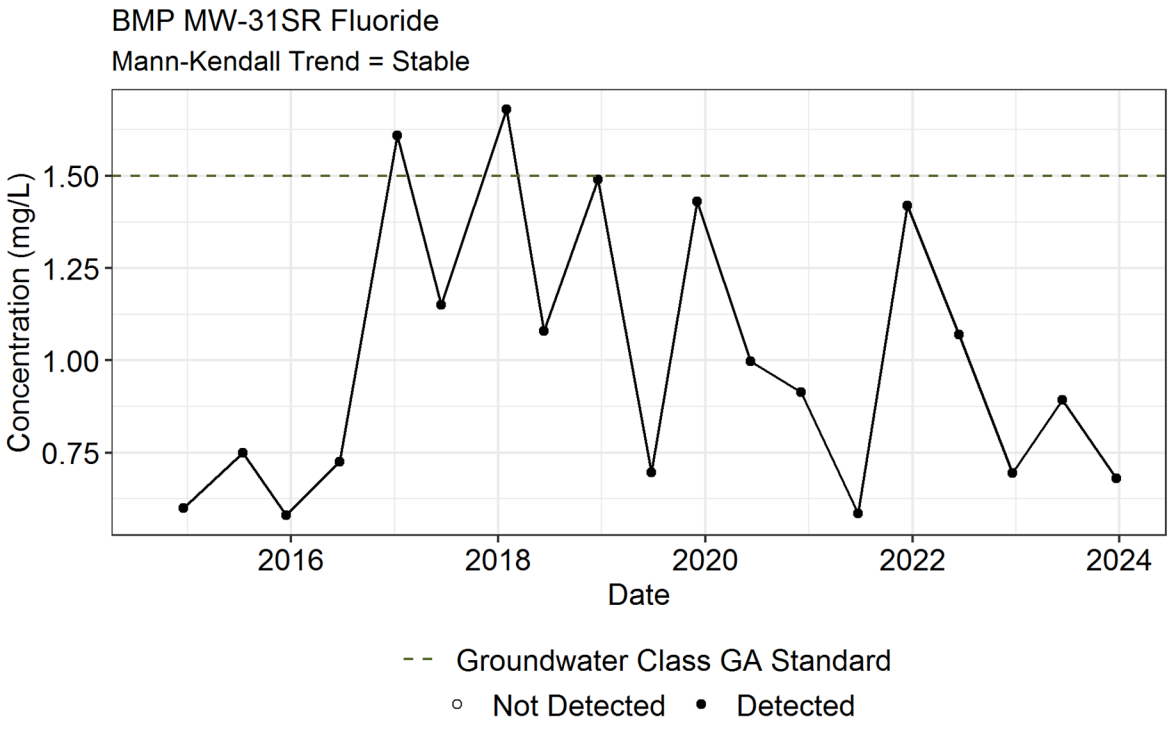
Mann-Kendall p-value = 0.046
Non-detects are shown as open circles at 1/2 of the reporting limit



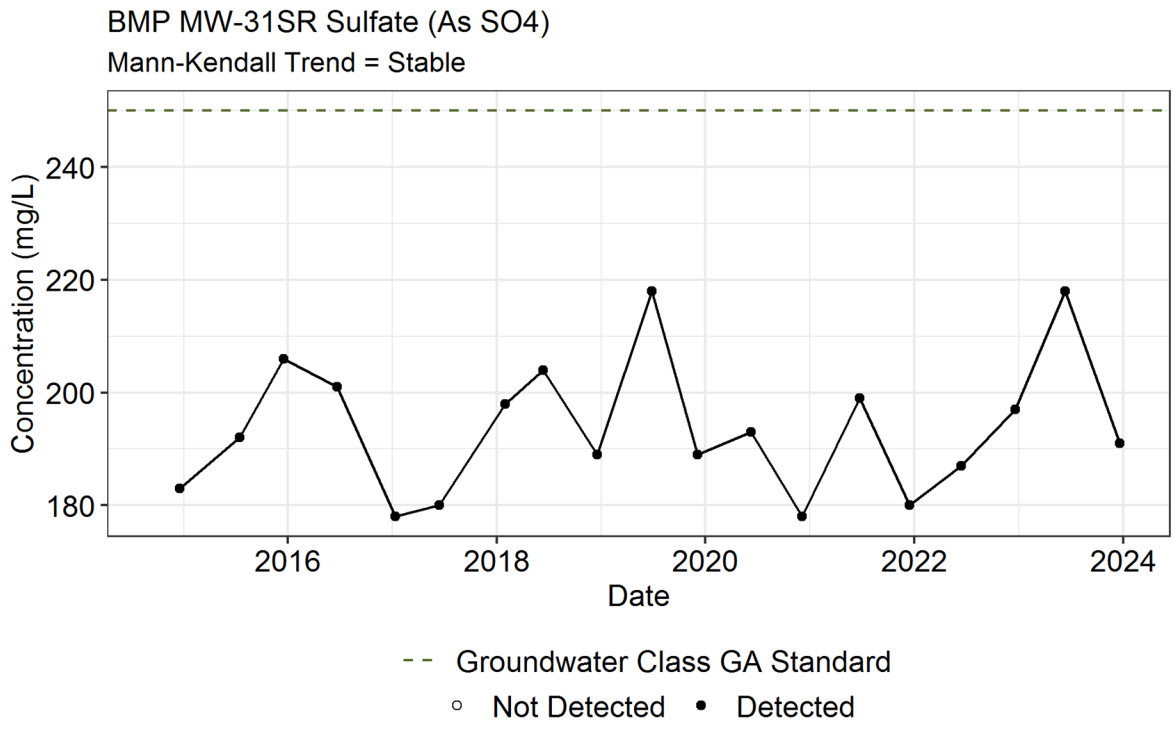
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



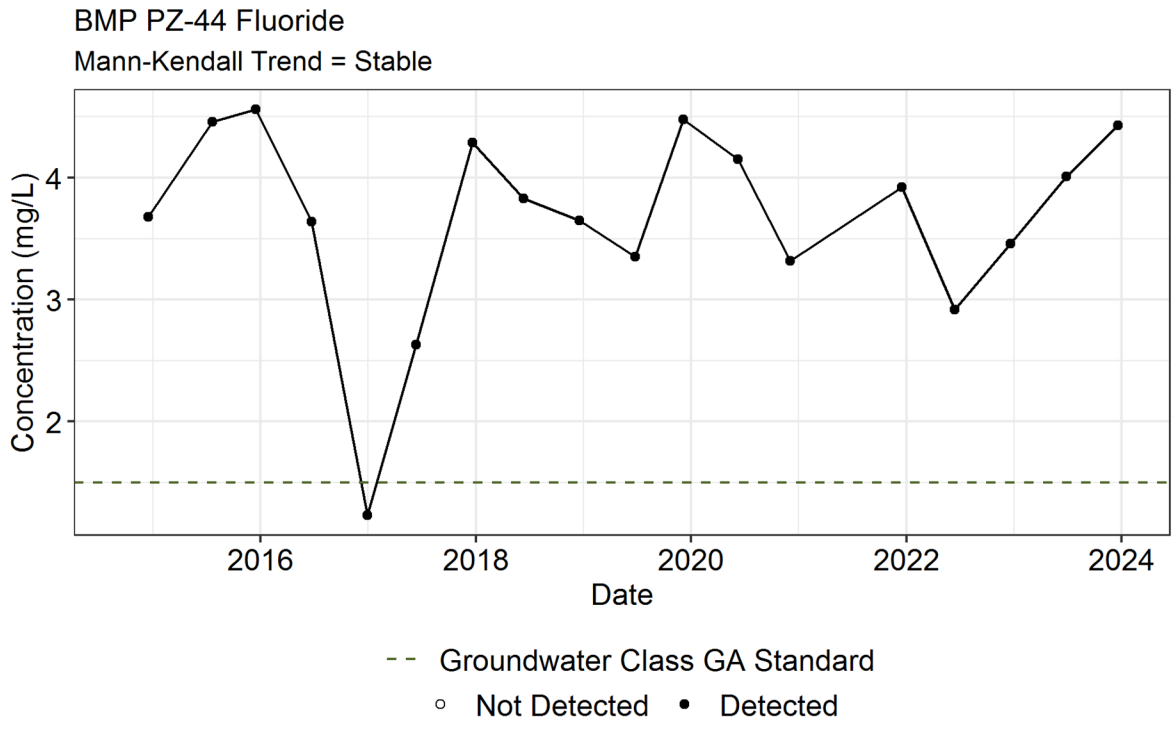
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



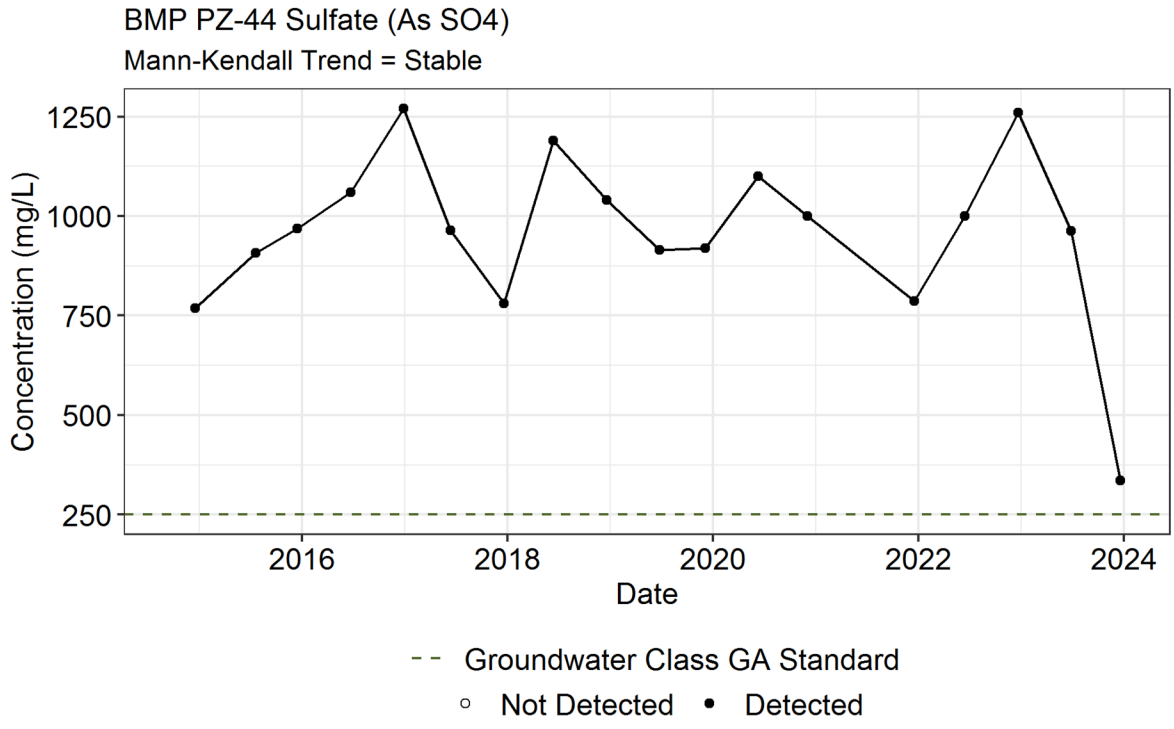
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



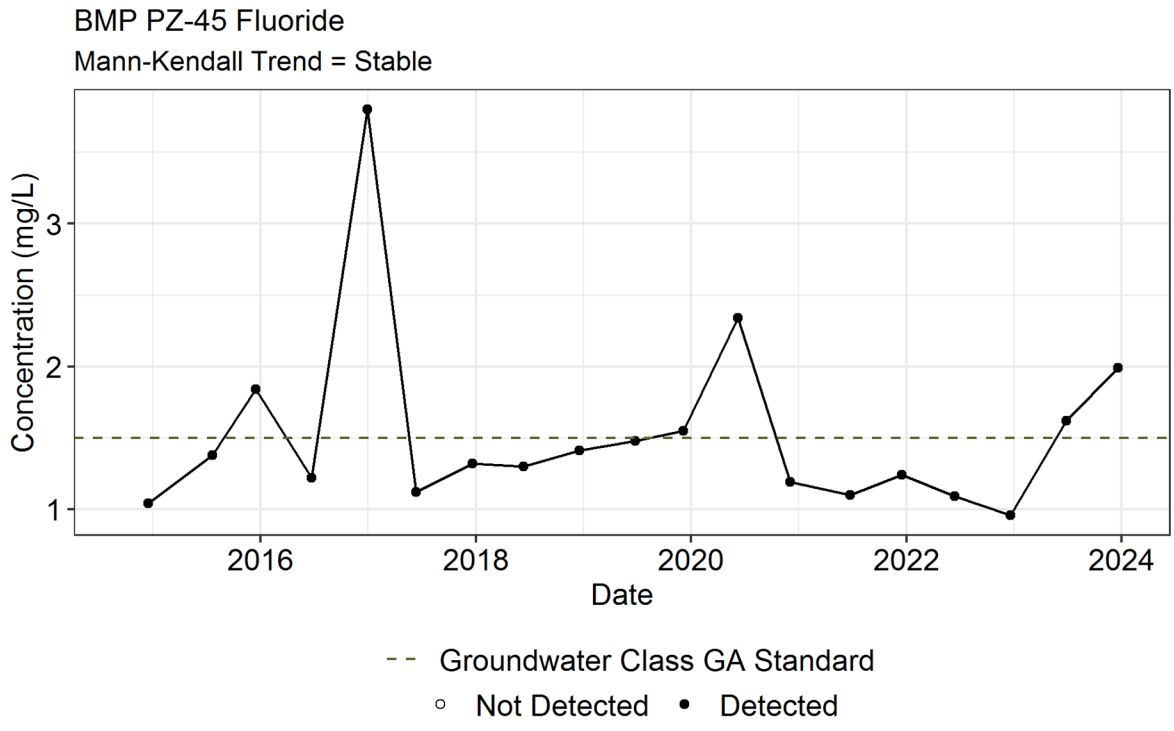
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



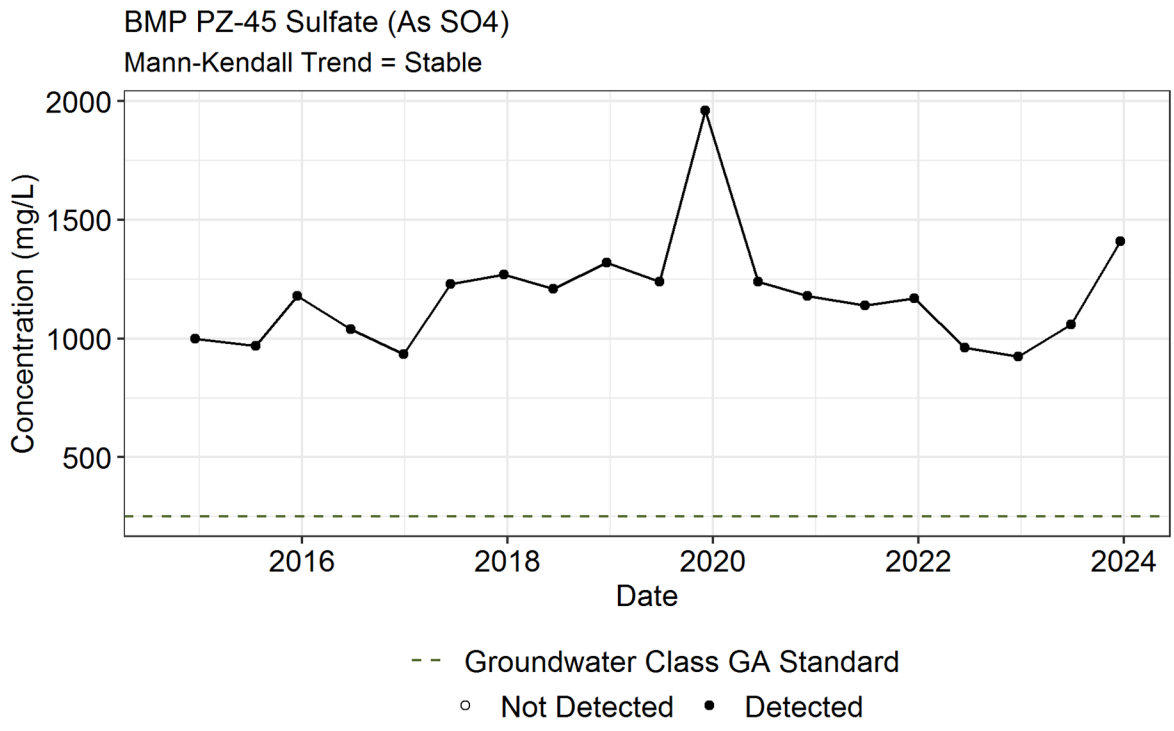
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



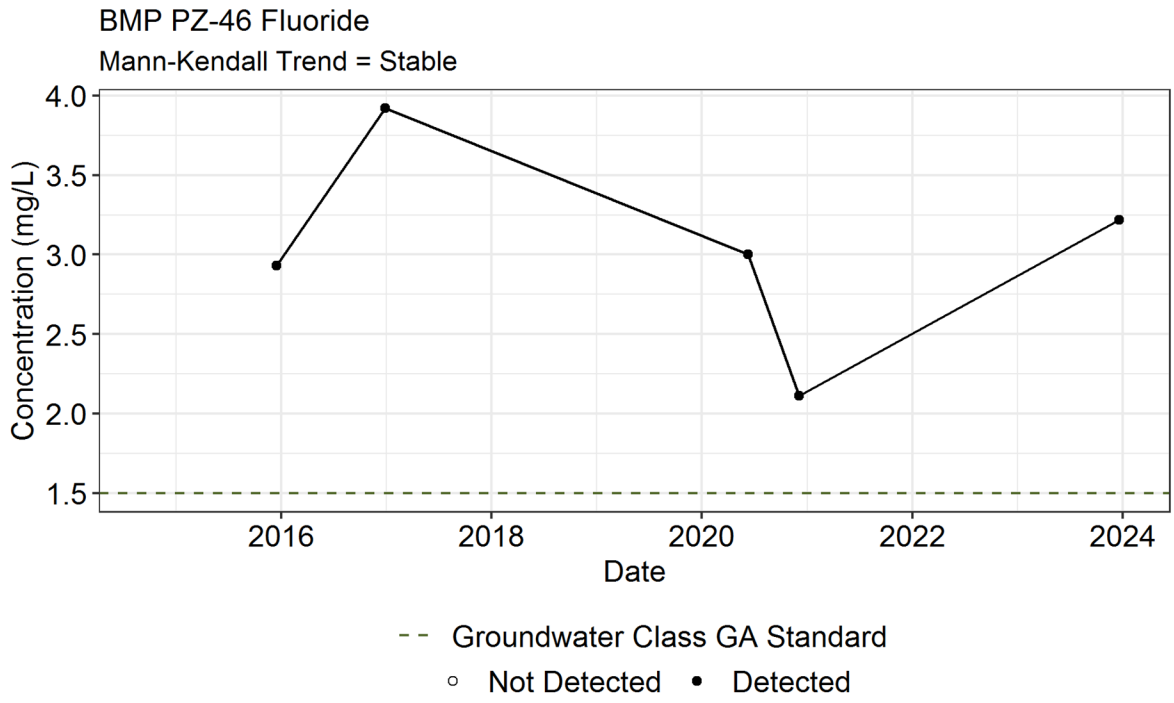
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



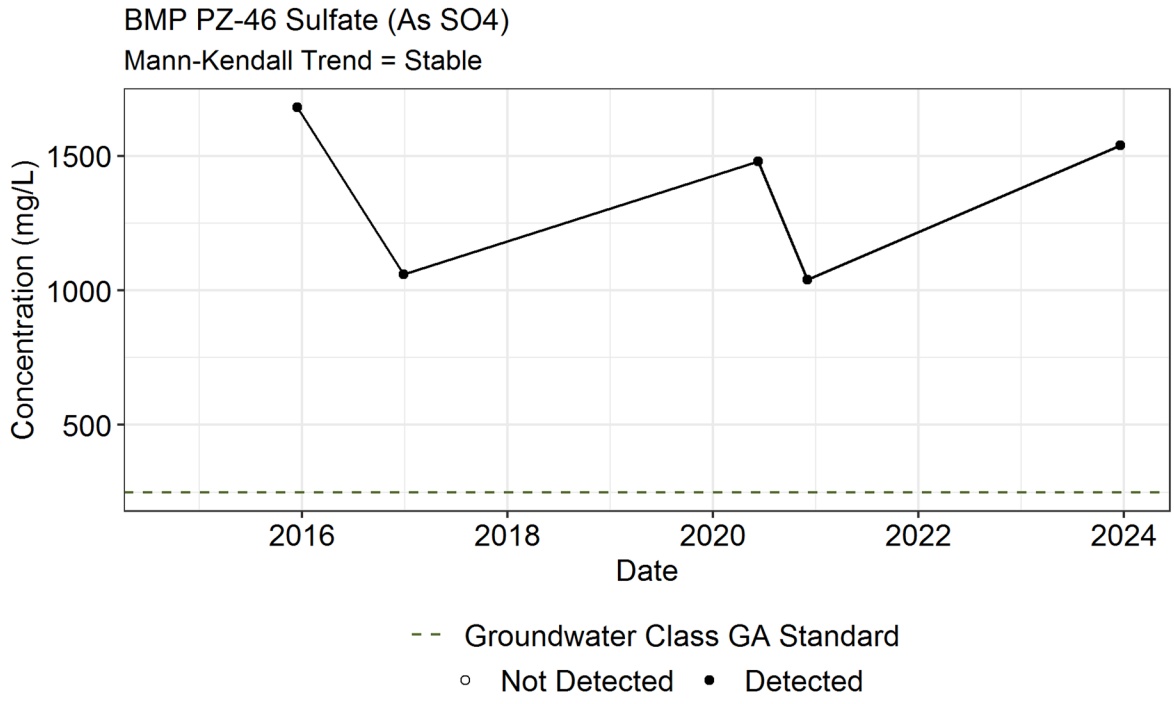
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



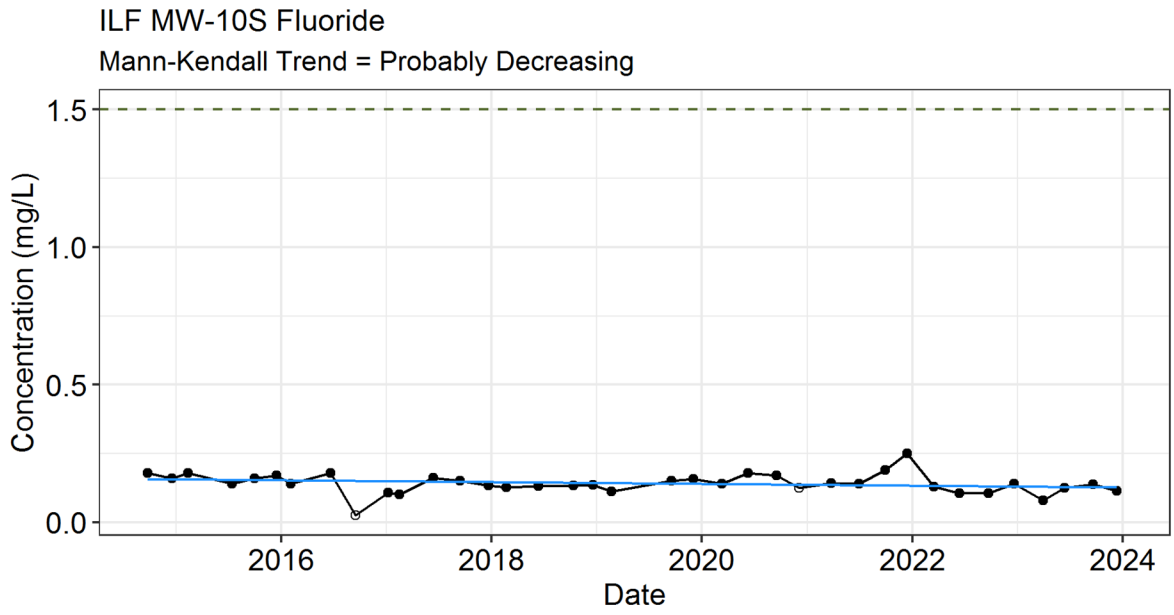
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



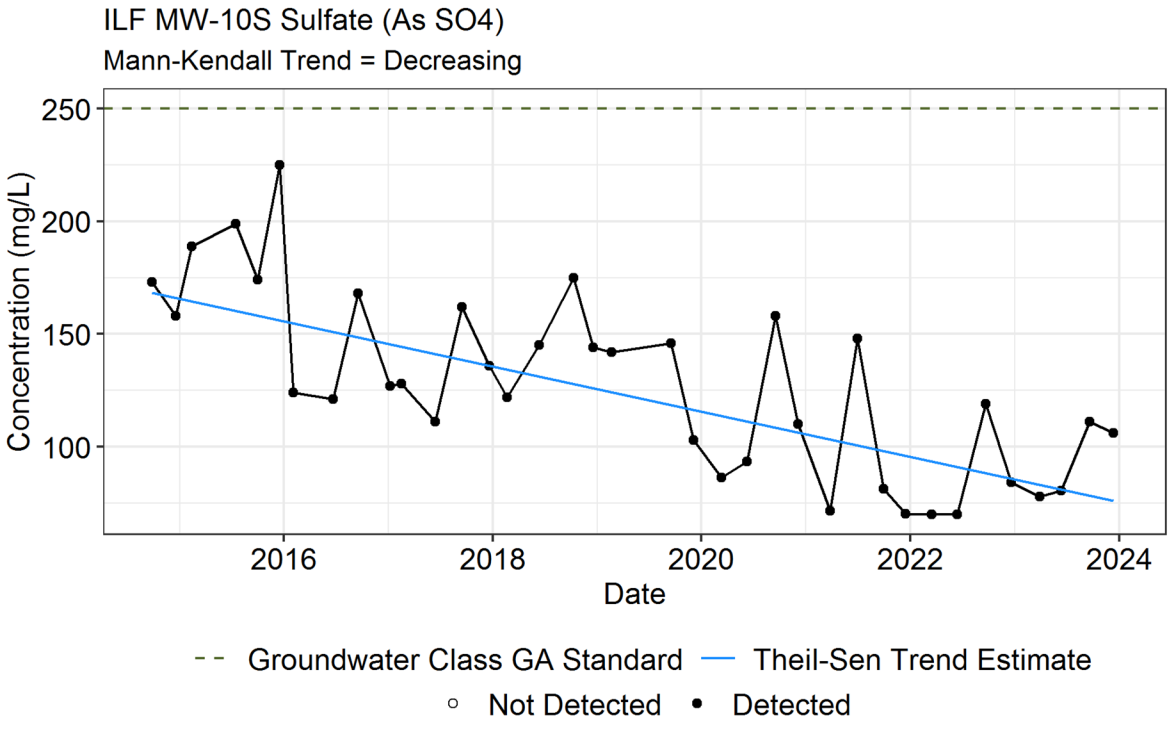
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Trend results less reliable - fewer than 8 samples.
Non-detects are shown as open circles at 1/2 of the reporting limit

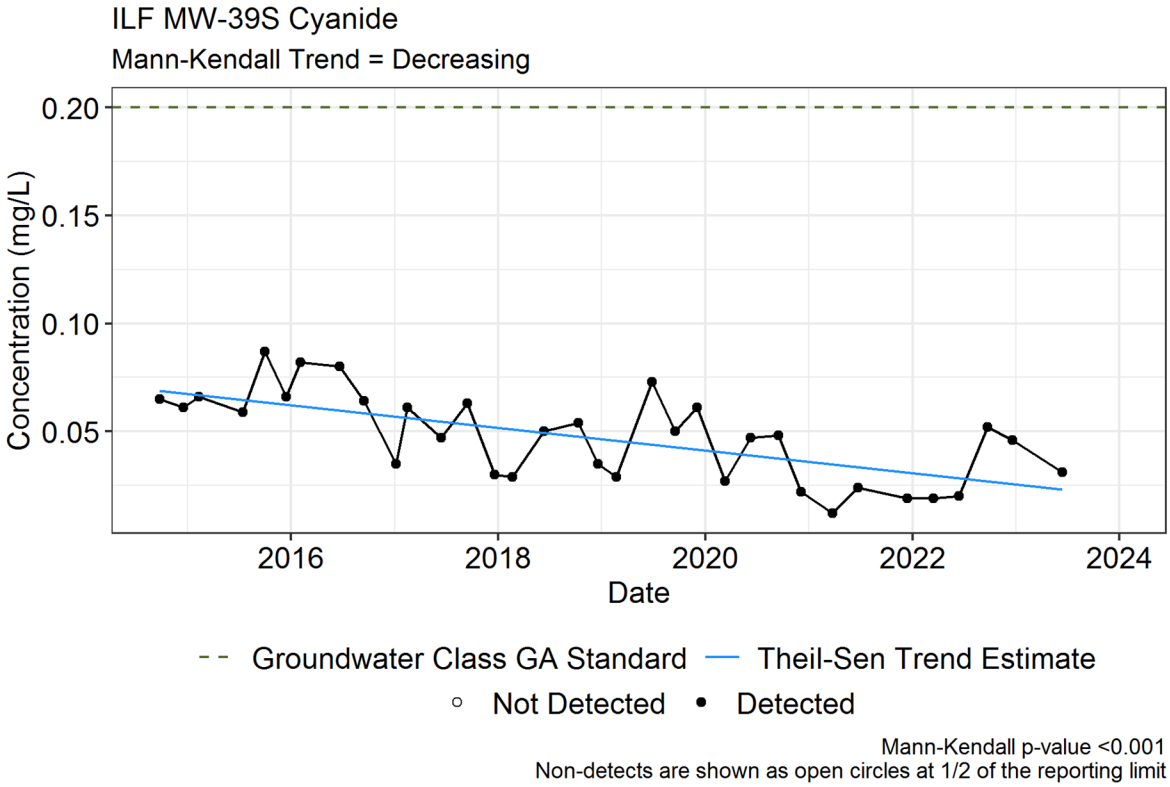


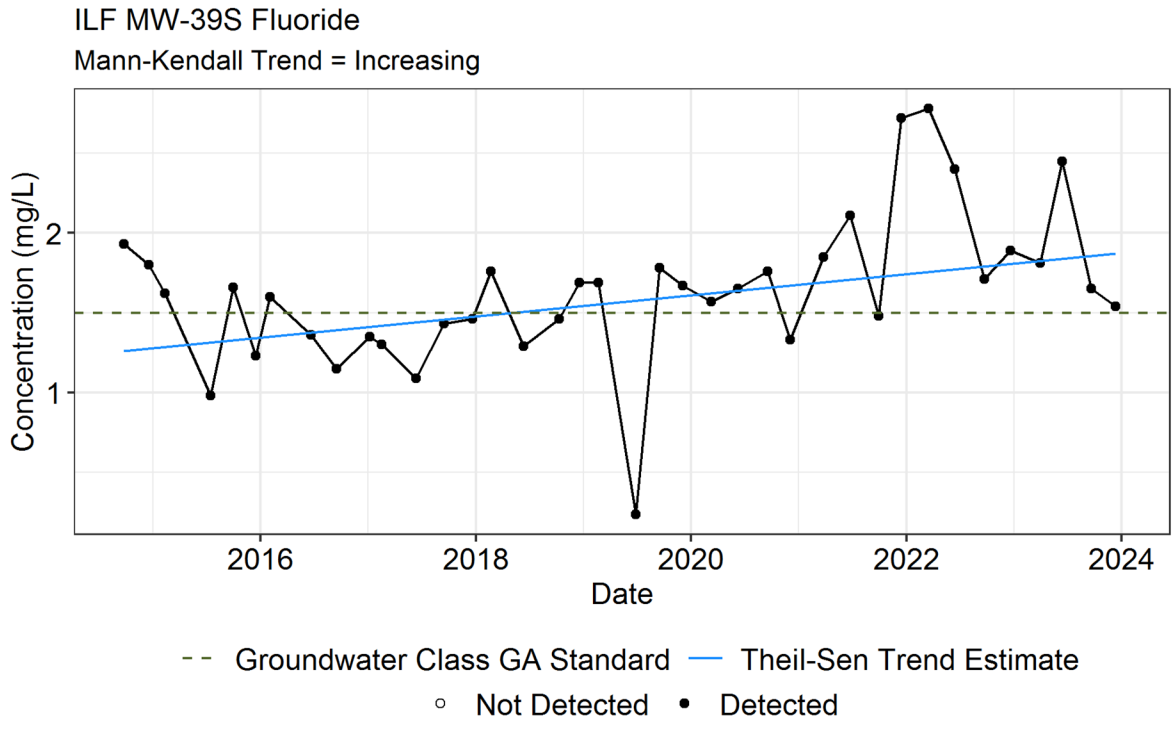
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Trend results less reliable - fewer than 8 samples.
Non-detects are shown as open circles at 1/2 of the reporting limit



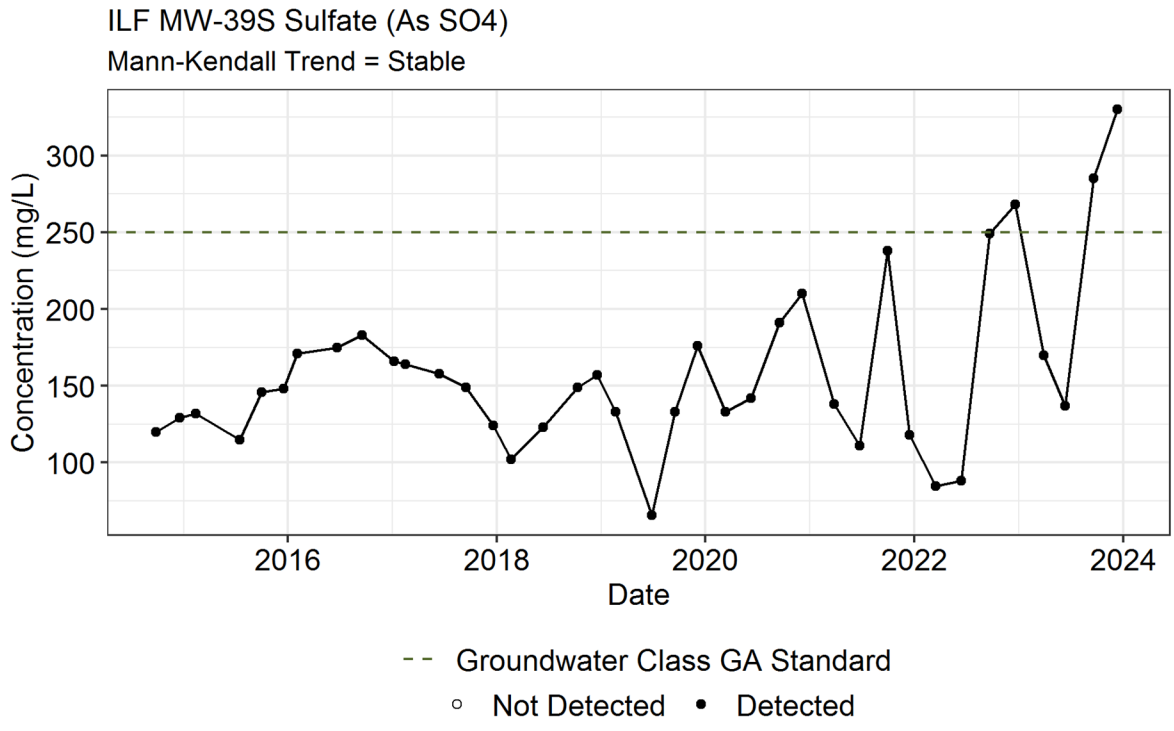
Mann-Kendall p-value = 0.069
Non-detects are shown as open circles at 1/2 of the reporting limit


ILF MW-10S Sulfate (As SO4)
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
250
200
150
100
2016
2018
2020
2022
2024
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

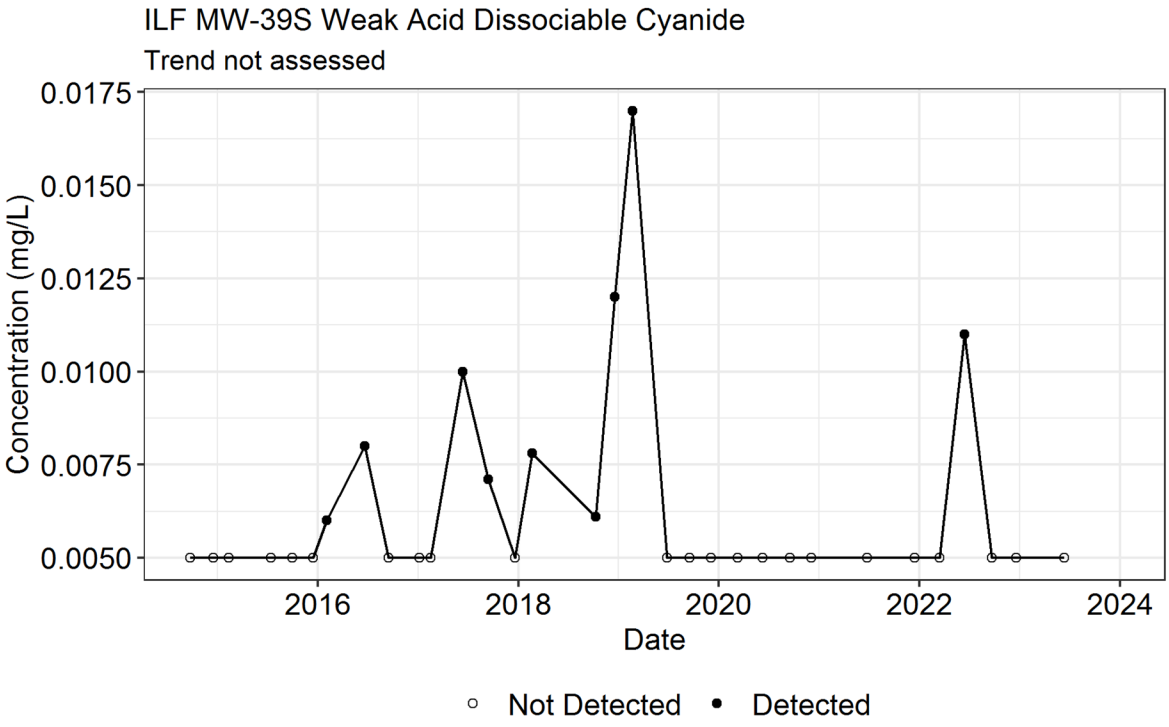

ILF MW-39S Cyanide
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
0.20
0.15
0.10
0.05
2016
2018
2020
2022
2024
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



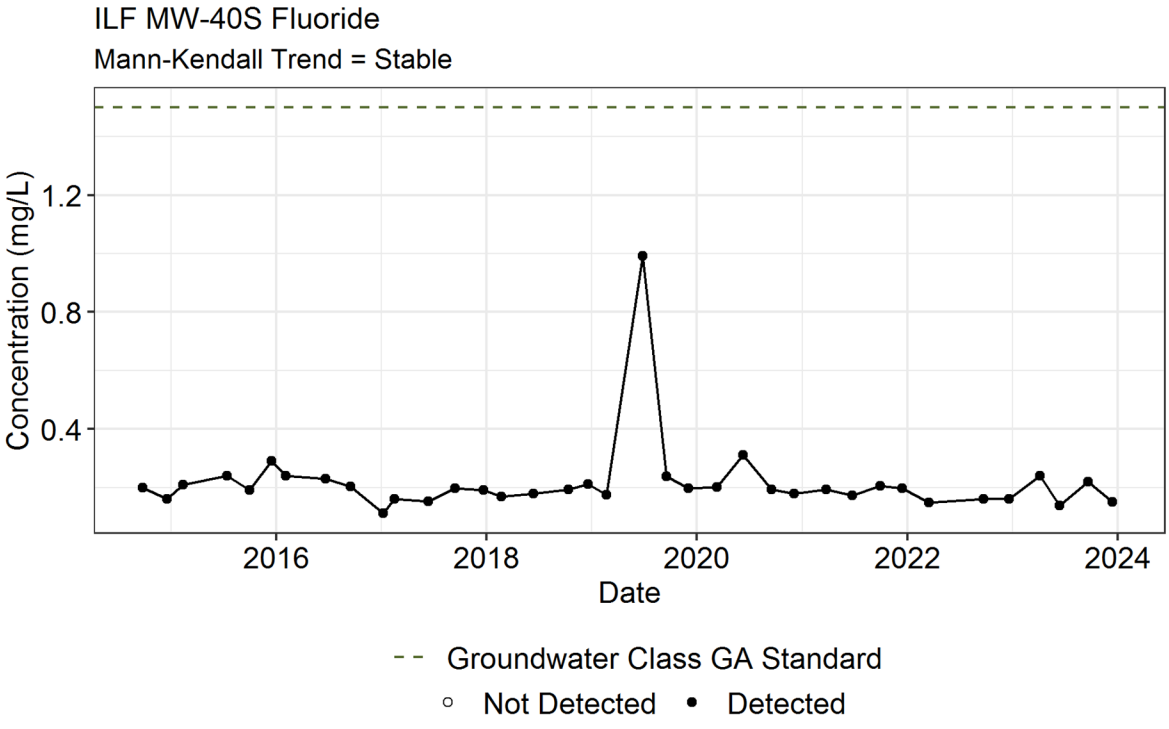
Mann-Kendall p-value = 0.004
Non-detects are shown as open circles at 1/2 of the reporting limit



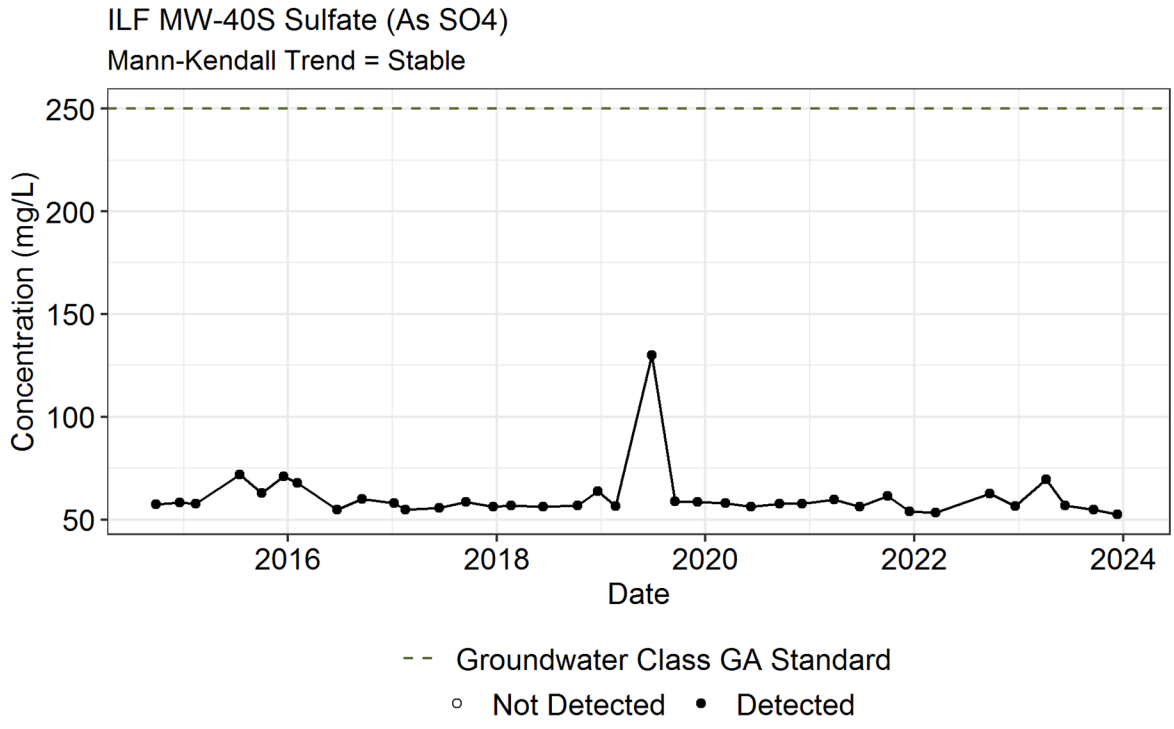
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



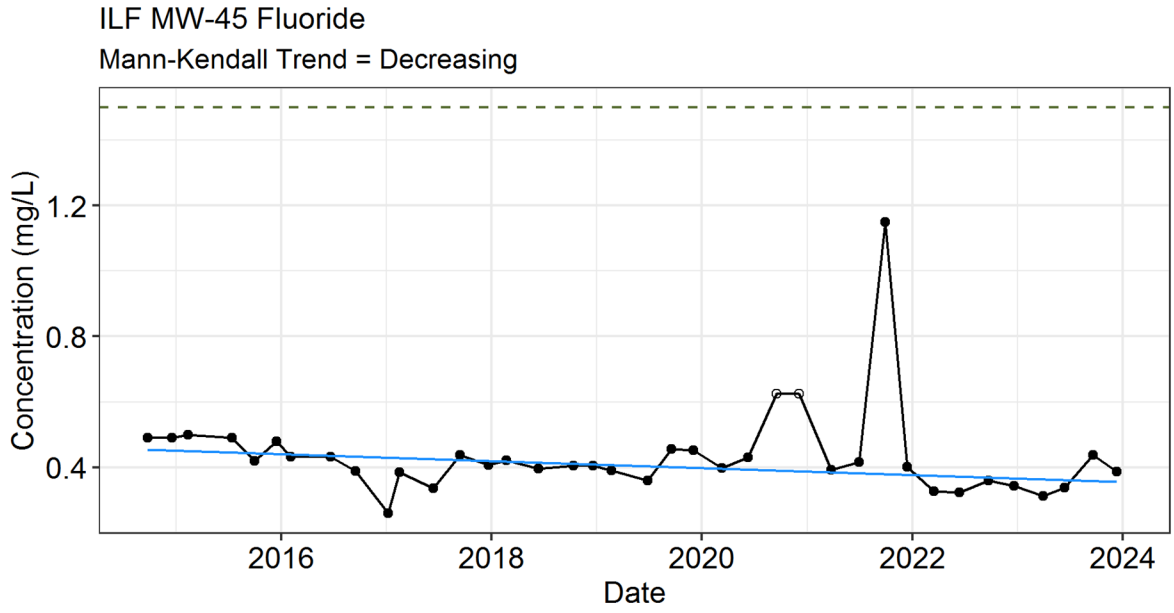
Trend testing not conducted because more than half of observations are nondetects.
Non-detects are shown as open circles at 1/2 of the reporting limit



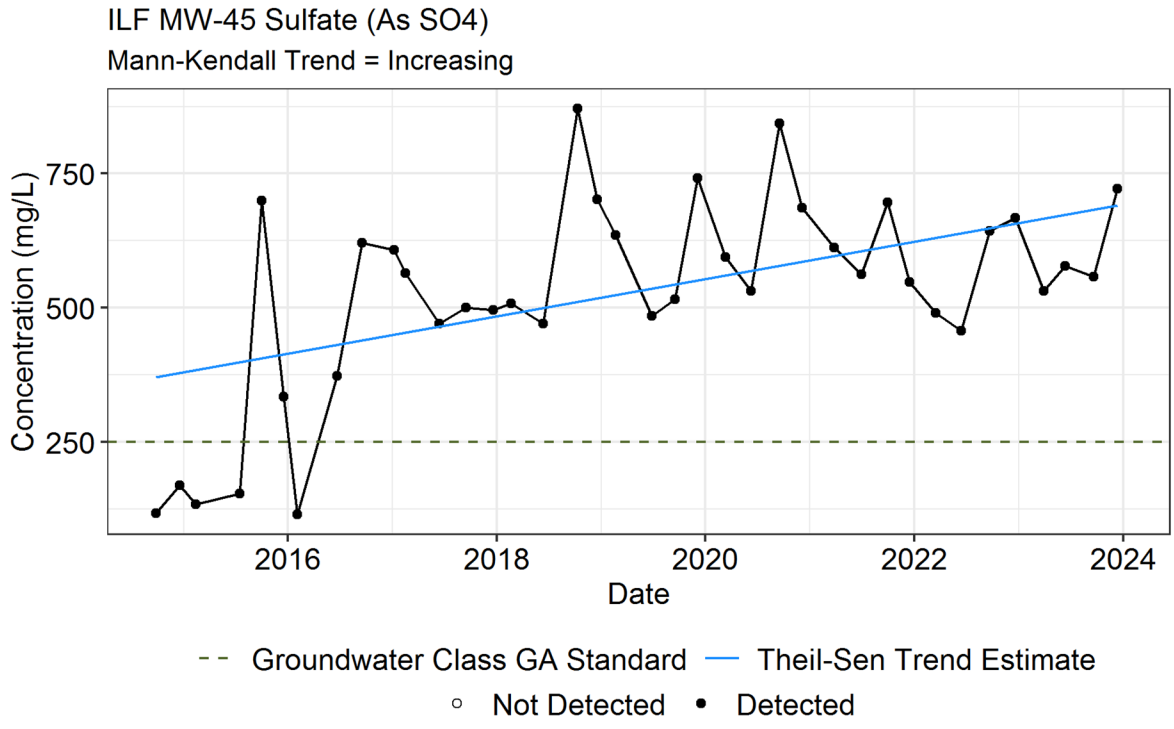
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



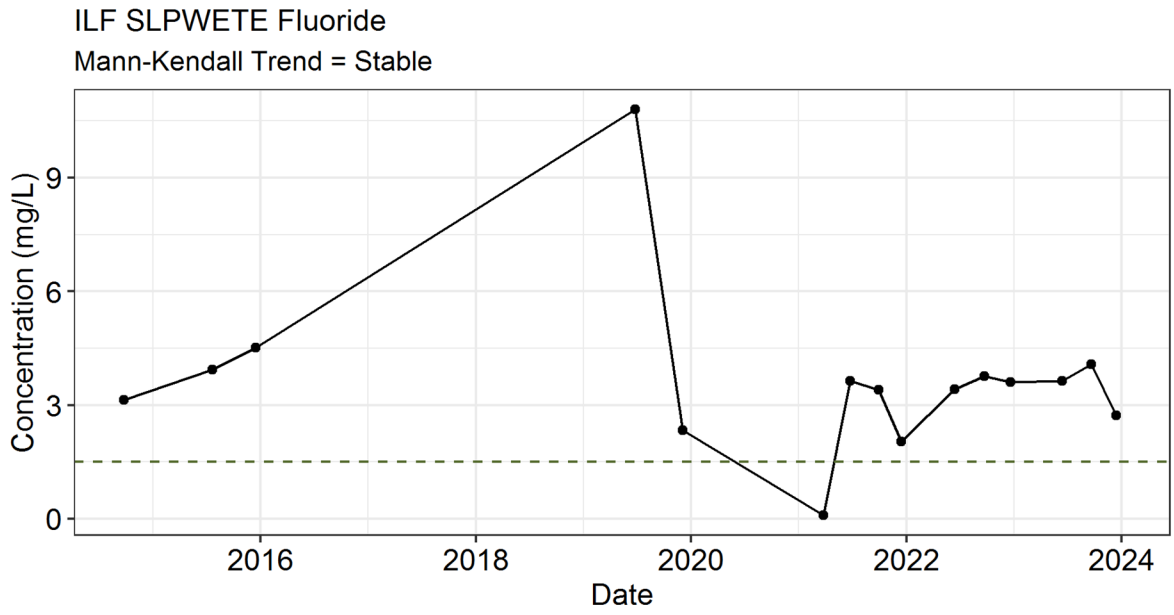
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



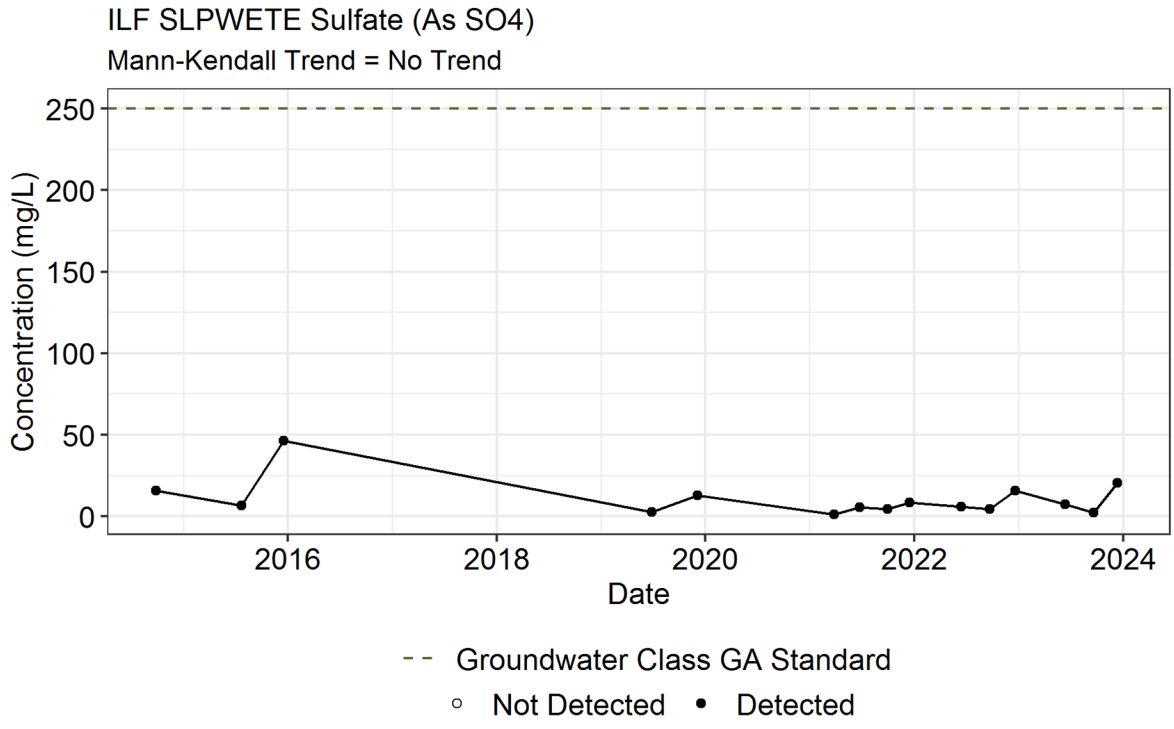
Mann-Kendall p-value = 0.013
Non-detects are shown as open circles at 1/2 of the reporting limit



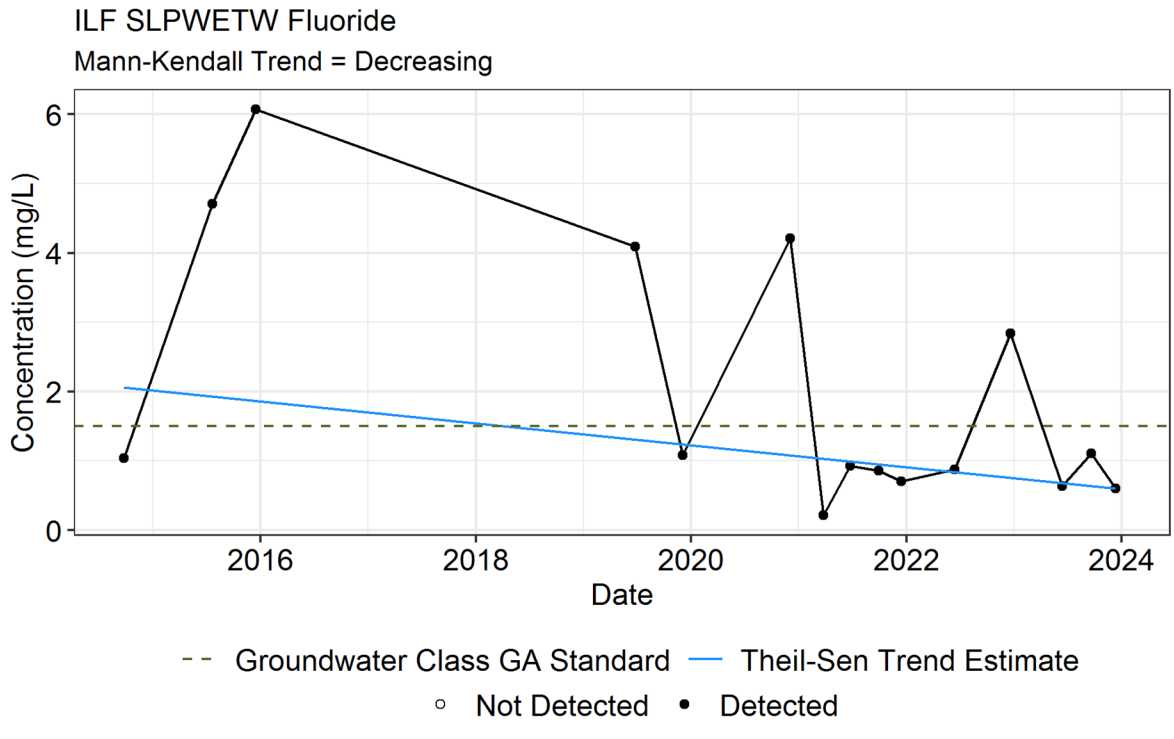
Mann-Kendall p-value = 0.003
Non-detects are shown as open circles at 1/2 of the reporting limit



Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



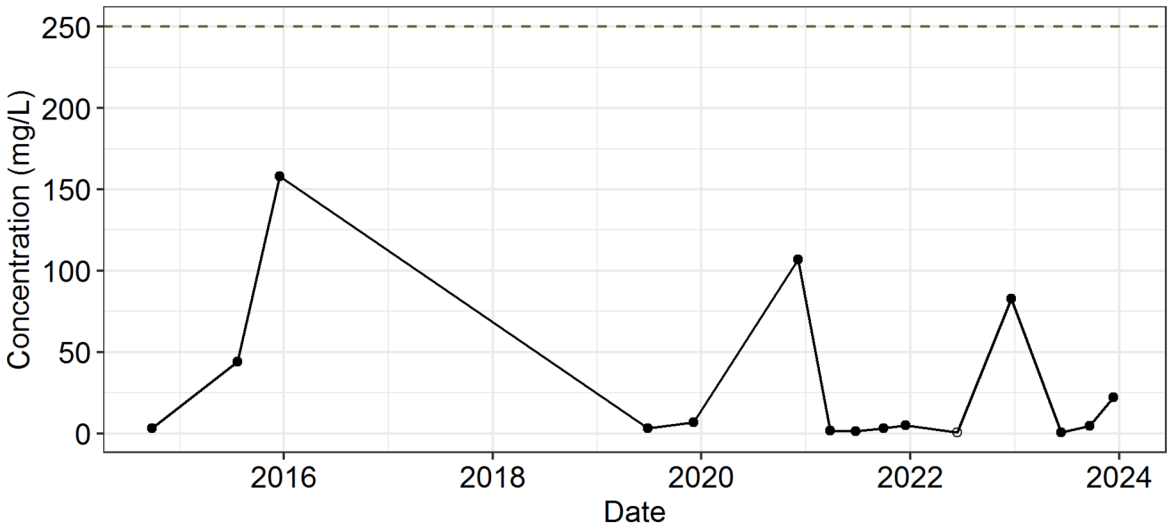
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



Mann-Kendall p-value = 0.038
Non-detects are shown as open circles at 1/2 of the reporting limit

ILF SLPWETW Sulfate (As SO4)

Mann-Kendall Trend = No Trend



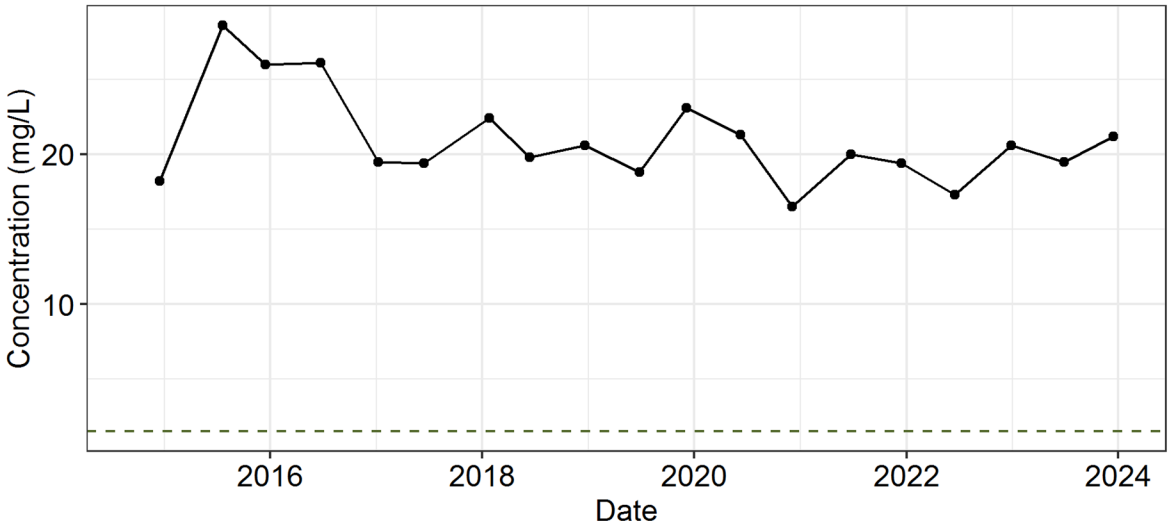
Groundwater Class GA Standard

Not Detected • Detected

Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

NY FDRAIN1 Fluoride

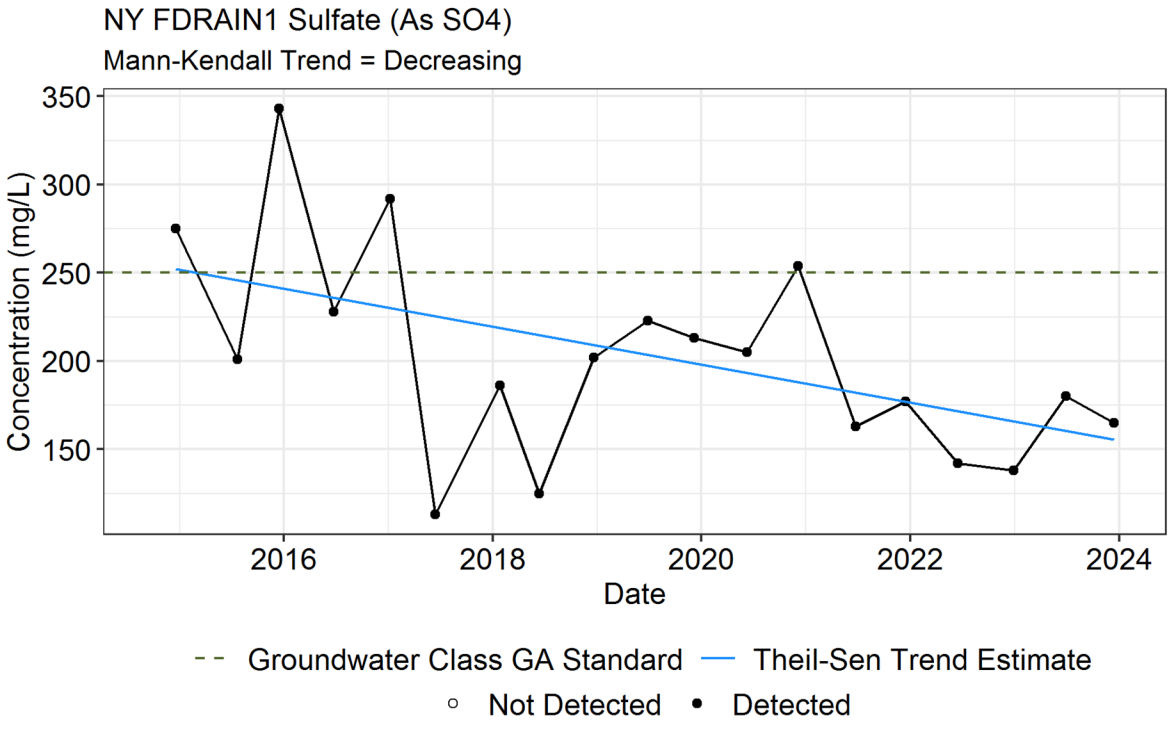
Mann-Kendall Trend = Stable



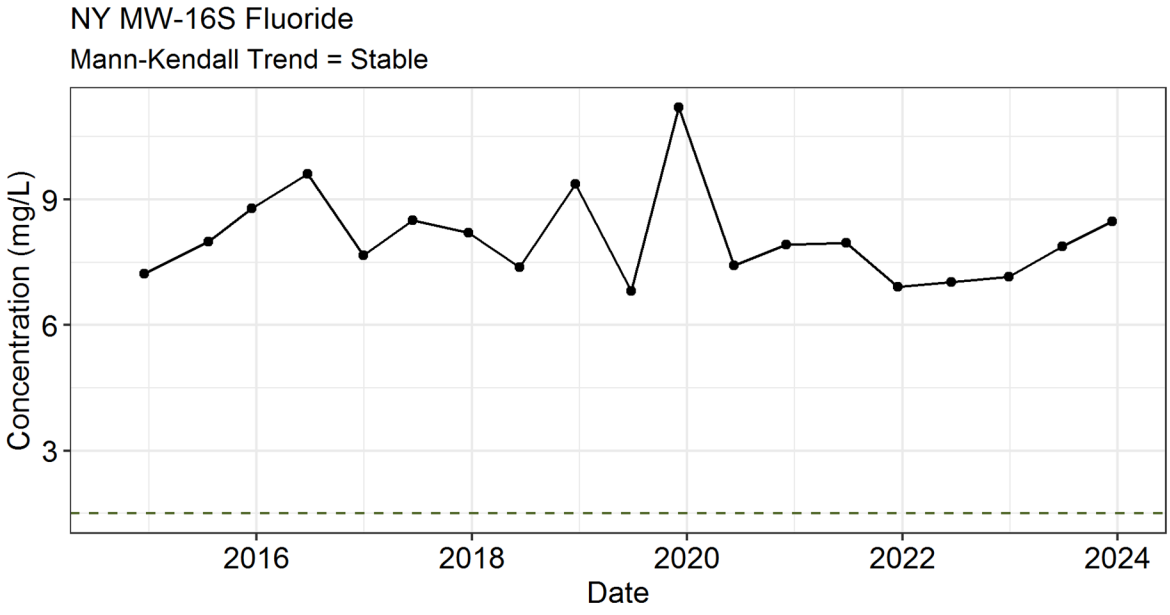
Groundwater Class GA Standard

Not Detected • Detected

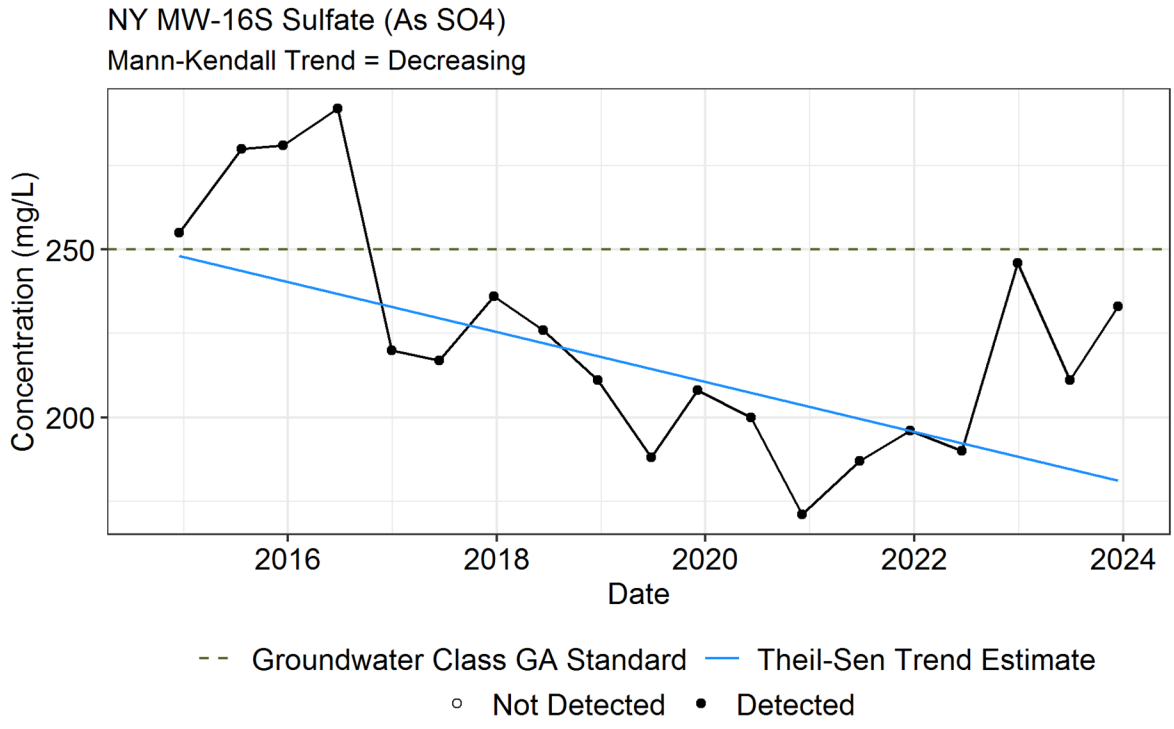
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



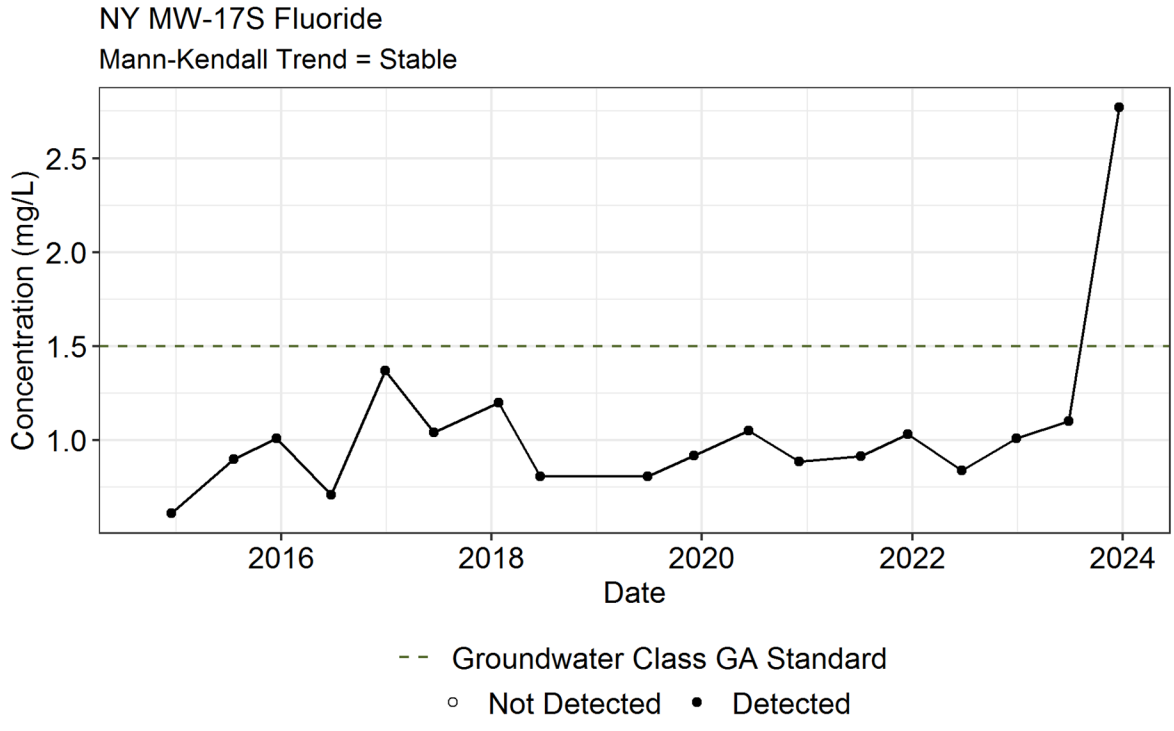
Mann-Kendall p-value = 0.042
Non-detects are shown as open circles at 1/2 of the reporting limit



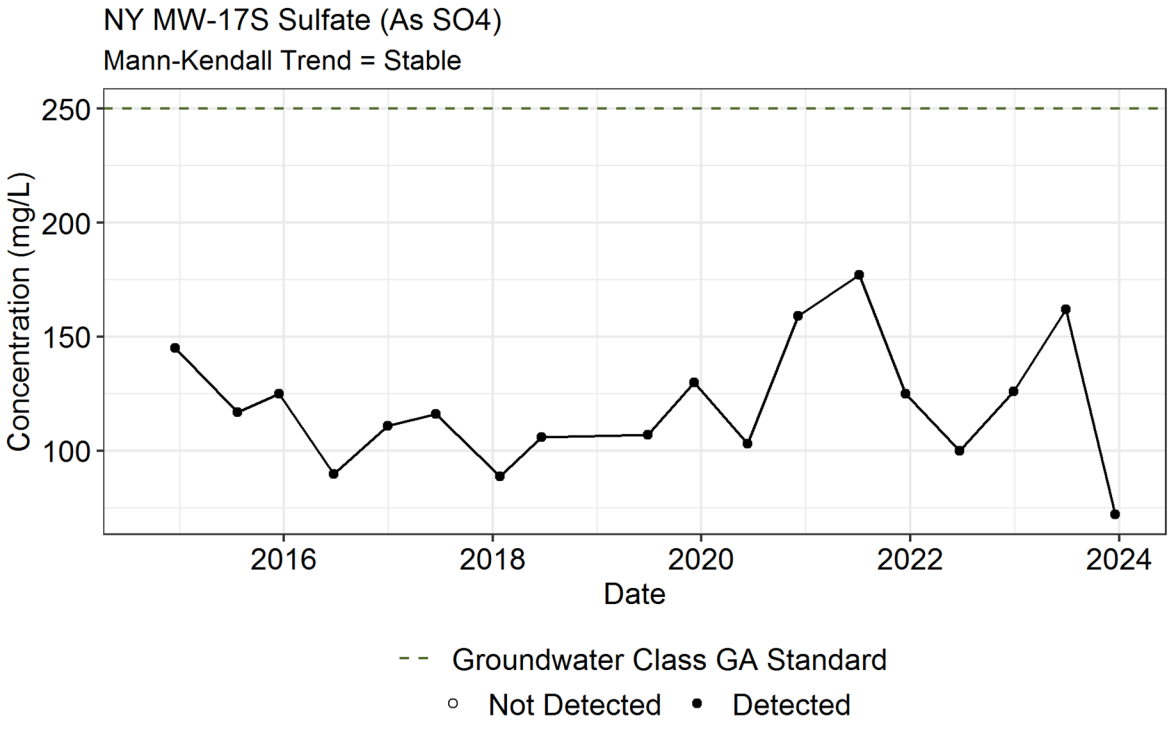
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



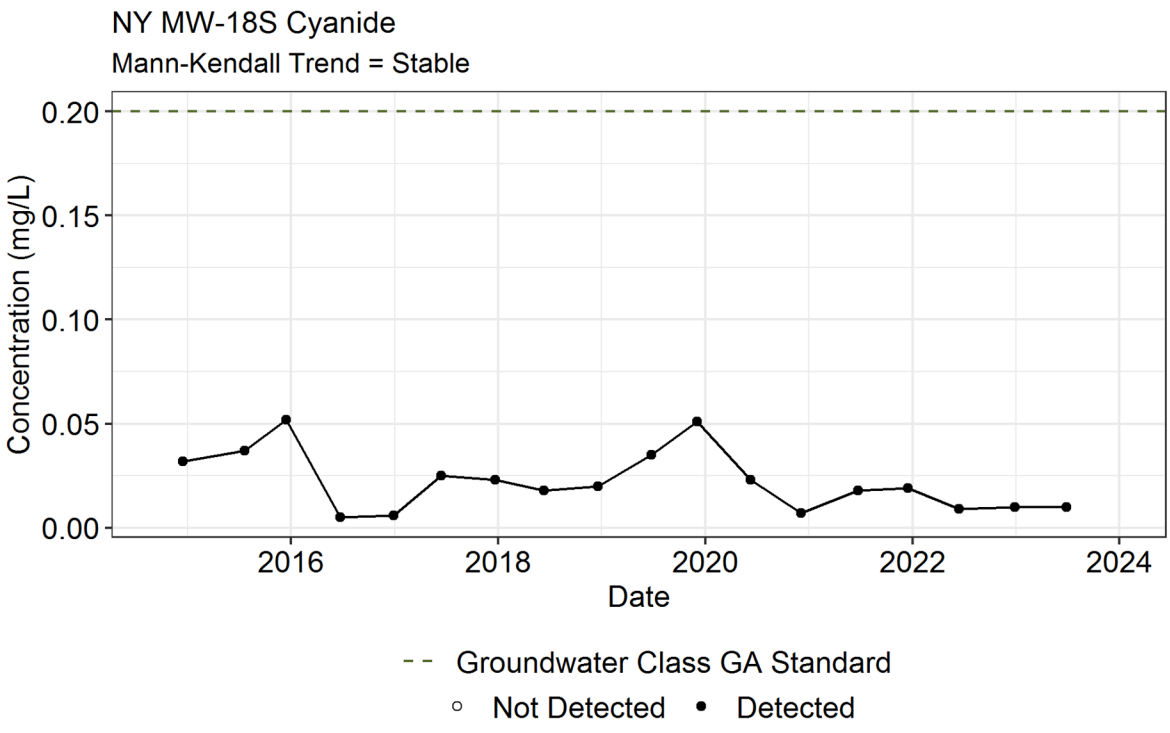
Mann-Kendall p-value = 0.016
Non-detects are shown as open circles at 1/2 of the reporting limit



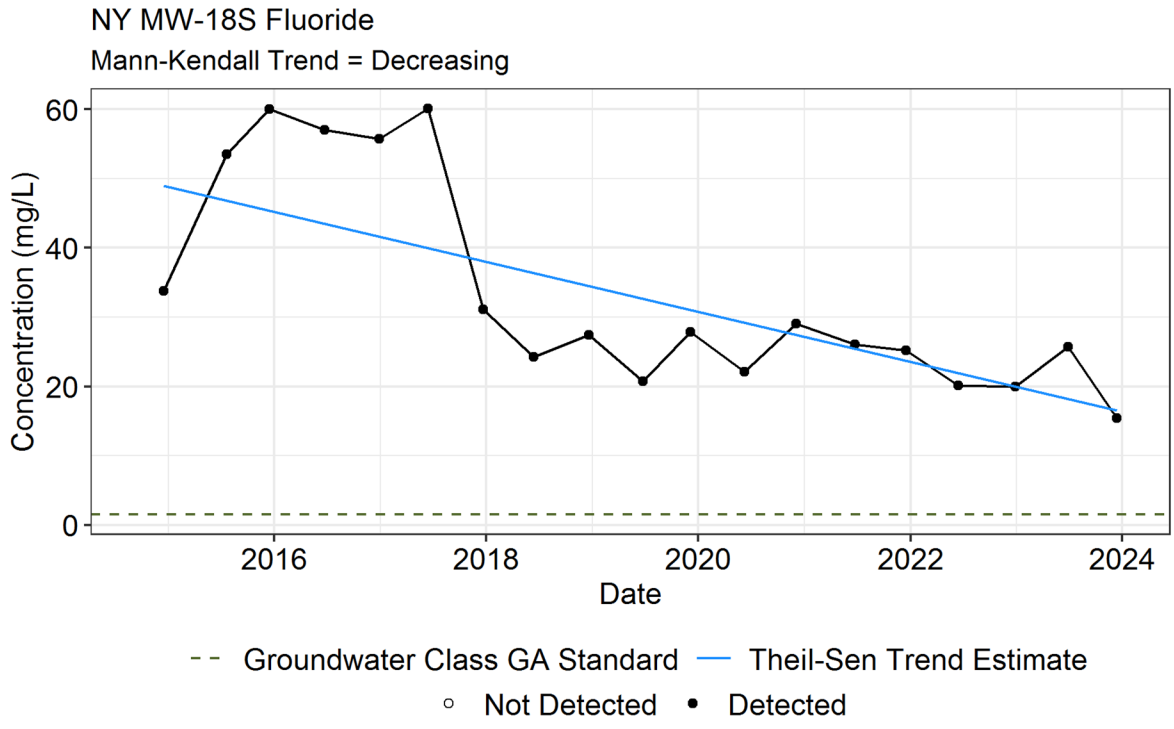
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

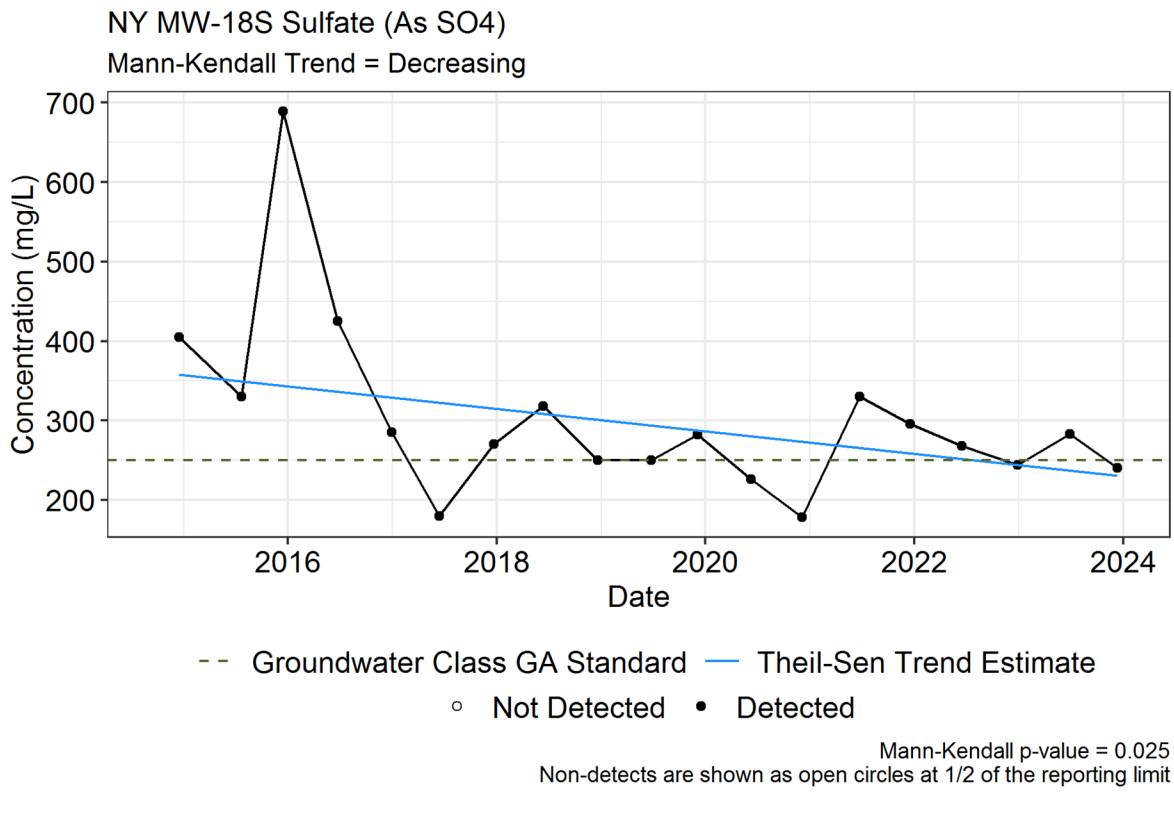


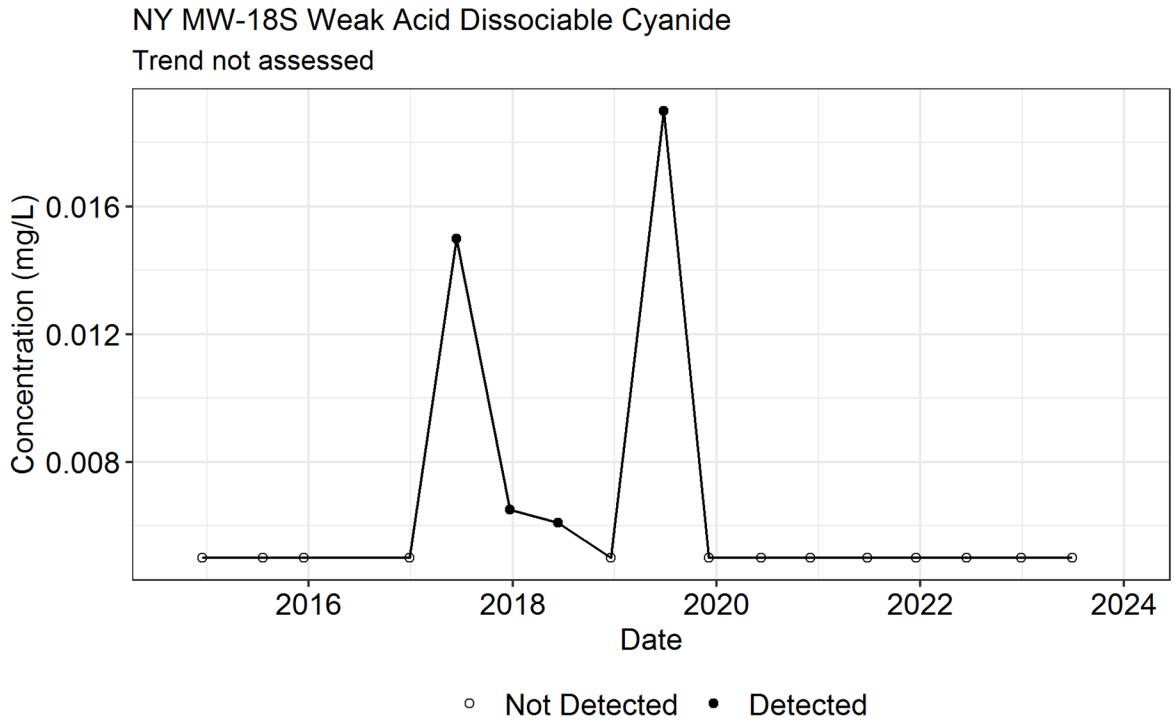
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



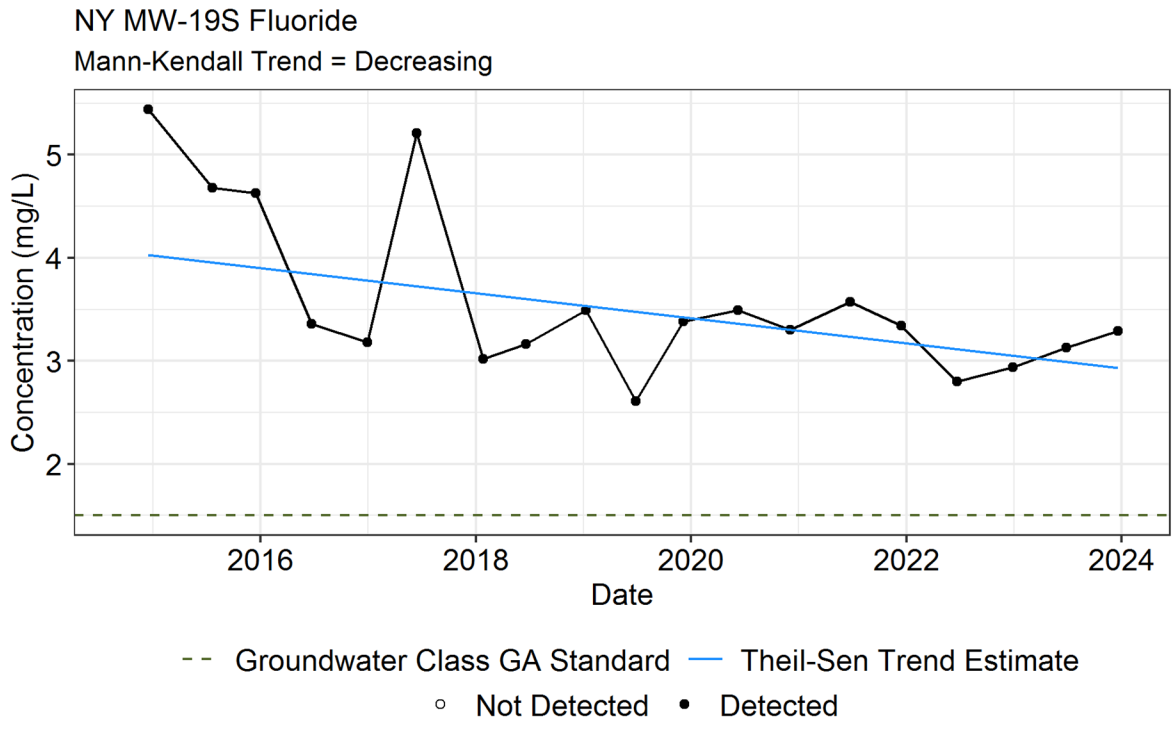
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit


NY MW-18S Fluoride
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
60
40
20
0
2016
2018
2020
2022
2024
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

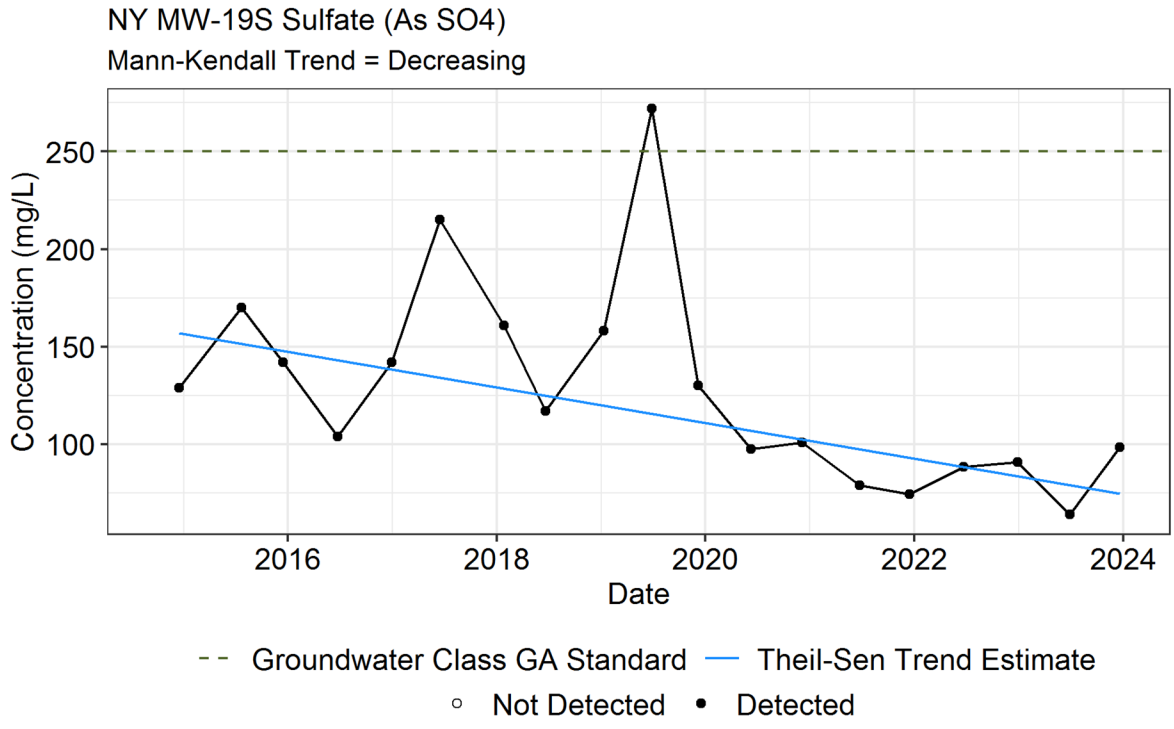

NY MW-18S Sulfate (As SO4)
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
700
600
500
400
300
200
2016
2018
2020
2022
2024
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value = 0.025
Non-detects are shown as open circles at 1/2 of the reporting limit



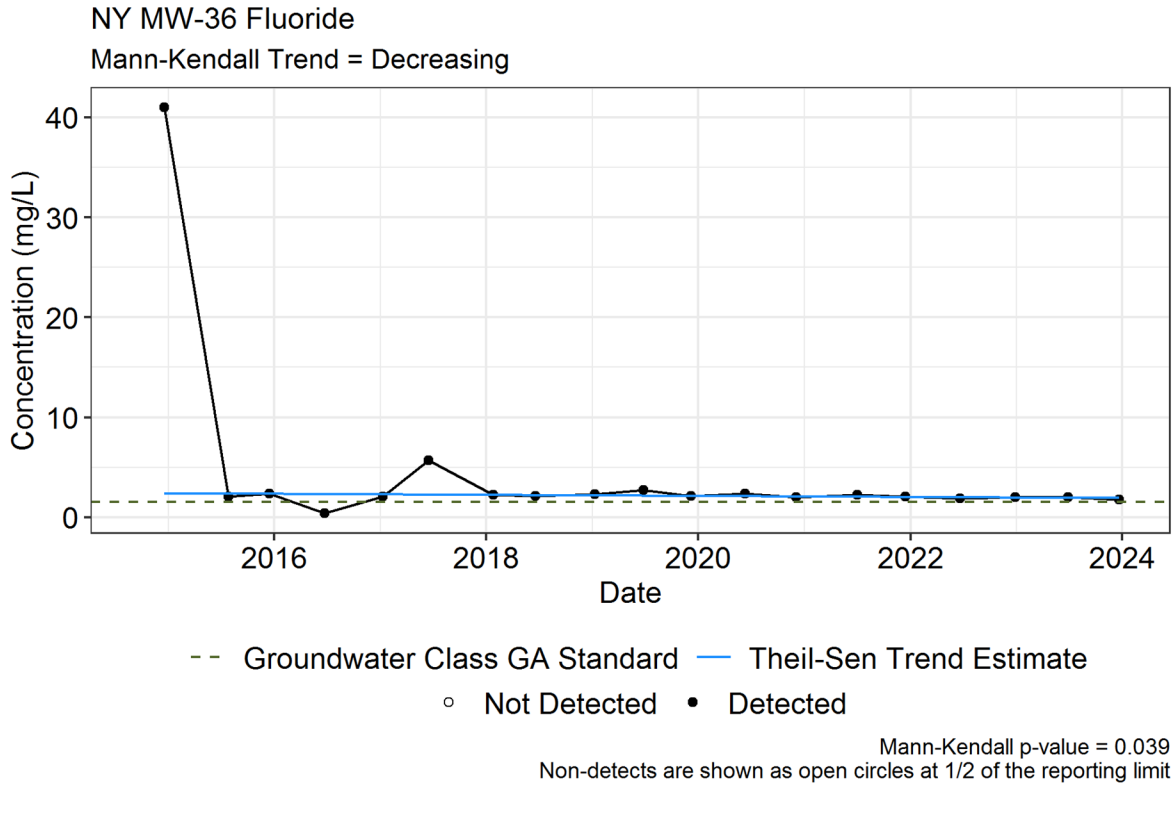
Trend testing not conducted because more than half of observations are nondetects.
Non-detects are shown as open circles at 1/2 of the reporting limit



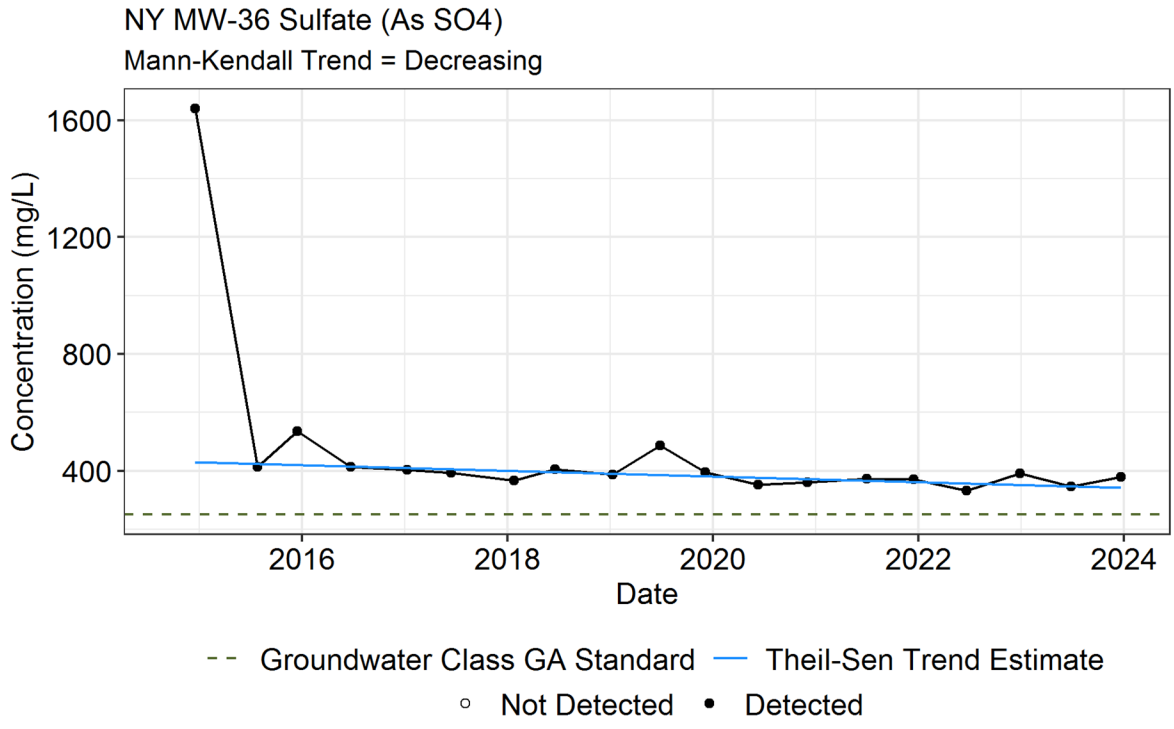
Mann-Kendall p-value = 0.023
Non-detects are shown as open circles at 1/2 of the reporting limit



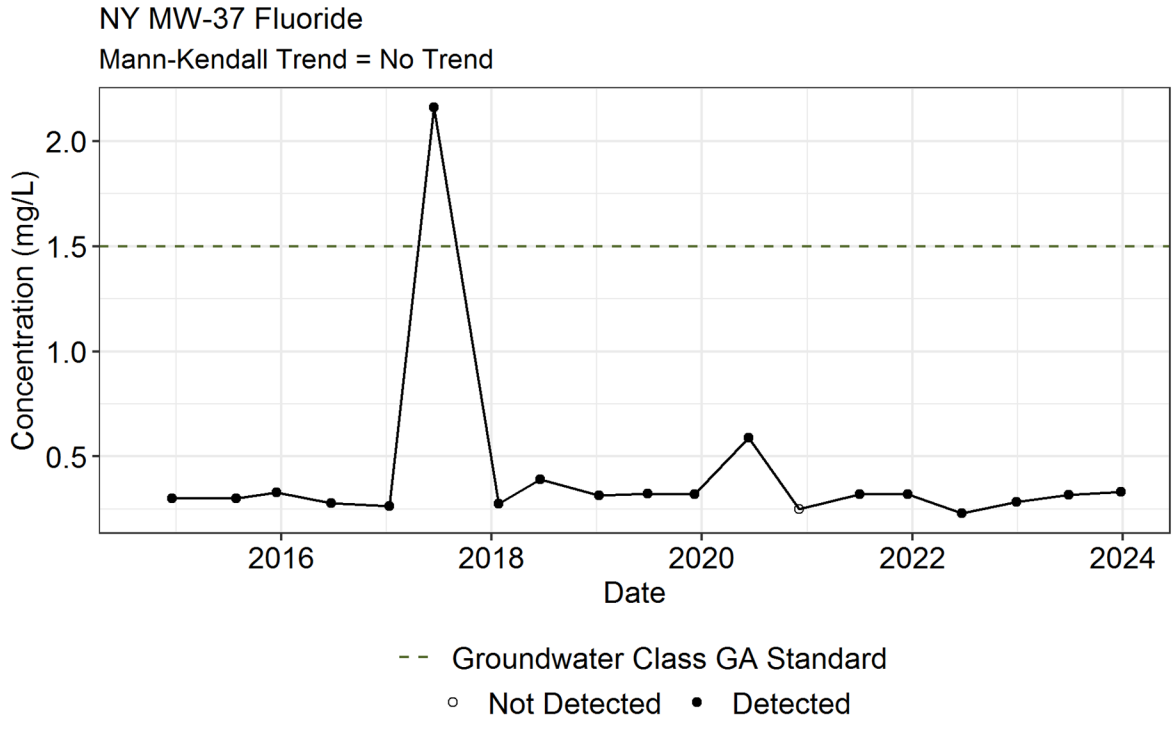
Mann-Kendall p-value = 0.004
Non-detects are shown as open circles at 1/2 of the reporting limit



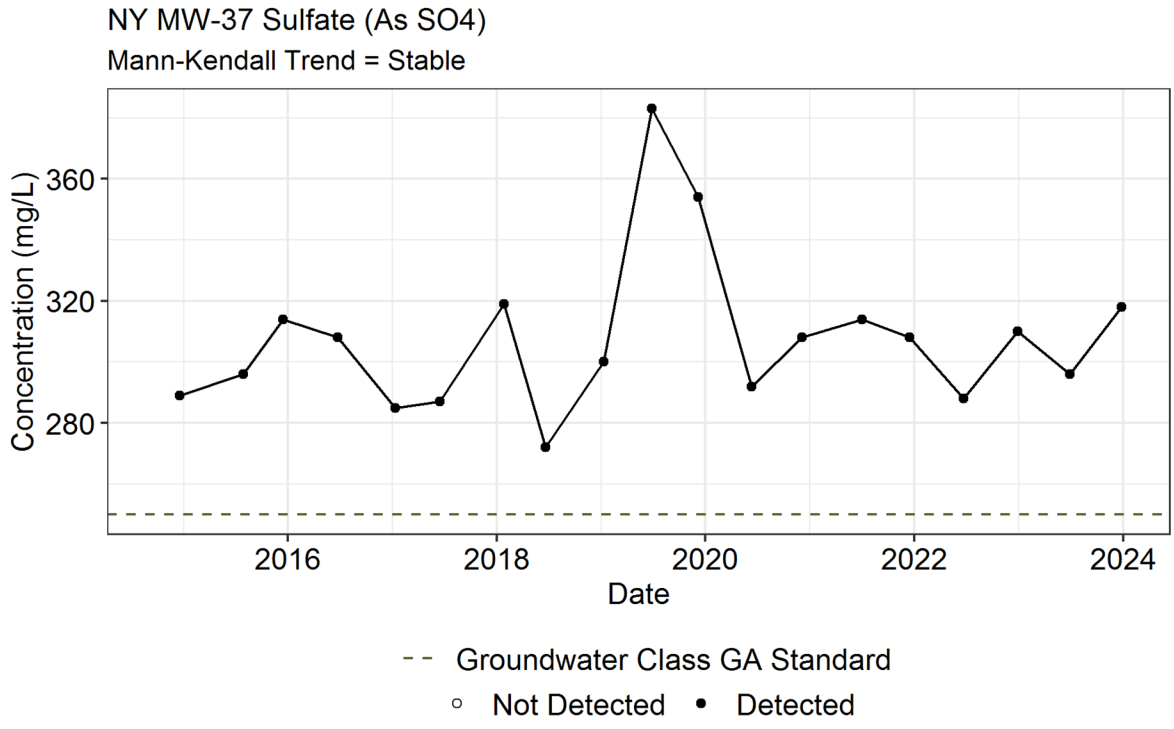
Mann-Kendall p-value = 0.039
Non-detects are shown as open circles at 1/2 of the reporting limit



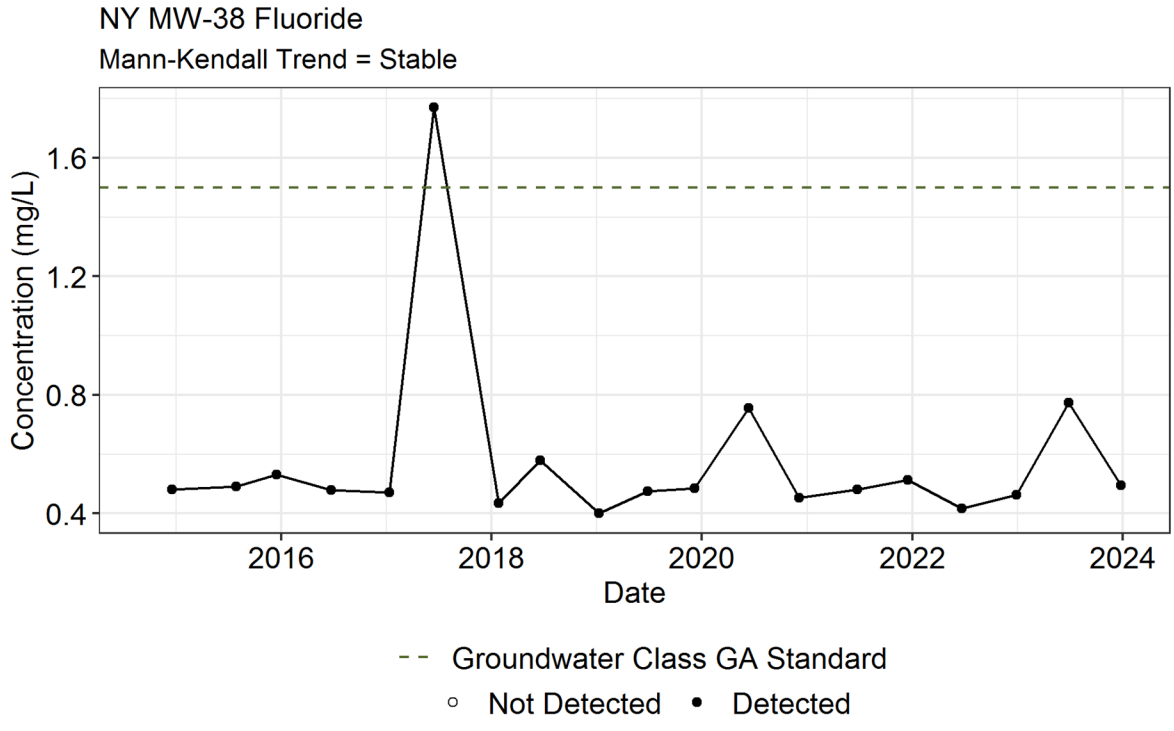
Mann-Kendall p-value = 0.001
Non-detects are shown as open circles at 1/2 of the reporting limit



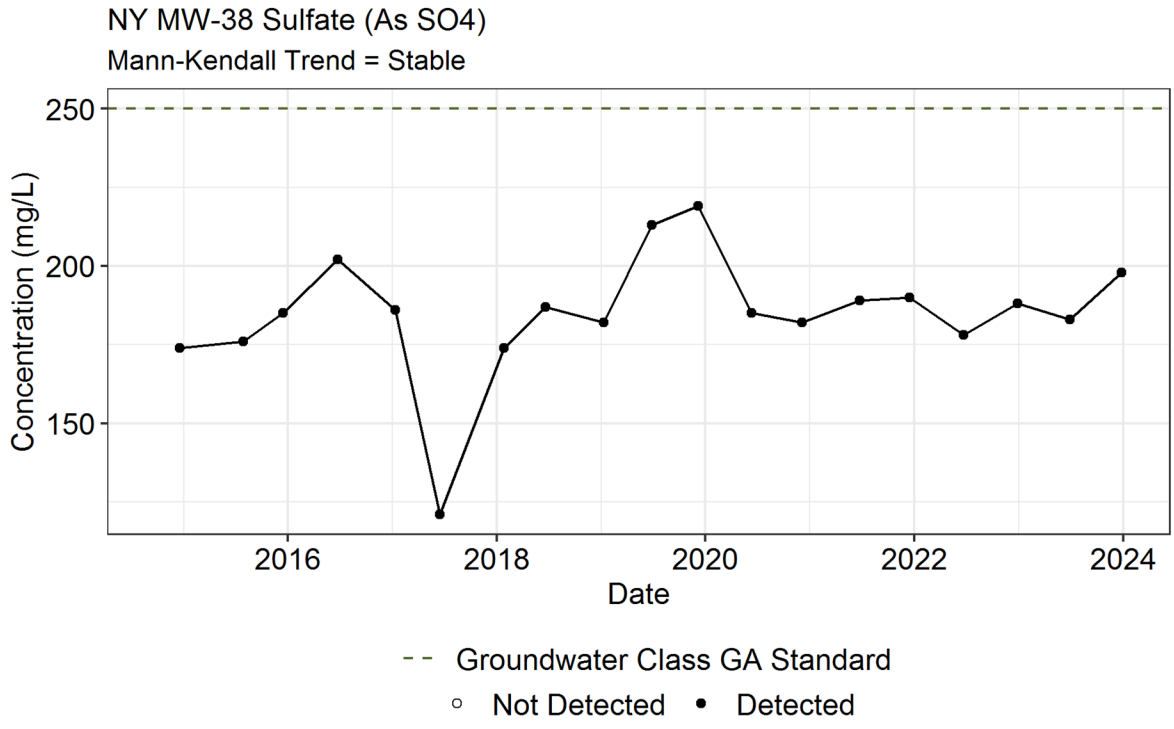
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



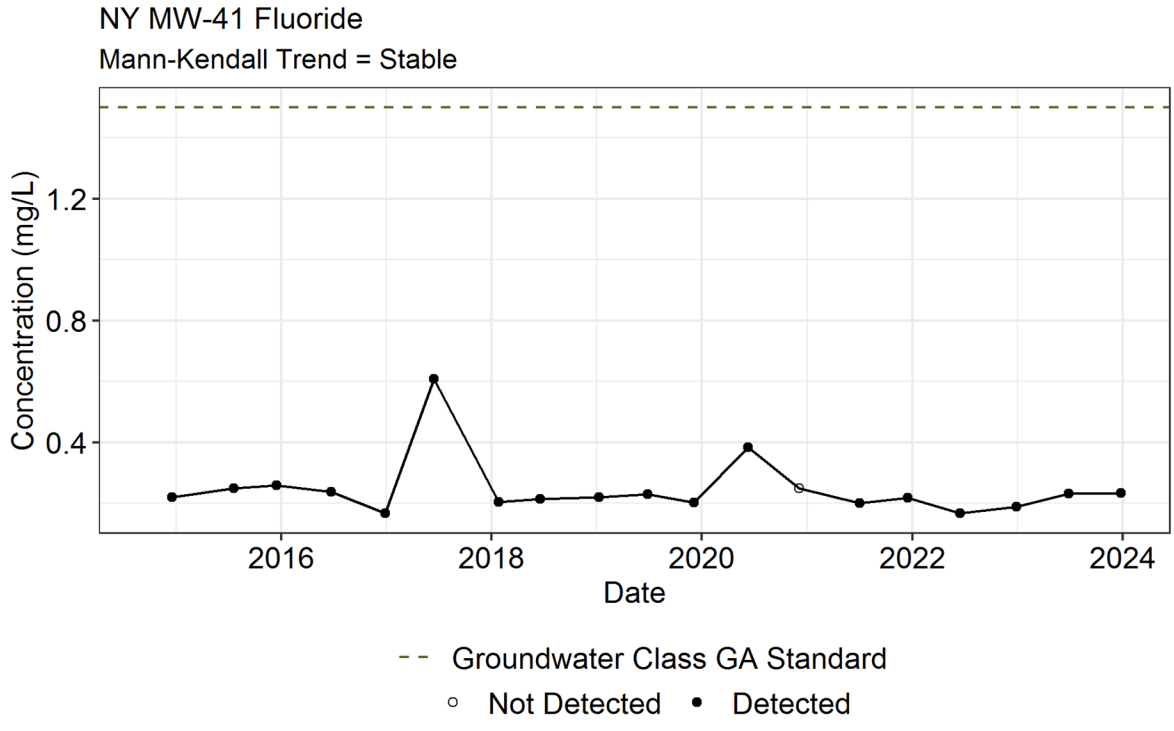
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



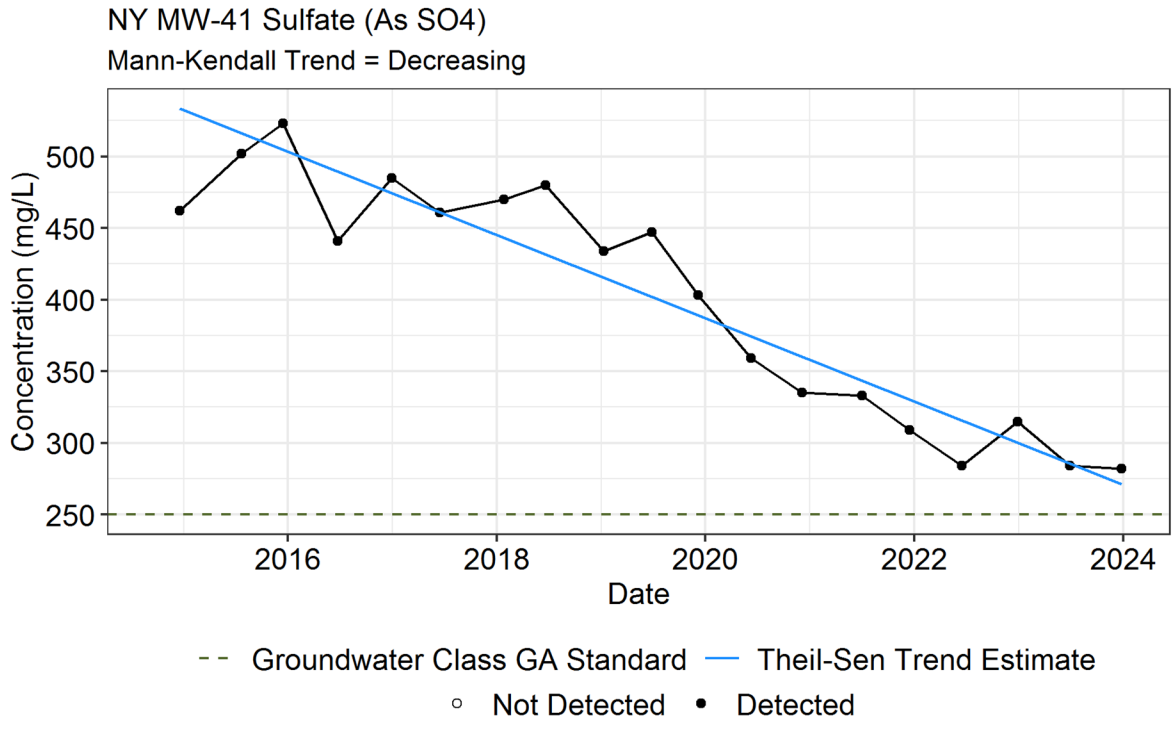
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

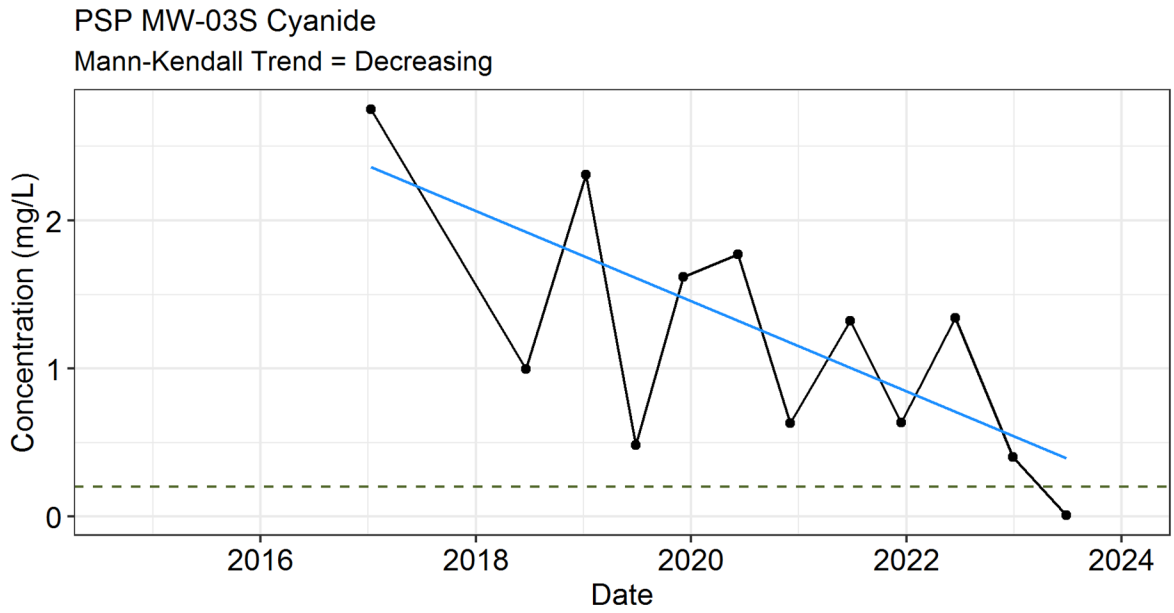


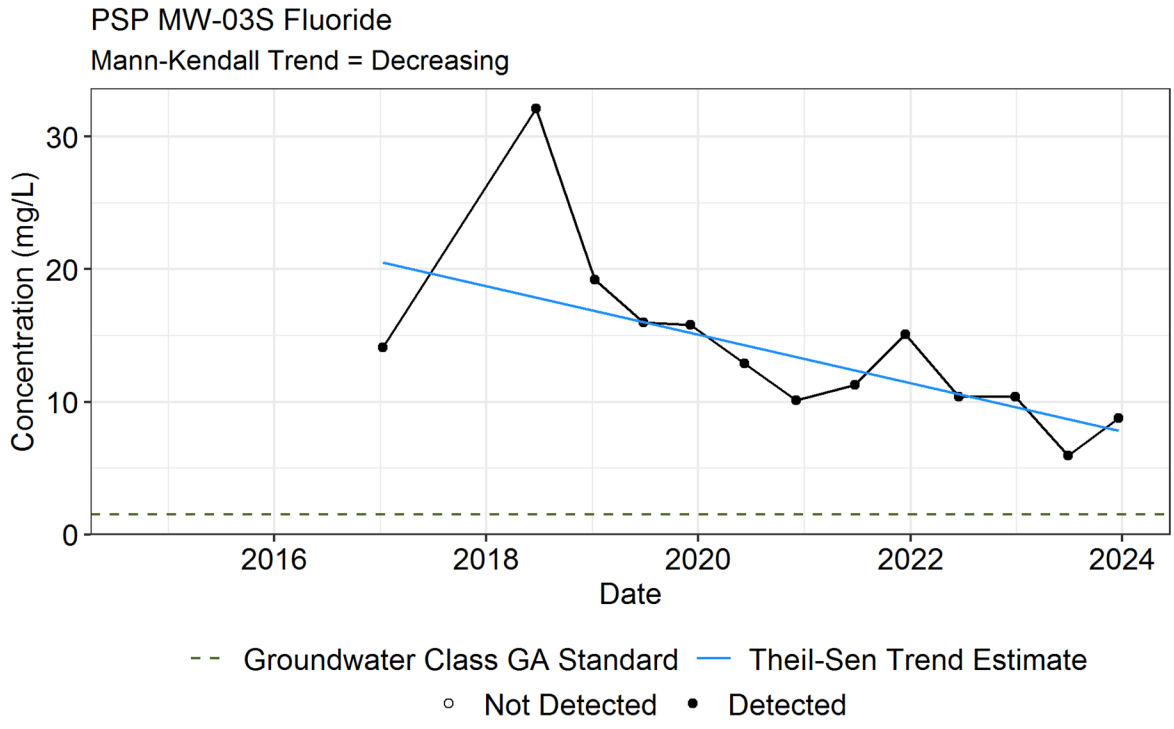
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

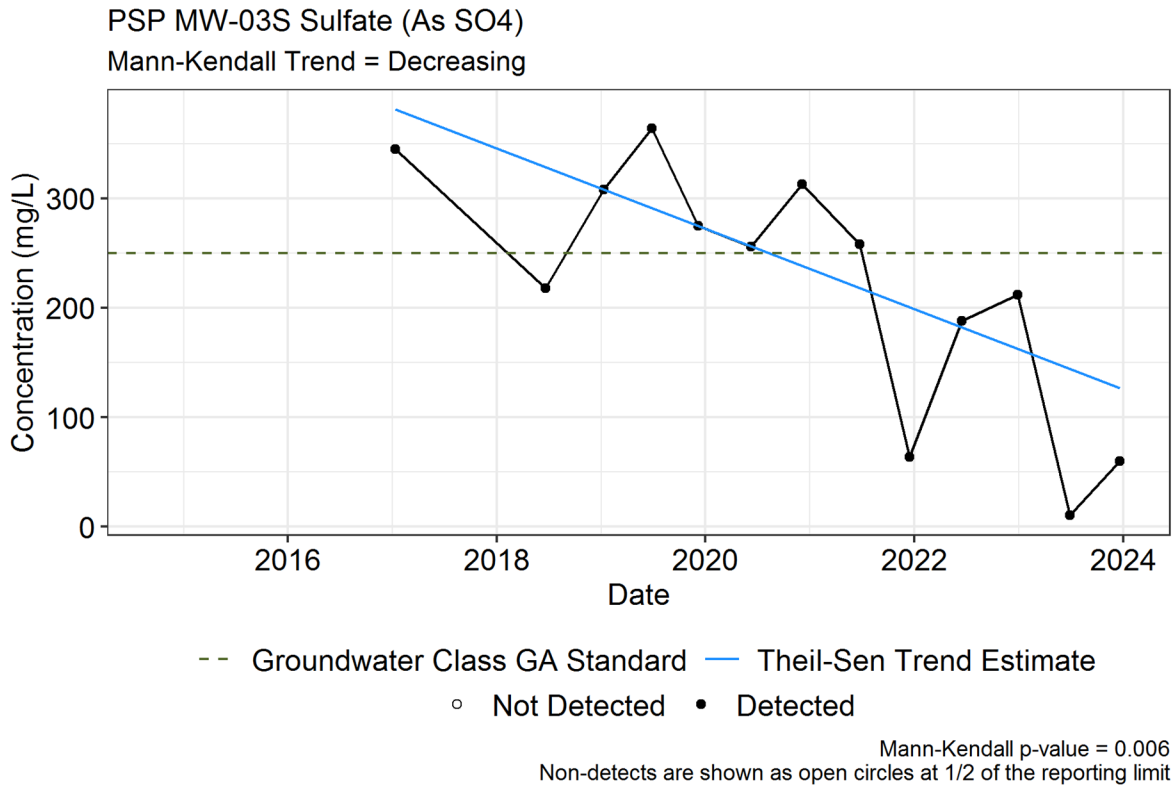


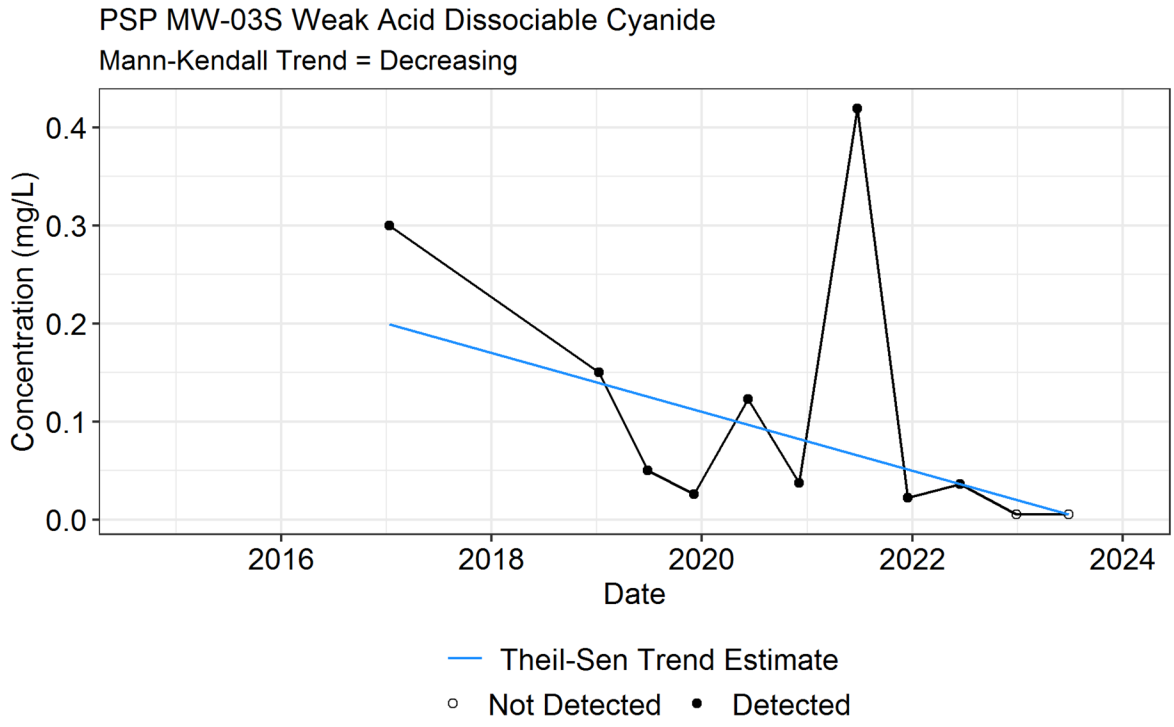
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

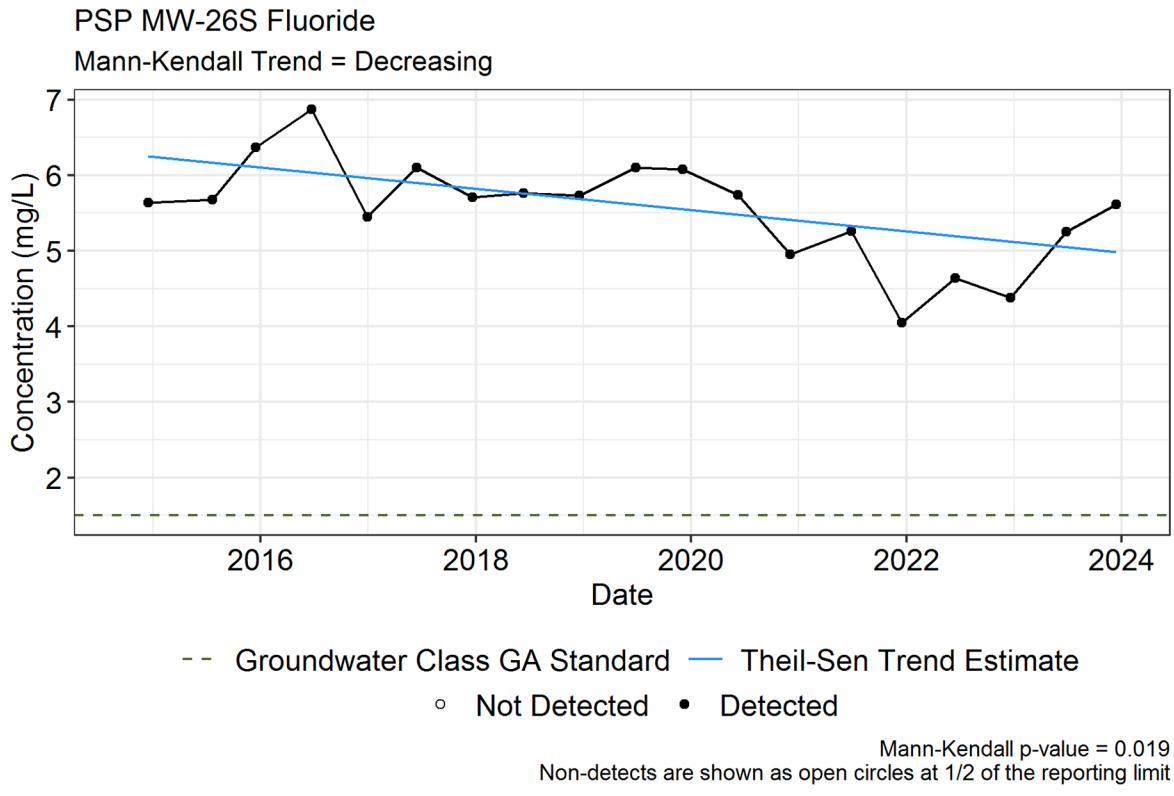

NY MW-41 Sulfate (As SO4)
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
500
450
400
350
300
250
2016
2018
2020
2022
2024
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value <0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

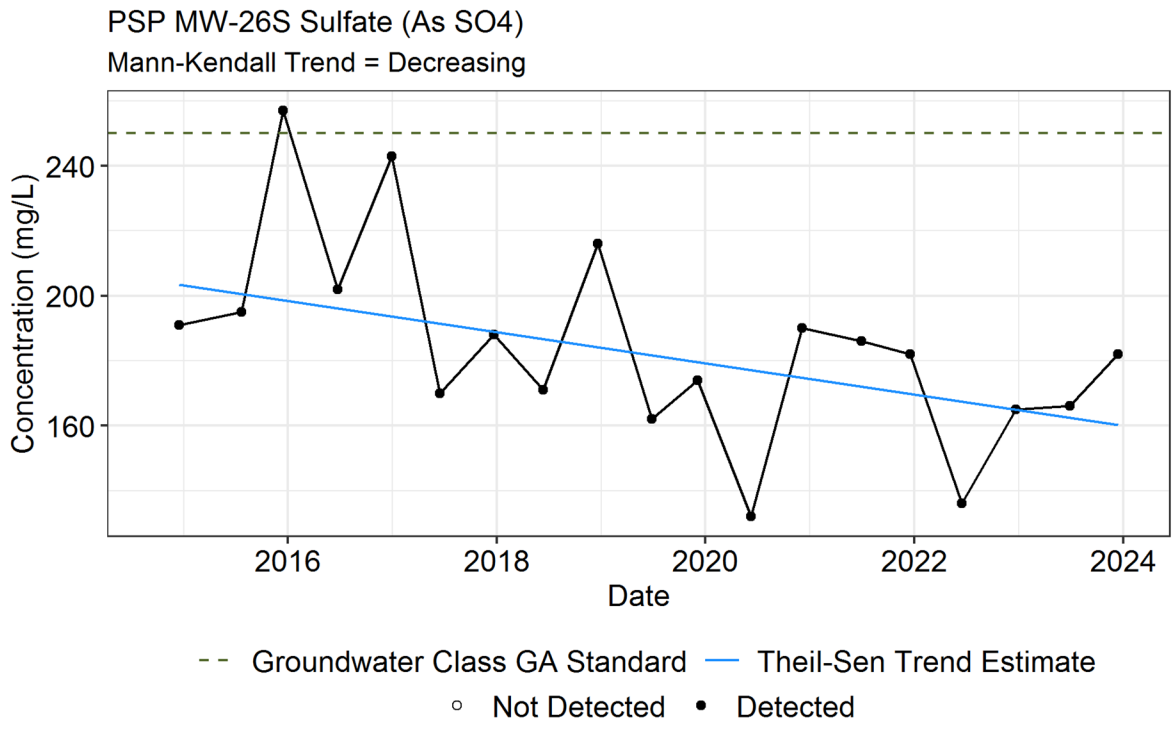

PSP MW-03S Cyanide
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
2
1
0
2016
2018
2020
2022
2024
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value = 0.034
Non-detects are shown as open circles at 1/2 of the reporting limit


PSP MW-03S Fluoride
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
0
10
20
30
2016
2018
2020
2022
2024
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value = 0.001
Non-detects are shown as open circles at 1/2 of the reporting limit

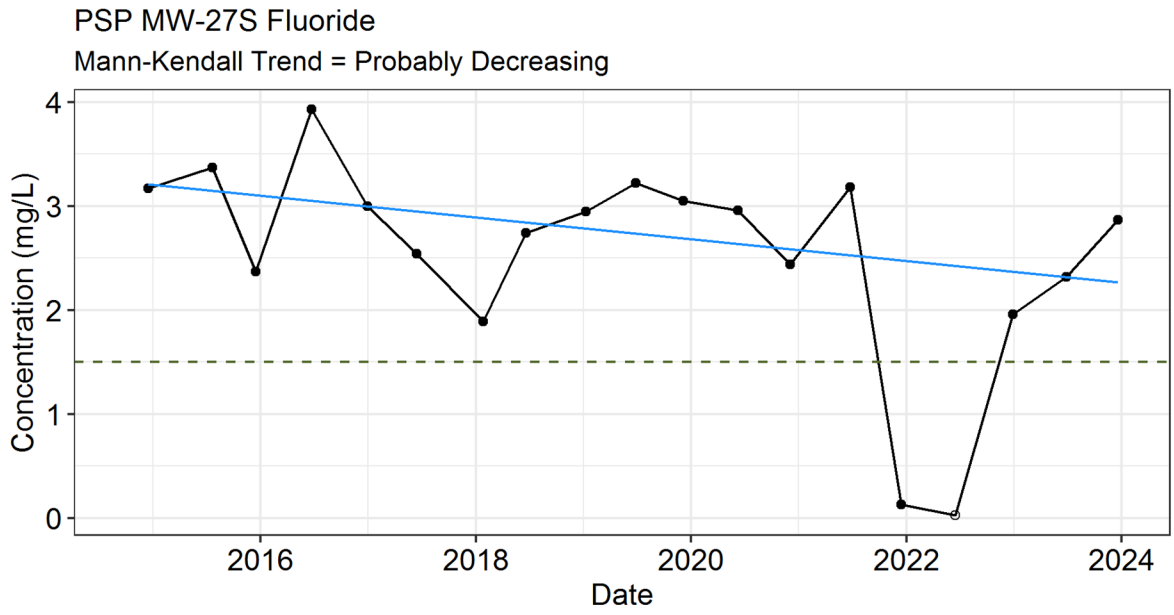

PSP MW-03S Sulfate (As SO4)
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
0
100
200
300
2016
2018
2020
2022
2024
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value = 0.006
Non-detects are shown as open circles at 1/2 of the reporting limit


PSP MW-03S Weak Acid Dissociable Cyanide
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
0.0
0.1
0.2
0.3
0.4
2016
2018
2020
2022
2024
Date
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value = 0.015
Non-detects are shown as open circles at 1/2 of the reporting limit

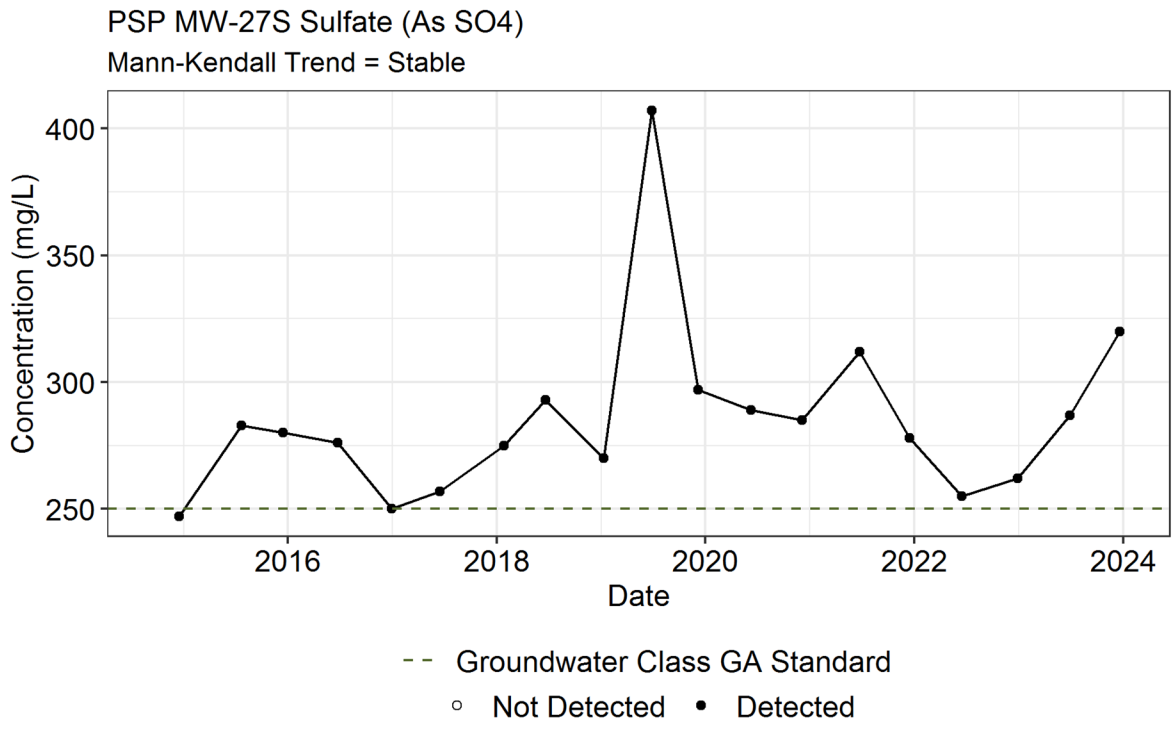

PSP MW-26S Fluoride
Mann-Kendall Trend = Decreasing
Concentration (mg/L)
2
3
4
5
6
7
2016
2018
2020
2022
2024
Date
Groundwater Class GA Standard
Theil-Sen Trend Estimate
Not Detected
Detected
Mann-Kendall p-value = 0.019
Non-detects are shown as open circles at 1/2 of the reporting limit



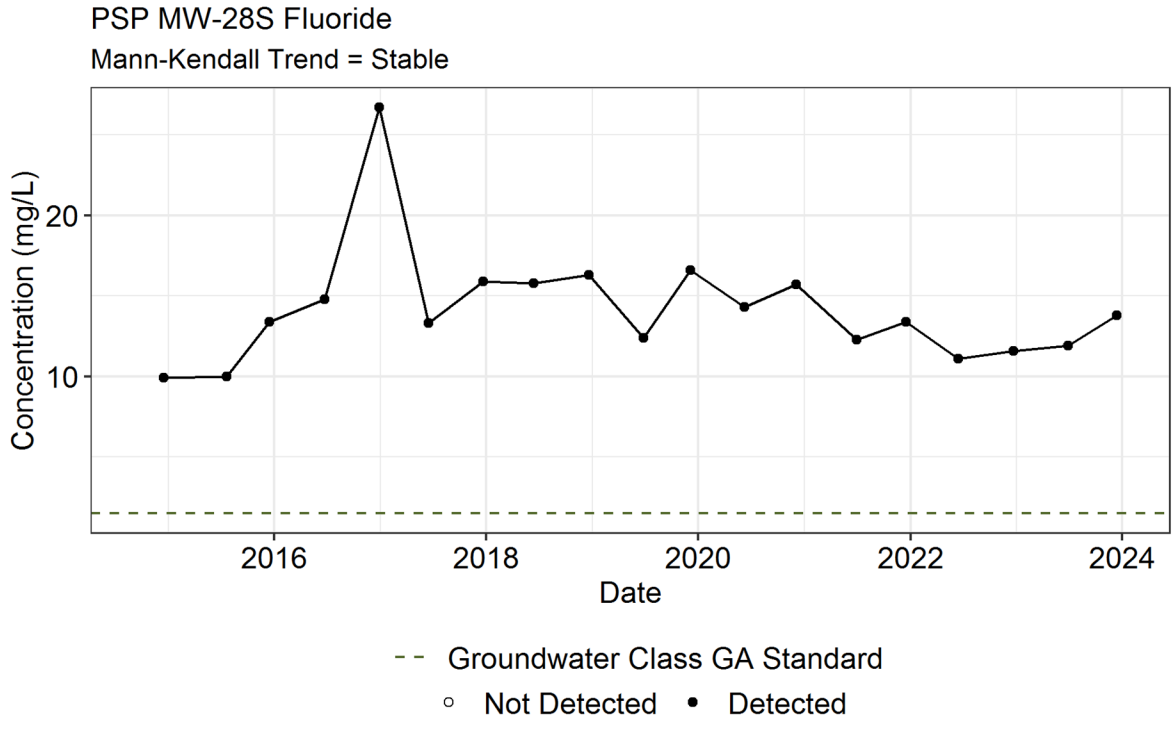
Mann-Kendall p-value = 0.019
Non-detects are shown as open circles at 1/2 of the reporting limit



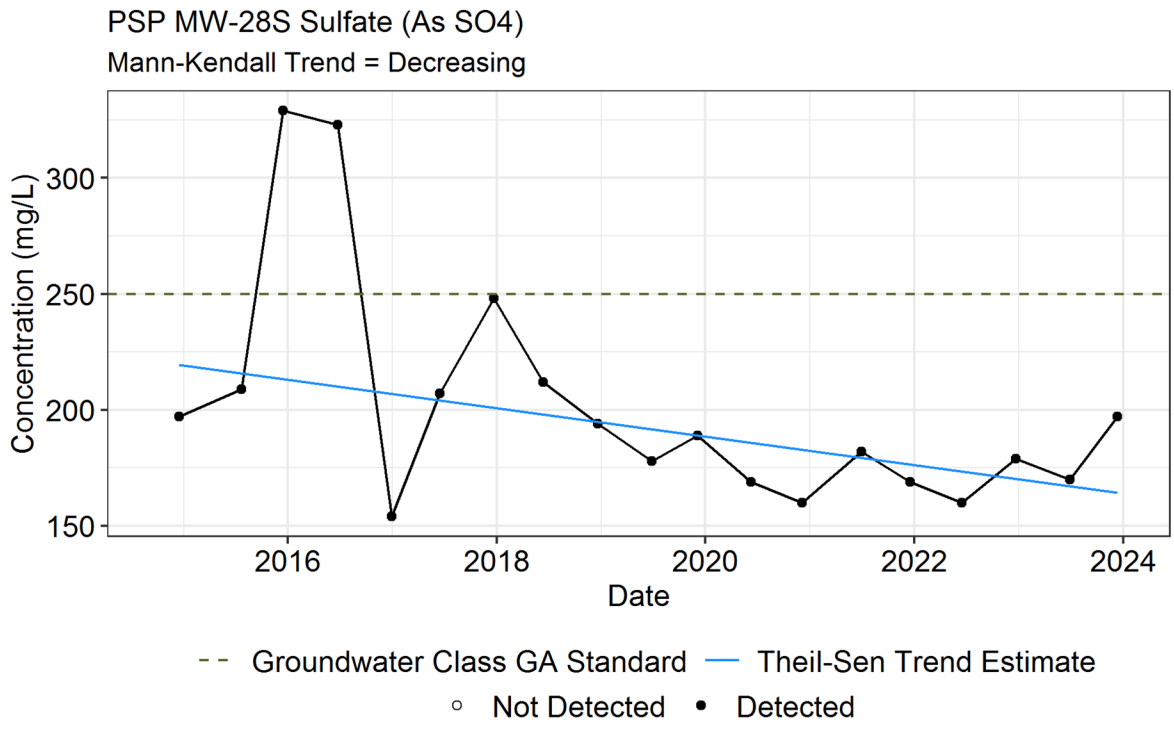
Mann-Kendall p-value = 0.069
Non-detects are shown as open circles at 1/2 of the reporting limit



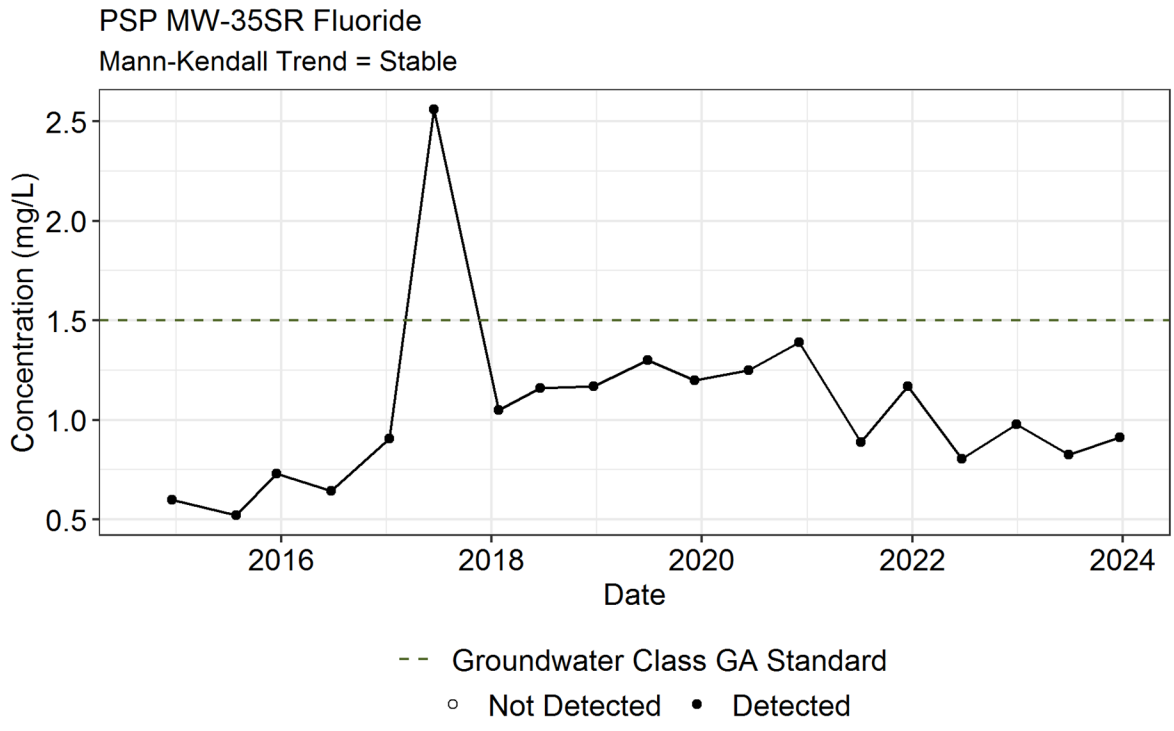
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



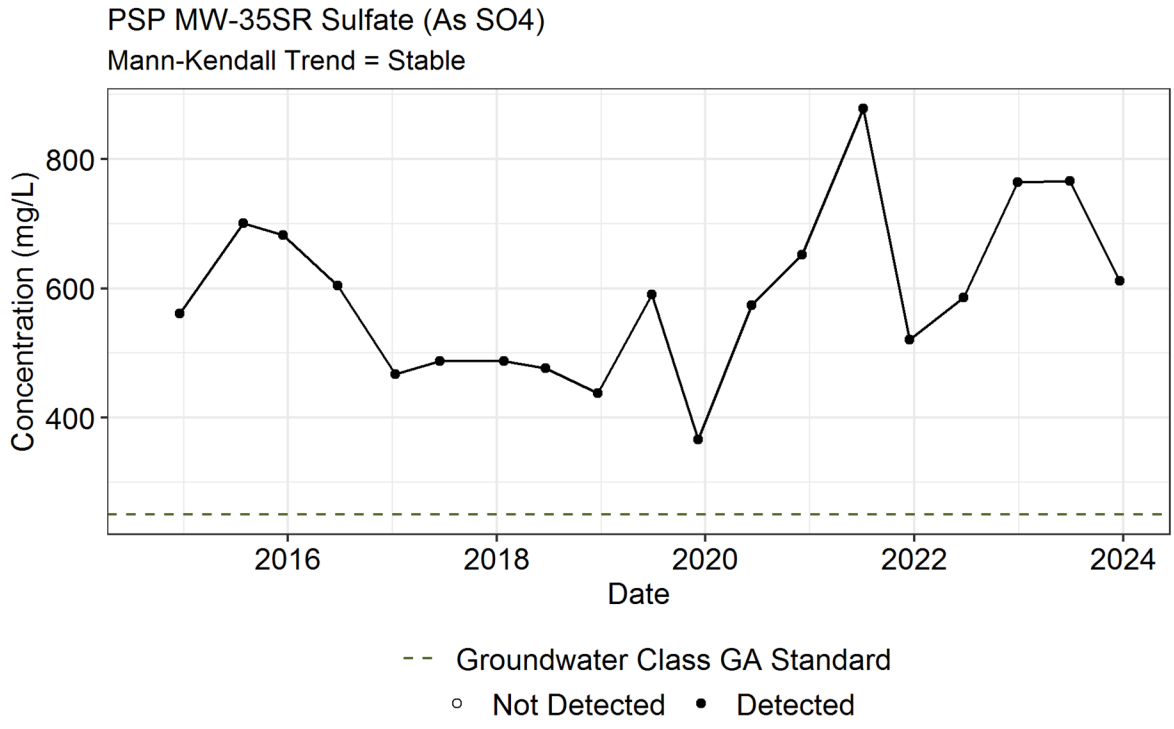
Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



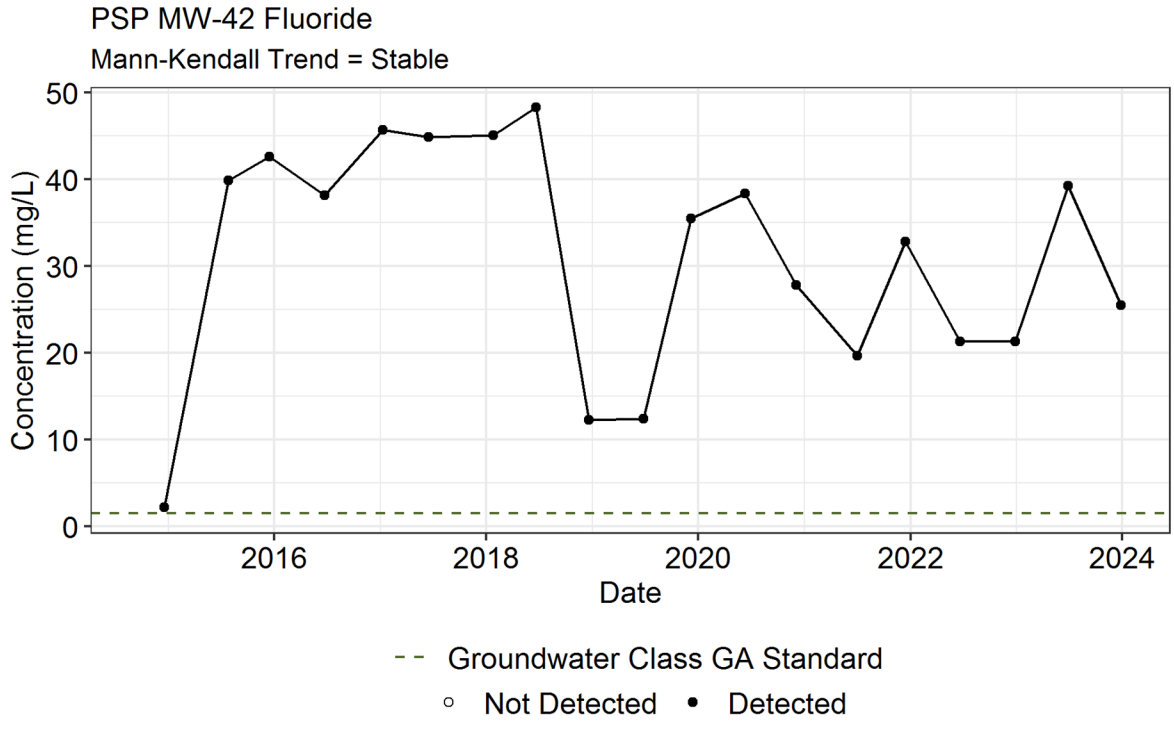
Mann-Kendall p-value = 0.019
Non-detects are shown as open circles at 1/2 of the reporting limit



Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit



Theil-Sen testing not conducted - Mann-Kendall analysis indicated slope was not significantly different from zero.
Non-detects are shown as open circles at 1/2 of the reporting limit

Appendix E Data Quality Assessments

Memorandum

To: *Robyn Gross*

From: *Paul Rodrigue*

Date: *October 24, 2023*

Subject: *Reynolds Metals Company, LLC – NYSDEC Site Code #645009*
Data Quality Assessment – March 2023

This memorandum presents the data quality assessment for the March 2023 quarterly sampling round for the Massena East Plant. Samples were collected on March 30, 2023, and April 6, 2023, and analyzed for polychlorinated biphenyls (PCBs), and conventional inorganics (free cyanide, fluoride, and sulfate).

Laboratory quality control data associated with these samples were reviewed in accordance with the *Quality Assurance Project Plan* (QAPP) (CDM, March 2008) and United States Environmental Protection Agency (USEPA) Region II Contract Laboratory Program (CLP) data validation criteria as referenced in *Validating PCB Compounds PCBs by Gas Chromatography SW-846 Method 8082A* (SOP No. HW-45, Revision No. 1, October 2006) and in *Validation of Metals for the (CLP) Based on SOW ILMO5.3* (SOP No. HW-2. Revision No. 13, September 2006). All analyses were performed by Alpha Analytical in Westborough, Massachusetts except free cyanide which was subcontracted by Alpha Analytical to Eurofins in Pittsburgh, Pennsylvania.

The intent of this review is to provide a general assessment of the overall quality of the data packages based on the review of the following information:

- Field and laboratory method blanks
- Surrogate spike recovery
- Field duplicate precision
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Laboratory control sample/laboratory control sample duplicates (LCS/LCSD)
- Sample holding time data
- Sample receipt conditions

All applicable data were evaluated and are summarized below. Field quality assurance sample results (field blanks and duplicate samples) were also evaluated. Analytical results, hold times and field quality assurance data are summarized in Tables 1 through 4.

PCB Analysis

One field blank sample was collected during each day of sampling. Field blank MW-1207-0312FBW was collected on March 30, 2023, while field blank MW-1208-0323FBW was collected on April 6, 2023. PCB Aroclors were not detected in the field blank samples. In addition, the laboratory blank samples analyzed with the field samples were non-detect for Aroclors. No qualification is required.

PCB analysis surrogate spike recovery data were reviewed. Tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were the compounds used for the surrogate spike standards. The QAPP specifies that at least one surrogate is recovered within range (30 to 150 percent), with both surrogate recoveries greater than 10 percent. All surrogate recoveries were within the acceptable range; no qualification is required.

A field duplicate sample was collected at MW-39S (MW-1206-0323BD). All Aroclors were non-detect in both the parent and duplicate sample. No qualification is required.

Sample MW-10S-0323 was analyzed as a MS/MSD sample. The QAPP specifies that MS/MSD recoveries be within the range of 29 to 135 percent, with a relative percent difference (RPD) of less than 30 percent between the spiked pair. The MS and MSD sample was spiked with Aroclor1260. Recoveries and precision between the spiked pair were acceptable. No qualification is required.

The QAPP specifies a recovery range of 50 to 150 percent for compounds in a LCS/LCSD. Recovery and precision for Aroclor 1260 was within the acceptable range in the two LCS/LCSD samples; no qualification is required.

USEPA Region II guidance specifies a holding time of up to 365 days beyond the verified time of sample receipt (VTSR) for sample extraction and 40 days from the time of sample extraction to analysis. In addition, the VTSR must be within 48 hours of sample collection. Table 2 presents a compilation of the relevant information regarding PCB analysis holding times. No qualification is required.

The condition of the samples upon receipt at the laboratory was reviewed. All samples were received at temperatures below 10°C. No qualification is required.

Based on the results of this assessment, the PCB results for the March 2023 quarterly sampling event can be used without qualification.

Conventional Analysis

Samples were analyzed for free cyanide, fluoride, and sulfate.

One field blank sample was collected during each day of sampling. Field blank MW-1207-0312FBW was collected on March 30, 2023, while field blank MW-1208-0323FBW was collected on April 6, 2023. Both field blanks were analyzed for conventional inorganics. All results for MW-1207-0323FBW were non-detect. MW-1208-0323FBW was non-detect except for free cyanide which was detected at a concentration of 0.0014JB mg/L, above the method detection limit (MDL), but below the reporting limit of 0.002 mg/L. Additionally, free cyanide was detected in the associated method blank at a concentration of 0.00113J mg/L. Since the method blank detection was below the reporting limit of 0.002 mg/L, any associated field results above the MDL and below the reporting limit are revised to non-detect at the reporting limit. Consequently, the free cyanide result for MW-40S-0323 was revised to 0.002U mg/L. Fluoride and sulfate were non-detect in the method blanks.

A field duplicate sample was collected at MW-39S (MW-1206-0323BD). The RPD quantified between the parent and duplicate sample collected at the monitoring well was acceptable for all conventional parameters. Free cyanide was detected in both samples at less than five times the reporting limit. In such case, the absolute difference is used to determine qualification. No quantification is required as the absolute difference between these results are below the reporting limit.

MS/MSD analysis was requested on MW-10S-0323. The subcontracted laboratory performed MS/MSD analysis for free cyanide on sample MW-40S-0323. The QAPP specifies acceptable MS/MSD recovery limits as 80 to 120 percent for fluoride and sulfate. The QAPP does not specify MS/MSD recovery limits for free cyanide; therefore, the laboratory-specified recovery limits were used to determine the need for qualification. All recoveries were acceptable with some exceptions. Sulfate was under-recovered in the MS and MSD at 50 percent and 61 percent, respectively. In this case, the native sample concentration was more than four times the spike amount, therefore the out-of-range recoveries are disregarded. MS and MSD recoveries were within the laboratory limits for free cyanide for both MW-10S-0323 and MW-40S-0323. No qualification is required.

All LCS recoveries for conventional were acceptable. No qualification is required.

The QAPP specifies holding times for conventional inorganic parameters beyond the VTSR. The VTSR must be within 48 hours of sample collection. Table 2 presents a compilation of the relevant information regarding conventional parameter analysis holding times. All hold time requirements were met. No qualification is required.

Sample receipt conditions were reviewed. All samples were received within the QAPP-specified temperature limits. No qualification is required.

Conventional results for the March 2023 quarterly sampling round can be used as reported by the laboratory with the qualifications noted above.

Summary

Based on a review of the data, the following qualifications were made to the March 2023 quarterly sampling event:

- Due to a detection of free cyanide in the method blank the free cyanide result for MW-40S-0323 was revised to 0.002U mg/L.

PR:tmp

Attachments

cc: Craig Peets, Alcoa
Jessica Roche, Alcoa
pw:\\1902\80599\02 Project Information\03 Data\40 Field Data\2021 Database\March 2022\23052

Sample ID Sample Date Parameter ID	Unit	MW-10S-0323 3/30/23	MW-39S-0323 3/30/23	MW-39S-0323D 3/30/23	MW-40S-0323 4/6/23	MW-45-0323 3/30/23
Field Parameters						
pH	SU	7.45	7.34	---	7.82	7.15
Temperature	deg C	0.677	0.799	---	0.828	1.351
Specific Conductance	mS/cm	6.9	5.8	---	8.1	5.2
Turbidity	NTU	25	24	---	4	11
Redox Potential	mVolt	251.1	204.4	---	206.2	197.1
Conventionals						
Cyanide, Free	mg/L	0.00088J	0.0018J	0.00091J	0.002U	0.0039
Fluoride	mg/L	0.079	1.81	1.8	0.239	0.312
Sulfate	mg/L	78	170	174	69.6	531
PCBs						
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1254	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1260	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U

Key:
U = Nondetect
J = Estimated

Sample ID	Sample Date	VTSR[1]	Days	Cyanide, Free		Fluoride		Sulfate	
				Target - 12 Days VTSR to Analysis	Days	Target - 26 Days VTSR to Analysis	Days	Target - 26 Days VTSR to Analysis	Days
MW-10S-0323	3/30/23	3/30/23	0	4/6/23	7	4/19/23	20	4/19/23	20
MW-1207-0323FBW	3/30/23	3/30/23	0	4/6/23	7	4/19/23	20	4/19/23	20
MW-1208-0323FBW	4/6/23	4/6/23	0	4/14/23	8	4/8/23	2	4/8/23	2
MW-39S-0323	3/30/23	3/30/23	0	4/6/23	7	4/19/23	20	4/19/23	20
MW-40S-0323	4/6/23	4/6/23	0	4/14/23	8	4/8/23	2	4/8/23	2
MW-39S-0323D	3/30/23	3/30/23	0	4/6/23	7	4/19/23	20	4/19/23	20
MW-45-0323	3/30/23	3/30/23	0	4/6/23	7	4/19/23	20	4/19/23	20

Key:

1. VTSR = Verified time of sample receipt; date shown is the VTSR at Alpha Analytical

Sample ID Sample Date Parameter ID	Unit	MW-1207-0323FBW 3/30/23	MW-1208-0323FBW 4/6/23
Conventionals			
Cyanide, Free	mg/L	0.002U	0.0014JB
Fluoride	mg/L	0.05U	0.05U
Sulfate	mg/L	1U	1U
PCBs			
Aroclor 1242	µg/L	0.065U	0.065U
Aroclor 1248	µg/L	0.065U	0.065U
Aroclor 1254	µg/L	0.065U	0.065U
Aroclor 1260	µg/L	0.065U	0.065U

Key:
U = Nondetect
JB = Estimated, Compound was detected in associated Field Blank

Sample ID Sample Location Sample Date Parameter ID	Unit	Original Sample MW-39S-0323 MW-39S 3/30/23	Duplicate Sample MW-1206-0323BD MW-39S 3/30/23	Relative Percent Difference[1,2] %
Conventionals				
Cyanide, Free	mg/L	0.0018J	0.00091J	---[3]
Fluoride	mg/L	1.81	1.8	0.6
Sulfate	mg/L	170	174	2.3
PCBs				
Aroclor 1242	µg/L	0.065U	0.065U	---
Aroclor 1248	µg/L	0.065U	0.065U	---
Aroclor 1254	µg/L	0.065U	0.065U	---
Aroclor 1260	µg/L	0.065U	0.065U	---

Notes:

1. Precision is evaluated by calculating the relative percent difference (RPD) using the following formula:

$$| 2 * (X1 - X2) / (X1 + X2) * 100 |$$

where X1 is the original sample value and X2 is the duplicate sample value.

2. --- = RPD not calculated for nondetect parameters.

3. When one or both results are less than five times the reporting limit, the absolute difference is used to determine qualification.

Key:

U = Nondetect

J = Estimated

Memorandum

To: *Robyn Gross*

From: *Paul Rodrigue*

Date: *December 2, 2023*

Subject: *Reynolds Metals Company, LLC – NYSDEC Site Code #645009*
Data Quality Assessment – June 2023

This memorandum presents the data quality assessment for the June 2023 quarterly sampling round for the Massena East Plant. Samples were collected on June 13, 2023, June 28, 2023, and August 23, 2023, and analyzed for polychlorinated biphenyls (PCBs), and conventional inorganics (free cyanide, weak acid dissociable (WAD) cyanide, total cyanide fluoride, and sulfate). The August sampling event was conducted to collect additional cyanide analyses at three monitoring locations (MW-12S, MW-13S, and MW-23-85S). Note that the sample names for samples collected in August were revised to reflect the month sampled in the data quality assessment memorandum and tables.

Laboratory quality control data associated with these samples were reviewed in accordance with the *Quality Assurance Project Plan* (QAPP) (CDM, March 2008) and United States Environmental Protection Agency (USEPA) Region II Contract Laboratory Program (CLP) data validation criteria as referenced in *Validating PCB Compounds PCBs by Gas Chromatography SW-846 Method 8082A* (SOP No. HW-45, Revision No. 1, October 2006) and in *Validation of Metals for the (CLP) Based on SOW ILMO5.3* (SOP No. HW-2. Revision No. 13, September 2006). All analyses were performed by Alpha Analytical in Westborough, Massachusetts except WAD cyanide, which was subcontracted by Alpha to ALS in Rochester, New York and free cyanide which was analyzed by Eurofins in Pittsburgh, Pennsylvania.

The intent of this review is to provide a general assessment of the overall quality of the data packages based on the review of the following information:

- Field and laboratory method blanks
- Surrogate spike recovery
- Field duplicate precision
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Laboratory control sample/laboratory control sample duplicates (LCS/LCSD)

- Sample holding time data
- Sample receipt conditions

All applicable data were evaluated and are summarized below. Field quality assurance sample results (field blanks and duplicate samples) were also evaluated. Analytical results, hold times and field quality assurance data are summarized in Tables 1 through 4.

PCB Analysis

One field blank sample was collected during each day of PCB sampling. Field blank MW-1203-0623FBW was collected on June 13, 2023, while field blank MW-1204-0623FBW was collected on June 28, 2023. PCB Aroclors were not detected in the field blank samples. In addition, the laboratory blank samples analyzed with the field samples were non-detect for Aroclors. No qualification is required.

PCB analysis surrogate spike recovery data were reviewed. Tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were the compounds used for the surrogate spike standards. The QAPP specifies that at least one surrogate is recovered within range (30 to 150 percent), with both surrogate recoveries greater than 10 percent. All samples except MW-37-0623 and MW-38-0623 had acceptable surrogate recoveries. For MW-37-0623 and MW-38-0623 DCB Column B recoveries were 28 percent and 29 percent, respectively. Since these recoveries are above 10 percent and TCX was recovered in-range, no qualification is required.

Field duplicate samples were collected at MW-14S (MW-1202-0623BD) and MW-18S (1201-0623BD). All Aroclors were non-detect in both the parent and duplicate samples. No qualification is required.

Samples MW-10S-0623 and MW-43-0623 were analyzed as a MS/MSD sample. The QAPP specifies that MS/MSD recoveries be within the range of 29 to 135 percent, with a relative percent difference (RPD) of less than 30 percent between the spiked pair. The MS and MSD samples were spiked with Aroclor1260. Recoveries and precision between the spiked pairs were acceptable. No qualification is required.

The QAPP specifies a recovery range of 50 to 150 percent for compounds in an LCS/LCSD. Recovery and precision for Aroclor 1260 was within the acceptable range in the four LCS/LCSD samples. No qualification is required.

USEPA Region II guidance specifies a holding time of up to 365 days beyond the verified time of sample receipt (VTSR) for sample extraction and 40 days from the time of sample extraction to analysis. In addition, the VTSR must be within 48 hours of sample collection. Table 2 presents a compilation of the relevant information regarding PCB analysis holding times. No qualification is required.

The condition of the samples upon receipt at the laboratory was reviewed. All samples were received at temperatures below 10°C. No qualification is required.

Based on the results of this assessment, the PCB results for the June 2023 quarterly sampling event can be used without qualification.

Conventional Analysis

One field blank sample was collected during each day of sampling. Field blanks MW-1203-0623FBW, MW-1204-0623FBW, and MW-1214-0623FBW were collected on June 13, 2023, June 28, 2023, and August 23, 2023, respectively. MW-1203-0623FBW and MW-1204-0623FBW were analyzed for conventional inorganics. MW-1214-0623FBW was only analyzed for free cyanide, WAD cyanide, and total cyanide. All results for MW-1203-0623FBW and MW-1204-6023FBW were non-detect. MW-1214-0623FBW was non-detect except for free cyanide which was detected at a concentration of 0.0013J mg/L, above the method detection limit (MDL), but below the reporting limit of 0.002 mg/L. No qualification is required since the detection is below the reporting limit. Additionally, all method blanks were non-detect for conventional parameters. No qualification is required.

Field duplicate samples were collected at MW-14S (MW-1202-0623BD), MW-18S (MW-1201-0623BD) and MW-12S (MW-1213-0823BD). The RPD quantified between the parent and duplicate sample collected at the monitoring wells were acceptable with two exceptions. Total cyanide was detected in the duplicate sample for MW-18S at less than five times the reporting limit. In such case, the absolute difference between the parent and duplicate sample is used to determine qualification. Since the absolute difference is greater than the reporting limit of 0.005 mg/L the total cyanide results for MW-18S-0623 is qualified as estimated ("J"). Additionally, total cyanide was detected in the parent and duplicate samples for MW-12S above the reporting limit. The RPD between this pair of samples was high at 122 percent. Consequently, the total cyanide results for MW-12S-0823 and MW-1213-0823BD are considered rejected ("R").

MS/MSD analysis was requested on MW-10S, MW-12S, MW-39S and MW-43. The laboratory also performed MS analyses for fluoride and sulfate on SLPWETE-0623, MW-16S-0623, and FDRAIN-0623. Additionally, the subcontracted laboratory performed MS/MSD analysis for WAD cyanide on sample MW-18S-0623. Eurofins performed additional MS/MSD analyses for free cyanide on samples SLPWETE-0623, PZ-45-0623 and MW-33S-0623. The QAPP specifies acceptable MS/MSD recovery limits as 75 to 125 percent for total and WAD cyanide and 80 to 120 percent for fluoride and sulfate. The QAPP does not specify MS/MSD recovery limits for free cyanide; therefore, the laboratory-specified recovery limits were used to determine the need for qualification.

All recoveries were acceptable with some exceptions. Sulfate was under-recovered in the MS and MSD in sample MW-10S-0623 and the MS recovery for fluoride was low in sample SLPWETE-0623. However, in both cases the native sample concentration was more than four times the spike amount. In such case, the out of-range recoveries are disregarded. WAD cyanide was under recovered in the MS and MSD for MW-12S-0823 at 54 percent and 55 percent. Since the sample concentration is less than four times the spike concentration and recoveries are between 30 percent and 74 percent, qualification was required. As such, the WAD cyanide results for MW-12S-0823 and MW-1213-0823BD are qualified as estimated non detect ("UJ"). The MS and MSD recoveries for WAD cyanide in sample MW-39S-023 were below QAPP limits, but within

laboratory limits; therefore, no further qualification was made. MS recoveries for free cyanide were outside of laboratory criteria for MW-33S-0623 (79 percent), PZ-45-0623 (77 percent), MW-12S-0823 (60 percent), and MW-43-0623 (78 percent). The laboratory case narrative for each of these analytical batches states that sample matrix interference was suspected in these cases since the LCS recoveries were acceptable. Consequently, qualification is limited to the spiked samples. The free cyanide results for samples MW-33S-0623, PZ-45-0623, MW-12S-0823, and MW-43-0623 are qualified as estimated nondetect ("UJ").

All LCS recoveries for conventional were acceptable. No qualification is required.

The QAPP specifies holding times for conventional inorganic parameters beyond the VTSR. The VTSR must be within 48 hours of sample collection. Table 2 presents a compilation of the relevant information regarding conventional parameter analysis holding times. All hold time requirements were met. No qualification is required.

Sample receipt conditions were reviewed. All samples were received within the QAPP-specified temperature limits. No qualification is required.

Conventional results for the June 2023 quarterly sampling round can be used as reported by the laboratory with the qualifications noted above.

Summary

Based on a review of the data, the following qualifications were made to the June 2023 quarterly sampling event:

- Due to an elevated RPD between the field duplicate pair, total cyanide result for MW-18S-0623 is qualified as estimated ("J")
- Due to an elevated RPD between the field duplicate pair, the total cyanide results for MW-12S-0823 and MW-1213-0823BD (MW-12S-0823D) are considered rejected ("R")
- Due to under recovery in the MS and MSD samples, the WAD cyanide results for MW-12S-0823 and MW-1213-0823BD (MW-12S-0823D) are qualified as estimated non detect ("UJ")
- Due to under recovery in the MS and MSD samples, the free cyanide results for samples MW-33S-0623, PZ-45-0623, MW-12S-0823, and MW-43-0623 are qualified as estimated nondetect ("UJ")

PR:tmp

Attachments

cc: Craig Peets, Alcoa
Jessica Roche, Alcoa
pw:\\1902\80599\02 Project Information\03 Data\40 Field Data\2021 Database\June2023\22062

Sample ID Sample Date Parameter ID	Unit	FDRAIN-0623 6/28/23	MW-03S-0623 6/28/23	MW-10S-0623 6/13/23	MW-11SR-0623 6/13/23	MW-12S-0623 6/13/23	MW-12S-0823 8/23/23	MW-12S-0823D 8/23/23	MW-13S-0623 6/13/23	MW-13S-0823 8/23/23
Field Parameters										
pH	SU	8.15	8.09	7.51	7.51	7.53	7.73	---	7.27	7.27
Temperature	deg C	12.9	14.5	12.7	12.4	11.6	16.8	---	10.1	15.5
Specific Conductance	mS/cm	0.862	0.89	0.674	1.279	2.764	2.936	---	4.511	4.97
Turbidity	NTU	1	517	19	49	20	18.4	---	3	18.8
Oxidation Reduction Potential	mVolt	253.4	119.3	206.8	163.9	164.3	221.6	---	204.4	230.2
Conventionals										
Total Cyanide	mg/L	---	0.008	---	---	0.039	0.033R	0.008R	---	---
Free Cyanide	mg/L	0.0014J	0.002U	0.002U	0.002U	---	0.002UJ	0.002U	---	0.002U
WAD Cyanide	mg/L	---	0.01U	---	---	0.01U	0.01UJ	0.01UJ	---	---
Fluoride	mg/L	19.5	5.94	0.124	0.301	8.86	---	---	2.84	---
Sulfate	mg/L	180	10.4	80.5	461	987	---	---	2910	---
PCBs										
Aroclor 1242	µg/L	---	0.065U	0.065U	0.065U	0.065U	---	---	0.065U	---
Aroclor 1248	µg/L	---	0.065U	0.065U	0.065U	0.065U	---	---	0.065U	---
Aroclor 1254	µg/L	---	0.065U	0.065U	0.065U	0.065U	---	---	0.065U	---
Aroclor 1260	µg/L	---	0.065U	0.065U	0.065U	0.065U	---	---	0.065U	---

Sample ID Sample Date Parameter ID	Unit	MW-14S-0623 6/13/23	MW-14S-0623D 6/13/23	MW-15S-87-0623 6/13/23	MW-16S-0623 6/28/23	MW-17S-0623 6/28/23	MW-18S-0623 6/28/23	MW-18S-0623D 6/28/23	MW-19S-0623 6/28/23
Field Parameters									
pH	SU	7.64	---	7.67	8.12	7.54	7.98	---	7.56
Temperature	deg C	11.2	---	12.3	12.3	11.4	12.5	---	11.9
Specific Conductance	mS/cm	1.071	---	0.598	0.88	0.87	1.206	---	0.743
Turbidity	NTU	23	---	398	17	28	4	---	3
Oxidation Reduction Potential	mVolt	195.6	---	152.3	128.5	168.6	108.4	---	120.4
Conventionals									
Total Cyanide	mg/L	---	---	---	---	---	0.01J	0.002J	---
Free Cyanide	mg/L	0.002U	0.002U	0.002U	0.002U	0.002U	0.002U	0.002U	0.002U
WAD Cyanide	mg/L	---	---	---	---	---	0.01U	0.01U	---
Fluoride	mg/L	0.366	0.375	3.96	7.88	1.1	25.7	24.5	3.13
Sulfate	mg/L	414	423	138	211	162	283	264	63.9
PCBs									
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1254	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1260	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U

Sample ID Sample Date Parameter ID	Unit	MW-20-85S-0623 6/13/23	MW-22-85S-0623 6/28/23	MW-23-85S-0623 6/13/23	MW-23-85S-0823 8/23/23	MW-26S-0623 6/13/23	MW-27S-0623 6/28/23	MW-28S-0623 6/28/23	MW-30S-0623 6/13/23	MW-31SR-0623 6/13/23
Field Parameters										
pH	SU	12.1	7.46	7.44	7.46	7.42	7.3	8.21	7.49	7.82
Temperature	deg C	11.4	12.5	11.1	13.3	11.7	12.6	12.6	11.2	10.8
Specific Conductance	mS/cm	1.778	1.436	0.996	0.99	0.738	6.78	0.84	0.773	0.659
Turbidity	NTU	3	26	201	1020	800	9	55	30	172
Oxidation Reduction Potential	mVolt	-27.7	197.3	180.6	224.6	76.3	147.3	80.3	169.3	165.9
Conventionals										
Total Cyanide	mg/L	--	--	--	--	--	--	--	--	--
Free Cyanide	mg/L	0.002U	0.002U		0.002U	0.002U	0.002U	0.0028	0.002U	0.002U
WAD Cyanide	mg/L	--	--	--	--	--	--	--	--	--
Fluoride	mg/L	0.128	0.238	0.313	--	5.25	2.32	11.9	5.28	0.893
Sulfate	mg/L	323	400	459	--	166	287	170	258	218
PCBs										
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	--	0.065U	---	---	0.065U	0.065U
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	--	0.065U	---	---	0.065U	0.065U
Aroclor 1254	µg/L	0.065U	0.065U	0.065U	--	0.065U	---	---	0.065U	0.065U
Aroclor 1260	µg/L	0.065U	0.065U	0.065U	--	0.065U	---	---	0.065U	0.065U

Sample ID Sample Date Parameter ID	Unit	MW-33S-0623 6/28/23	MW-34S-0623 6/28/23	MW-35SR-0623 6/28/23	MW-36-0623 6/28/23	MW-37-0623 6/28/23	MW-38-0623 6/28/23	MW-39S-0623 6/13/23	MW-40S-0623 6/13/23	MW-41-0623 6/28/23
Field Parameters										
pH	SU	7.64	7.85	7.28	8.6	8.37	8.26	7.23	7.25	7.71
Temperature	deg C	12.5	12.2	11.3	11.1	11.1	11.7	12	12.5	11.9
Specific Conductance	mS/cm	1.482	2.201	1.607	1.959	0.461	0.465	0.731	1.115	0.885
Turbidity	NTU	371	96	800	800	800	800	49	1	800
Oxidation Reduction Potential	mVolt	14.7	179	190.5	164.5	158.9	165.1	122.3	160.4	145.3
Conventionals										
Total Cyanide	mg/L	---	---	---	---	---	---	0.031	---	---
Free Cyanide	mg/L	0.002UJ	0.002U	0.002U	0.0022	0.002U	0.002U	0.002U	0.002U	0.002U
WAD Cyanide	mg/L	---	---	---	---	---	---	0.01U	---	---
Fluoride	mg/L	---	---	0.826	2.03	0.317	0.773	2.45	0.138	0.232
Sulfate	mg/L	---	---	766	346	296	183	137	56.7	284
PCBs										
Aroclor 1242	µg/L	---	---	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1248	µg/L	---	---	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1254	µg/L	---	---	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1260	µg/L	---	---	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U

Sample ID Sample Date Parameter ID	Unit	MW-42-0623 6/28/23	MW-43-0623 6/28/23	MW-44-0623 6/28/23	MW-45-0623 6/13/23	PZ-44-0623 6/28/23	PZ-45-0623 6/28/23	PZ-46-0623 6/28/23	SLPWETE-0623 6/13/23	SLPWETW-0623 6/13/23
Field Parameters										
pH	SU	8.08	7.19	7.19	7.06	7.23	7.2	7.34	8.39	7.26
Temperature	deg C	11.4	11.5	11.3	12.2	15.6	15.4	18.8	18.9	16.7
Specific Conductance	mS/cm	2.702	0.766	0.711	1.424	2.189	1.766	2.022	0.3231	0.176
Turbidity	NTU	239	297	5	11	800	289	800	1	8
Oxidation Reduction Potential	mVolt	174.3	164.8	161.4	141.2	-59.9	-84.6	10.5	109	28.8
Conventionals										
Total Cyanide	mg/L	---	---	---	---	---	---	---	---	---
Free Cyanide	mg/L	0.00085J	0.002UJ	0.002U	0.022	0.002U	0.002UJ	0.002U	0.002U	0.002U
WAD Cyanide	mg/L	---	---	---	---	---	---	---	---	---
Fluoride	mg/L	39.3	0.379	0.252	0.337	4.01	1.62	---	3.63	0.631
Sulfate	mg/L	1140	126	123	578	963	1060	---	7.39	0.726J
PCBs										
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	---	0.065U	0.065U
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	---	0.065U	0.065U
Aroclor 1254	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	---	0.065U	0.065U
Aroclor 1260	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	---	0.065U	0.065U

Key:
U = Nondetect
J = Estimated
--- = Not Analyzed
R = Rejected
UJ = Estimated nondetect

Sample ID	Sample Date	VTSR[1]	Days	Total Cyanide		Weak Acid Dissociable Cyanide		Free Cyanide	
				Target - 12 Days VTSR to Analysis	Days	Target - 12 Days VTSR to Analysis	Days	Target - 12 Days VTSR to Analysis	Days
FDRAIN-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-03S-0623	6/28/23	6/29/23	1	7/11/23	12	7/6/23	7	6/30/23	1
MW-10S-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
MW-11SR-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
MW-1203-0623FBW	6/13/23	6/14/23	1	6/26/23	12	6/21/23	7	6/16/23	2
MW-1204-0623FBW	6/28/23	6/29/23	1	7/11/23	12	7/6/23	7	6/30/23	1
MW-1214-0823FBW	8/23/23	8/24/23	1	8/31/23	7	8/30/23	6	8/29/23	5
MW-12S-0623	6/13/23	6/14/23	1	6/26/23	12	6/21/23	7	---	---
MW-12S-0823	8/23/23	8/24/23	1	8/31/23	7	8/30/23	6	8/29/23	5
MW-12S-0823D	8/23/23	8/24/23	1	8/31/23	7	8/30/23	6	8/29/23	5
MW-13S-0623	6/13/23	6/14/23	1	---	---	---	---	---	---
MW-13S-0823	8/23/23	8/24/23	1	---	---	---	---	8/29/23	5
MW-14S-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
MW-14S-0623D	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
MW-15S-87-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
MW-16S-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-17S-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-18S-0623	6/28/23	6/29/23	1	7/10/23	11	7/6/23	7	6/30/23	1
MW-18S-0623D	6/28/23	6/29/23	1	7/10/23	11	7/6/23	7	6/30/23	1
MW-19S-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-20-85S-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
MW-22-85S-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-23-85S-0623	6/13/23	6/14/23	1	---	---	---	---	---	---
MW-23-85S-0823	8/23/23	8/24/23	1	---	---	---	---	8/29/23	5
MW-26S-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-27S-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-28S-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-30S-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
MW-31SR-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
MW-33S-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-34S-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-35SR-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-36-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-37-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-38-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-39S-0623	6/13/23	6/14/23	1	6/26/23	12	6/21/23	7	6/16/23	2
MW-40S-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
MW-41-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-42-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-43-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-44-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
MW-45-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
PZ-44-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
PZ-45-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
PZ-46-0623	6/28/23	6/29/23	1	---	---	---	---	6/30/23	1
SLPWETE-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2
SLPWETW-0623	6/13/23	6/14/23	1	---	---	---	---	6/16/23	2

Table 2
East Plant
Summary of Sample Hold Times

Sample ID	Sample Date	VTSR[1]	Days	Fluoride		Sulfate		PCBs			
				Target - 26 Days VTSR to Analysis	Days	Target - 26 Days VTSR to Analysis	Days	Target - 365 Days from VTSR to Extraction	Days	Target - 40 Days from Extraction to Analysis	Days
FDRAIN-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	---	---	---	---
MW-03S-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-10S-0623	6/13/23	6/14/23	1	6/23/23	9	6/23/23	9	7/9/23	25	7/11/23	2
MW-11SR-0623	6/13/23	6/14/23	1	6/24/23	10	6/23/23	9	7/9/23	25	7/11/23	2
MW-1203-0623FBW	6/13/23	6/14/23	1	6/23/23	9	6/23/23	9	7/9/23	25	7/11/23	2
MW-1204-0623 FBW	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-1214-0823FBW	8/23/23	8/24/23	1	---	---	---	---	---	---	---	---
MW-12S-0623	6/13/23	6/14/23	1	6/24/23	10	6/24/23	10	7/9/23	25	7/11/23	2
MW-12S-0823	8/23/23	8/24/23	1	---	---	---	---	---	---	---	---
MW-12S-0823D	8/23/23	8/24/23	1	---	---	---	---	---	---	---	---
MW-13S-0623	6/13/23	6/14/23	1	6/23/23	9	6/23/23	9	7/9/23	25	7/11/23	2
MW-13S-0823	8/23/23	8/24/23	1	---	---	---	---	---	---	---	---
MW-14S-0623	6/13/23	6/14/23	1	6/24/23	10	6/23/23	9	7/9/23	25	7/11/23	2
MW-14S-0623D	6/13/23	6/14/23	1	6/24/23	10	6/23/23	9	7/9/23	25	7/11/23	2
MW-15S-87-0623	6/13/23	6/14/23	1	6/23/23	9	6/23/23	9	7/9/23	25	7/11/23	2
MW-16S-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-17S-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-18S-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-18S-0623D	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-19S-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-20-85S-0623	6/13/23	6/14/23	1	6/24/23	10	6/23/23	9	7/9/23	25	7/11/23	2
MW-22-85S-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-23-85S-0623	6/13/23	6/14/23	1	6/24/23	10	6/23/23	9	7/9/23	25	7/11/23	2
MW-23-85S-0823	8/23/23	8/24/23	1	---	---	---	---	---	---	---	---
MW-26S-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-27S-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-28S-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-30S-0623	6/13/23	6/14/23	1	6/23/23	9	6/23/23	9	7/9/23	25	7/11/23	2
MW-31SR-0623	6/13/23	6/14/23	1	6/24/23	10	6/23/23	9	7/9/23	25	7/11/23	2
MW-33S-0623	6/28/23	6/29/23	1	---	---	---	---	---	---	---	---
MW-34S-0623	6/28/23	6/29/23	1	---	---	---	---	---	---	---	---
MW-35SR-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-36-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-37-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-38-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-39S-0623	6/13/23	6/14/23	1	6/28/23	14	6/28/23	14	7/10/23	26	7/11/23	1
MW-40S-0623	6/13/23	6/14/23	1	6/23/23	9	6/23/23	9	7/9/23	25	7/11/23	2
MW-41-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-42-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-43-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-44-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
MW-45-0623	6/13/23	6/14/23	1	6/23/23	9	6/23/23	9	7/9/23	25	7/11/23	2
PZ-44-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
PZ-45-0623	6/28/23	6/29/23	1	7/12/23	13	7/12/23	13	7/10/23	11	7/11/23	1
PZ-46-0623	6/28/23	6/29/23	1	---	---	---	---	---	---	---	---
SLPWETE-0623	6/13/23	6/14/23	1	6/23/23	9	6/23/23	9	7/9/23	25	7/11/23	2
SLPWETW-0623	6/13/23	6/14/23	1	6/23/23	9	6/23/23	9	7/9/23	25	7/11/23	2

Key:

1. VTSR = Verified time of sample receipt

Note:

--- = Not sampled

Sample ID Sample Date Parameter ID	Unit	MW-1203-0623FBW 6/13/23	MW-1204-0623FBW 6/28/23	MW-1214-0623FBW 8/23/23
Conventionals				
Total Cyanide	mg/L	0.005U	0.005U	0.005U
Free Cyanide	mg/L	0.002U	0.002U	0.0013J
WAD Cyanide	mg/L	0.01U	0.01U	0.01U
Fluoride	mg/L	0.05U	0.05U	---
Sulfate	mg/L	1U	1U	---
PCBs				
Aroclor 1242	µg/L	0.065U	0.065U	---
Aroclor 1248	µg/L	0.065U	0.065U	---
Aroclor 1254	µg/L	0.065U	0.065U	---
Aroclor 1260	µg/L	0.065U	0.065U	---

Key:
U = Nondetect
J = Estimated
--- = Not Analyzed

Table 3
East Plant
Summary of Field Blanks

Sample ID		Original Sample	Duplicate Sample		Original Sample	Duplicate Sample		Original Sample	Duplicate Sample	Relative
Sample Location		MW-14S-0623	MW-1202-0623BD	Relative	MW-18S-0623	MW-1201-0623BD		MW-12S-0823	MW-1213-0823BD	Percent
Sample Date		MW-14S	MW-14S	Percent	MW-18S	MW-18S	Relative Percent	MW-12S	MW-12S	Difference[1,2]
Parameter ID	Unit	6/13/23	6/13/23	Difference[1,2] %	6/28/23	6/28/23	Difference[1,2] %	8/23/23	8/23/23	%
Conventionals										
Total Cyanide	mg/L	---	---	---	0.01J	0.002J	---[3]	0.033R	0.008R	122.0
Free Cyanide	mg/L	0.002U	0.002U	---	0.002U	0.002U	---	0.002UJ	0.002U	---
WAD Cyanide	mg/L	---	---	---	0.01U	0.01U	---	0.01UJ	0.01UJ	---
Fluoride	mg/L	0.366	0.375	2.4	25.7	24.5	4.8	---	---	---
Sulfate	mg/L	414	423	2.2	283	264	6.9	---	---	---
PCBs										
Aroclor 1242	µg/L	0.065U	0.065U	---	0.065U	0.065U	---	---	---	---
Aroclor 1248	µg/L	0.065U	0.065U	---	0.065U	0.065U	---	---	---	---
Aroclor 1254	µg/L	0.065U	0.065U	---	0.065U	0.065U	---	---	---	---
Aroclor 1260	µg/L	0.065U	0.065U	---	0.065U	0.065U	---	---	---	---

Notes:

1. Precision is evaluated by calculating the relative percent difference (RPD) using the following formula:

| 2 * (X1 - X2) / (X1 + X2) * 100 |

where X1 is the original sample value and X2 is the duplicate sample value.

2. --- = RPD not calculated for nondetected parameters.

3. When one or both results are less than five times the CRQL, the absolute difference is used to determine qualification.

Key:
U = Nondetect
J = Estimated
--- = Not Analyzed
R = Rejected
UJ = Estimated Nondetect

Table 4
East Plant
Summary of Field Duplicate Samples

Memorandum

To: *Robyn Gross*

From: *Paul Rodrigue*

Date: *February 5, 2024*

Subject: *Reynolds Metals Company, LLC – NYSDEC Site Code #645009*
Data Quality Assessment – September 2023

This memorandum presents the data quality assessment for the September 2023 quarterly sampling round for the Massena East Plant. Samples were collected on September 20, 2023, and analyzed for polychlorinated biphenyls (PCBs), and conventional inorganics (free cyanide, fluoride, and sulfate).

Laboratory quality control data associated with these samples were reviewed in accordance with the *Quality Assurance Project Plan* (QAPP) (CDM, March 2008) and United States Environmental Protection Agency (USEPA) Region II Contract Laboratory Program (CLP) data validation criteria as referenced in *Validating PCB Compounds PCBs by Gas Chromatography SW-846 Method 8082A* (SOP No. HW-45, Revision No. 1, October 2006) and in *Validation of Metals for the (CLP) Based on SOW ILMO5.3* (SOP No. HW-2. Revision No. 13, September 2006). All analyses were performed by Alpha Analytical in Westborough, Massachusetts except free cyanide which was analyzed by Eurofins in Pittsburgh, Pennsylvania.

The intent of this review is to provide a general assessment of the overall quality of the data packages based on the review of the following information:

- Field and laboratory method blanks
- Surrogate spike recovery
- Field duplicate precision
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Laboratory control sample/laboratory control sample duplicates (LCS/LCSD)
- Sample holding time data
- Sample receipt conditions

All applicable data were evaluated and are summarized below. Field quality assurance sample results (field blanks and duplicate samples) were also evaluated. Analytical results, hold times and field quality assurance data are summarized in Tables 1 through 4.

PCB Analysis

One field blank sample was collected during each day of sampling. Field blank MW-1207-0923FBW was collected on September 20, 2023. PCB Aroclors were not detected in the field blank samples. In addition, the laboratory blank samples analyzed with the field samples were non-detect for Aroclors. No qualification is required.

PCB analysis surrogate spike recovery data were reviewed. Tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were the compounds used for the surrogate spike standards. The QAPP specifies that at least one surrogate is recovered within range (30 to 150 percent), with both surrogate recoveries greater than 10 percent. All samples except SLPWETW-0923 had surrogate recoveries were within the acceptable range. For sample SLPWETW-0923 both DCB and TCX recoveries for Column A and Column B were below 30 percent. Since these recoveries were below laboratory acceptance criteria sample SLPWETW-0923 was reanalyzed by the laboratory. The reanalysis resulted in both DCB and TCX recoveries for Column A and Column B below 30 percent. Since these recoveries were all above 10 percent and no detections were present all PCB results for sample SLPWETW-0923 were qualified as estimated non detect (UJ) and revised to 0.0065UJ µg/L. The Aroclor results obtained from the initial analysis will be considered reportable for upload into the database. A field duplicate sample was collected at MW-45 (MW-1206-0923BD). All Aroclors were non-detect in both the parent and duplicate sample. No qualification is required.

Sample MW-10S-0923 was analyzed as a MS/MSD sample. The QAPP specifies that MS/MSD recoveries be within the range of 29 to 135 percent, with a relative percent difference (RPD) of less than 30 percent between the spiked pair. The MS and MSD sample was spiked with Aroclor 1260. Recoveries and precision between the spiked pair were acceptable. No qualification is required.

The QAPP specifies a recovery range of 50 to 150 percent for compounds in a LCS/LCSD. Recovery and precision for Aroclor 1260 was within the acceptable range in the two LCS/LCSD samples; no qualification is required.

USEPA Region II guidance specifies a holding time of up to 365 days beyond the verified time of sample receipt (VTSR) for sample extraction and 40 days from the time of sample extraction to analysis. In addition, the VTSR must be within 48 hours of sample collection. Table 2 presents a compilation of the relevant information regarding PCB analysis holding times. No qualification is required.

The condition of the samples upon receipt at the laboratory was reviewed. All samples were received at temperatures below 10°C. No qualification is required.

Based on the results of this assessment, the PCB results for the September2023 quarterly sampling event can be used with the qualifications noted above.

Conventional Analysis

Samples were analyzed for free cyanide, fluoride, and sulfate.

One field blank sample was collected during each day of sampling. Field blank MW-1207-0923FBW was collected on September 20, 2023. This blank was analyzed for conventional inorganics. MW-1207-0923FBW was non-detect except for free cyanide which was detected at a concentration of 0.0011J mg/L, above the method detection limit (MDL), but below the reporting limit of 0.002 mg/L. Since the detection in MW-1207-0923FBW was below the reporting limit and no detections were present in the associated method blank no qualification is required.

A field duplicate sample was collected at MW-45 (MW-1206-0923BD). The RPD quantified between the parent and duplicate sample collected at the monitoring well was acceptable for all conventional parameters; no qualification is required.

MS/MSD analysis was requested on MW-10S-0923. The QAPP specifies acceptable MS/MSD recovery limits as 80 to 120 percent for fluoride and sulfate. The QAPP does not specify MS/MSD recovery limits for free cyanide; therefore, the laboratory-specified recovery limits were used to determine the need for qualification. All recoveries for fluoride and sulfate were acceptable. MS and MSD recoveries were outside the laboratory limits of 82 to 130 percent for free cyanide for MW-10S-0923. Since the native sample concentrations were less than four times the spike amount and the recoveries were between 30 percent and 74 percent, free cyanide results for MW-45-0923, MW-1206-0923BD, SLPWETE-0923 and SLPWETW-0923 were qualified as estimated (J). No additional qualification was required for samples MW-10S-0923, MW-39S-0923 and MW-40S-0923 as the results for free cyanide for these samples were already qualified as estimated due to these detections being below the report limit.

All LCS recoveries for conventional were acceptable. No qualification is required.

The QAPP specifies holding times for conventional inorganic parameters beyond the VTSR. The VTSR must be within 48 hours of sample collection. Table 2 presents a compilation of the relevant information regarding conventional parameter analysis holding times. All hold time requirements were met. No qualification is required.

Sample receipt conditions were reviewed. All samples were received within the QAPP-specified temperature limits. No qualification is required.

Conventional results for the September 2023 quarterly sampling round can be used as reported by the laboratory with the qualifications noted above.

Summary

Based on a review of the data, the following qualifications were made to the September 2023 quarterly sampling event:

- Due to poor surrogate recovery Aroclor 1242, 1248, 1254 and 1260 results for SLPWETW-0923 were revised to 0.065UJ µg/L

- Due to MS/MSD recoveries, the free cyanide results for MW-45-0923, MW-1206-0923BD, SLPWETE-0923 and SLPWETW-0923 were qualified as estimated (J)

PR:tmp

Attachments

cc: Craig Peets, Alcoa
Jessica Roche, Alcoa
pw:\\1902\80599\02 Project Information\03 Data\40 Field Data\2023 Database\Reynolds 2023\24013

Sample ID Sample Date Parameter ID	Unit	MW-10S-0923 9/20/23	MW-39S-0923 9/20/23	MW-40S-0923 9/20/23	MW-45-0923 9/20/23	MW-45-0923D 9/20/23	SLPWETE-0923 9/20/23	SLPWETW-0923 9/20/23
Field Parameters								
pH	SU	7.42	7.08	7.33	7.21	---	8.61	6.84
Temperature	deg C	13.8	11.9	16.6	13.7	---	19	16.1
Specific Conductance	mS/cm	0.676	0.964	1.183	1.564	---	0.513	0.1795
Turbidity	NTU	2.11	17	3.97	2.03	---	7.5	129
Redox Potential	mVolt	210.1	91.4	180.2	143.8	---	163.3	0.3
Conventionals								
Cyanide, Free	mg/L	0.0011J	0.0017J	0.0013J	0.0082J	0.0092J	0.0023J	0.0025J
Fluoride	mg/L	0.138	1.65	0.219	0.437	0.419	4.08	1.11
Sulfate	mg/L	111	285	54.8	558	563	2.31	4.76
PCBs								
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065UJ
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065UJ
Aroclor 1254	µg/L	0.041	0.065U	0.065U	0.065U	0.065U	0.065U	0.065UJ
Aroclor 1260	µg/L	0.036	0.065U	0.065U	0.065U	0.065U	0.065U	0.065UJ

Key:
U = Nondetect
J = Estimated
UJ - Estimated Nondetect
--- = Not Analyzed

Table 1
East Plant
Summary of Analytical Results

Sample ID	Sample Date	VTSR[1]	Days	Cyanide, Free		Fluoride		Sulfate		PCBs			
				Target - 12 Days VTSR to Analysis	Days	Target - 26 Days VTSR to Analysis	Days	Target - 26 Days VTSR to Analysis	Days	Target - 365 Days from VTSR to Extraction	Days	Target - 40 Days from Extraction to Analysis	Days
MW-10S-0923	9/20/23	9/21/23	1	9/23/23	2	10/3/23	12	10/3/23	12	10/28/23	37	11/2/23	5
MW-1207-0923FBW	9/20/23	9/21/23	1	9/23/23	2	10/3/23	12	10/3/23	12	10/31/23	40	11/1/23	1
MW-39S-0923	9/20/23	9/21/23	1	9/23/23	2	10/3/23	12	10/3/23	12	10/28/23	37	11/2/23	5
MW-40S-0923	9/20/23	9/21/23	1	9/23/23	2	10/3/23	12	10/3/23	12	10/31/23	40	11/1/23	1
MW-45-0923	9/20/23	9/21/23	1	9/23/23	2	10/3/23	12	10/3/23	12	10/28/23	37	11/2/23	5
MW-45-0923D	9/20/23	9/21/23	1	9/23/23	2	10/3/23	12	10/3/23	12	10/28/23	37	11/2/23	5
SLPWETE-0923	9/20/23	9/21/23	1	9/23/23	2	10/3/23	12	10/3/23	12	11/4/23	44	11/6/23	2
SLPWETW-0923	9/20/23	9/21/23	1	9/23/23	2	10/3/23	12	10/3/23	12	10/28/23	37	11/2/23	5

Key:

1. VTSR = Verified time of sample receipt; date shown is the VTSR at Alpha Analytical and Eurofins

Table 2
East Plant
Summary of Sample Hold Times

Sample ID Sample Date Parameter ID	Unit	MW-1207-0923FBW 9/20/23
Conventionals		
Cyanide, Free	mg/L	0.0011J
Fluoride	mg/L	0.05U
Sulfate	mg/L	1U
PCBs		
Aroclor 1242	µg/L	0.065U
Aroclor 1248	µg/L	0.065U
Aroclor 1254	µg/L	0.065U
Aroclor 1260	µg/L	0.065U

Key:
U = Nondetect
J = Estimated

Sample ID Sample Location Sample Date Parameter ID	Unit	Original Sample MW-45-0923 MW-45 9/20/23	Duplicate Sample MW-1206-0923BD MW-45 9/20/23	Relative Percent Difference[1,2] %
Conventionals				
Cyanide, Free	mg/L	0.0082J	0.0092J	11.5
Fluoride	mg/L	0.437	0.419	4.2
Sulfate	mg/L	558	563	0.9
PCBs				
Aroclor 1242	µg/L	0.065U	0.065U	---
Aroclor 1248	µg/L	0.065U	0.065U	---
Aroclor 1254	µg/L	0.065U	0.065U	---
Aroclor 1260	µg/L	0.065U	0.065U	---

Notes:

1. Precision is evaluated by calculating the relative percent difference (RPD) using the following formula:

$$| 2 * (X1 - X2) / (X1 + X2) * 100 |$$

where X1 is the original sample value and X2 is the duplicate sample value.

2. --- = RPD not calculated for nondetect parameters.

Key:

U = Nondetect

J = Estimated

Memorandum

To: *Jason Mibroda*

From: *Paul Rodrigue*

Date: *March 13, 2024*

Subject: *Reynolds Metals Company, LLC – NYSDEC Site Code #645009*
Data Quality Assessment – December 2023

This memorandum presents the data quality assessment for the December 2023 quarterly sampling round and February 2024 resampling round for the Massena East Plant. Samples were collected between December 12, 2023, to December 28, 2023, and on February 9, 2024, and analyzed for polychlorinated biphenyls (PCBs), and conventional inorganics (free cyanide, weak acid dissociable (WAD) cyanide, total cyanide fluoride, and sulfate). MW-12S was required to be re-sampled in February 2024 because the WAD cyanide hold time had been exceeded for the previously collected sample because of a laboratory error.

Laboratory quality control data associated with these samples were reviewed in accordance with the *Quality Assurance Project Plan* (QAPP) (CDM Smith 2008) and United States Environmental Protection Agency (USEPA) Region II Contract Laboratory Program (CLP) data validation criteria as referenced in *Validating PCB Compounds PCBs by Gas Chromatography SW-846 Method 8082A* (SOP No. HW-45, Revision No. 1, October 2006) and in *Validation of Metals for the (CLP) Based on SOW ILMO5.3* (SOP No. HW-2. Revision No. 13, September 2006). All analyses were performed by Alpha Analytical in Westborough, Massachusetts except WAD cyanide, which was subcontracted by Alpha to ALS in Rochester, New York and free cyanide which was analyzed by Eurofins in Pittsburgh, Pennsylvania.

The intent of this review is to provide a general assessment of the overall quality of the data packages based on the review of the following information:

- Field and laboratory method blanks
- Surrogate spike recovery
- Field duplicate precision
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Laboratory control sample/laboratory control sample duplicates (LCS/LCSD)

- Sample holding time data
- Sample receipt conditions

All applicable data were evaluated and are summarized below. Field quality assurance sample results (field blanks and duplicate samples) were also evaluated. Analytical results, hold times and field quality assurance data are summarized in Tables 1 through 4.

PCB Analysis

One field blank sample was collected during each day of PCB sampling. A total of 12 field blanks were collected during the December 2023 sampling event as detailed in Table 3. PCB Aroclors were not detected in the field blank samples. In addition, the laboratory blank samples analyzed with the field samples were non-detect for Aroclors. No qualification is required.

PCB analysis surrogate spike recovery data were reviewed. Tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were the compounds used for the surrogate spike standards. The QAPP specifies that at least one surrogate is recovered within range (30 to 150 percent), with both surrogate recoveries greater than 10 percent. All samples except MW-14S-1223 had acceptable surrogate recoveries. For MW-14S-1223 DCB Column B recovery was 28 percent. Since this recovery is above 10 percent and TCX was recovered in-range, no qualification is required.

Field duplicate samples were collected at MW-12S (MW-1209-1223BD), MW-39 (MW-1210-1223BD) and MW-31SR (MW-1211-1223BD). All Aroclors were non-detect in both the parent and duplicate samples. No qualification is required.

Samples MW-10S-1223, MW-12S-1223 and MW-36-1223 were analyzed as a MS/MSD sample. The QAPP specifies that MS/MSD recoveries be within the range of 29 to 135 percent, with a relative percent difference (RPD) of less than 30 percent between the spiked pair. The MS and MSD samples were spiked with Aroclor 1260. Recoveries and precision between the spiked pairs were acceptable. No qualification is required.

The QAPP specifies a recovery range of 50 to 150 percent for compounds in an LCS/LCSD. Recovery and precision for Aroclor 1260 was within the acceptable range in the seven LCS/LCSD samples. No qualification is required.

USEPA Region II guidance specifies a holding time of up to 365 days beyond the verified time of sample receipt (VTSR) for sample extraction and 40 days from the time of sample extraction to analysis. In addition, the VTSR must be within 48 hours of sample collection. Table 2 presents a compilation of the relevant information regarding PCB analysis holding times. No qualification is required.

The condition of the samples upon receipt at the laboratory was reviewed. All samples were received at temperatures below 10°C. No qualification is required.

Based on the results of this assessment, the PCB results for the December 2023 quarterly and February 2024 sampling events can be used without qualification.

Conventional Analysis

One field blank sample was collected during each day of sampling. A total of 13 field blanks were collected during the December 2023 and February 2024 sampling events as detailed in Table 3. All field blanks except MW-2024-FBW were analyzed for free cyanide, fluoride, and sulfate. Additionally, MW-1214-1223 was analyzed for total cyanide, and MW-2024-FBW (associated with the February re-sample) was analyzed for total, free, and WAD cyanide. All samples except for MW-1213-1223FBW, MW-1224-1223FBW and MW-2024-FBW were non-detect. MW-1213-1223FBW and MW-1224-1223FBW were non-detect except for free cyanide which was detected at concentrations of 0.034 mg/L and 0.027 mg/L, respectively, above the reporting limit of 0.006 mg/L. MW-2024-FBW was non-detect except for free cyanide which was detected at a concentration of 0.00099J mg/L, above the method detection limit (MDL), but below the reporting limit of 0.002 mg/L.

All method blanks were non-detect except one detection for total cyanide above the MDL and below the reporting limit. No additional qualification is required.

In accordance with USEPA Region II guidance, when a field blank detection is above the reporting limit, any associated field results above the reporting limit and less than the field blank value should be considered rejected. Additionally, any results between the field blank value and 10 times the field blank value are qualified as estimated. Due to the detections of free cyanide above the reporting limit in MW-1213-1223FBW and MW-1224-1223FBW, qualification is required for the free cyanide sample results of MW-16S-1223, MW-20-85S-1223, MW-48-1223, MW-49-1223, MW-51-1223 and MW-52-1223. For MW-16S-1223 the detection of 0.022 mg/L is considered rejected ("R") since it was above the report limit and less than the detection of 0.034 mg/L in the associated field blank MW-1213-1223FBW. Since the detections of free cyanide for MW-20-85S-1223, MW-48-1223, MW-49-1223, MW-51-1223, and MW-52-1223 are above the detection of 0.027 mg/L in MW-1224-1223FBW and below 10 times the detection in the MW-1224-1223FBW, these results are qualified as estimated ("J"). No qualification is required for free cyanide sample results associated with MW-2024-FBW since this detection of free cyanide was below the reporting limit and no detections were present in the associated method blank.

Field duplicate samples were collected at MW-12S (MW-1209-1223BD and MW-2024-BD), MW-39 (MW-1210-1223BD) and MW-31SR (MW-1211-1223BD). The RPD quantified between the parent and duplicate sample collected at the monitoring wells were acceptable with three exceptions. Total cyanide was detected in both the parent and duplicate samples for MW-12S in December 2023 and February 2024 above reporting limit. The RPD between these two sample pairs was 40 percent which is above the specified limit of 30 precent. Since the RPD was between 20 percent and 100 percent the total cyanide results for these sample pairs are qualified as estimated. Thus, the total cyanide results for MW-12S-1223, MW-12S-1223BD, MW-12S-0224 and MW-12S-0224BD are revised to 0.014J mg/L, 0.021J mg/L, 0.01J mg/L and 0.015J mg/L, respectively. Additionally, free cyanide was detected below the reporting limit at 0.001J mg/L in MW-12S-0224 while not being detected in duplicate sample MW-12S-0224BD. Since this

detection was less than 5 times the reporting limit and the absolute difference between the parent and duplicate sample of 0.001 mg/L is below the reporting limit of 0.002 mg/L no qualification is required.

MS/MSD analysis was requested on MW-10S, MW-12S, and MW-36 for fluoride and sulfate. The laboratory also performed MS analyses for fluoride and sulfate on MW-13S-1223, MW-15S-87-1223, MW-40S-1223, and MW-42-1223. Additionally, MS/MSD analysis was requested on MW-12S for free, total, and WAD cyanide. The laboratory also performed additional MS/MSD analysis on MW-2024-FBW for total cyanide. MS/MSD analysis was requested on MW-10S and MW-12S for free cyanide. The subcontracted laboratory also performed additional MS/MSD analysis on MW-28S-1223, MW-36-1223, MW-42-1223, MW-52-1223, MW-35SR-1223, PZ-44-1223, FDRAIN-1223 and MW-1209-1223BD (MW-12S-1223BD). The QAPP specifies acceptable MS/MSD recovery limits as 75 to 125 percent for total and WAD cyanide and 80 to 120 percent for fluoride and sulfate. The QAPP does not specify MS/MSD recovery limits for free cyanide; therefore, the laboratory-specified recovery limits were used to determine the need for qualification.

All recoveries were acceptable with some exceptions. Sulfate was under-recovered in the MS and MSD in sample MW-12S-1223 and MS in sample MW-13S-1223. However, in both cases the native sample concentration was more than four times the spike amount. In such case, the out of-range recoveries are disregarded. WAD cyanide was under recovered in the MS and MSD for MW-12S-1223 at 53percent and 48 percent. Since the sample concentration is less than four times the spike concentration and recoveries are between 30 percent and 74 percent, qualification was required. As such, the WAD cyanide results for MW-12S-0224 and MW-2024-BD are qualified as estimated non-detect ("UJ"). MS recoveries for free cyanide were outside of laboratory criteria for MW-42-1223 (77 percent), and PZ-44-1223 (0 percent). No mention of sample matrix interference was present in the laboratory case narratives for each of these analytical batches. However, CDM Smith obtained a written email from the laboratory stating that for sample PZ-44-1223 the laboratory suspected matrix interference. Additionally, the LCS recoveries were acceptable for the batch associated with PZ-44-1223, therefore any qualification would apply to only the spiked sample. Consequently, the free cyanide results for samples for MW-42-1223, MW-37-1223, MW-38-1223, MW-41-1223, MW-55-1223, and PZ-44-1223 are qualified as estimated non-detect ("UJ").

All LCS recoveries for conventional were acceptable. No qualification is required.

The QAPP specifies holding times for conventional inorganic parameters beyond the VTSR. The VTSR must be within 48 hours of sample collection. Table 2 presents a compilation of the relevant information regarding conventional parameter analysis holding times. All hold time requirements were met. No qualification is required.

Sample receipt conditions were reviewed. All samples were received within the QAPP-specified temperature limits. No qualification is required.

Conventional results for the December 2023 quarterly and February 2024 sampling events can be used as reported by the laboratory with the qualifications noted above.

Summary

Based on a review of the data, the following qualifications were made to the December 2023quarterly and February 2024 sampling events:

- Due to an elevated RPD between the field duplicate pair MW-12S-1223 and MW-12S-1223D, total cyanide results for MW-12S-1223 and MW-12S-1223BD are qualified as estimated ("J")

- Due to an elevated RPD between the field duplicate pair MW-12S-0224 and MW-12S-0224D, total cyanide results for MW-12S-0224 and MW-12S-0224BD are qualified as estimated ("J")

- Due to an MS recovery between 30% and 74% the WAD cyanide results for MW-12S-0224 and MW-12S-0224BD are qualified as estimated non-detect ("UJ")

- Due to the detection of free cyanide above the reporting limit in field blank MW-1213-1223FBW the free cyanide result for MW-16S-1223 is rejected ("R")

- Due to the detection of free cyanide above the reporting limit in field blank MW-1224-1223FBW, the free cyanide results for MW-20-85S-1223, MW-48-1223, MW-49-1223, MW-51-1223, and MW-52-1223 are qualified as estimated ("J")

- Due to poor MS recoveries free cyanide, results for samples MW-37-1223, MW-38-1223, MW-41-1223, MW-42-1223, MW-55-1223 and PZ-44-1223 are qualified as estimated non-detect ("UJ")

MH:tmp

Attachments

cc: Craig Peets, Alcoa
Jessica Roche, Alcoa
pw:\\1902\80599\02 Project Information\03 Data\40 Field Data\2023Database\Dec2023\24015

Sample ID Sample Date Parameter ID	Unit	FDRAIN-1223 12/14/23	MW-03S-1223 12/20/23	MW-10S-1223 12/12/23	MW-11SR-1223 12/14/23	MW-12S-1223 12/15/23	MW-12S-1223D 12/15/23	MW-12S-0224 2/9/24	MW-12S-0224D 2/9/24	MW-13S-1223 12/18/23
Field Parameters										
pH	SU	8.3	7.65	7.54	7.36	7.46	---	7.46	---	7.21
Temperature	deg C	8.8	9.3	7	7.8	9.1	---	9.1	---	8.3
Specific Conductance	mS/cm	0.707	0.567	0.355	1.064	3.02	---	3.02	---	1.712
Turbidity	NTU	2.5	14.7	1.34	3.61	7.41	---	7.41	---	0.96
Oxidation Reduction Potential	mVolt	282.2	159.3	130.1	153.7	148.4	---	148.4	---	304.4
Conventionals										
Total Cyanide	mg/L	---	---	---	---	0.014J	0.021J	0.01J	0.015J	---
Free Cyanide	mg/L	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0010J	0.0020U	0.0060U
WAD Cyanide	mg/L	---	---	---	---	---	---	0.01UJ	0.01UJ	---
Fluoride	mg/L	21.2	8.77	0.115	0.29	9.54	10.2	---	---	---
Sulfate	mg/L	165	59.8	106	258	724	744	---	---	---
PCBs										
Aroclor 1242	µg/L	---	0.065U	0.065U	0.065U	0.065U	0.065U	---	---	---
Aroclor 1248	µg/L	---	0.065U	0.065U	0.065U	0.065U	0.065U	---	---	---
Aroclor 1254	µg/L	---	0.065U	0.065U	0.065U	0.065U	0.065U	---	---	---
Aroclor 1260	µg/L	---	0.065U	0.065U	0.065U	0.065U	0.065U	---	---	---

Sample ID Sample Date Parameter ID	Unit	MW-14S-1223 12/18/23	MW-15S-87-1223 12/20/23	MW-16S-1223 12/14/23	MW-17S-1223 12/19/23	MW-18S-1223 12/13/23	MW-19S-1223 12/20/23	MW-20-85S-1223 12/28/23	MW-22-85S-1223 12/22/23
Field Parameters									
pH	SU	7.71	7.49	7.74	7.18	7.59	7.47	12.37	7.37
Temperature	deg C	9.6	7	10.8	5	9.7	8.7	7	3.8
Specific Conductance	mS/cm	1.068	0.759	0.783	0.908	0.762	0.916	1.948	1.723
Turbidity	NTU	6.48	3.58	2.5	2	0.02	1.95	21.3	17.1
Oxidation Reduction Potential	mVolt	182	98.8	189.3	142.9	232.1	130.7	-14.6	196.7
Conventionals									
Total Cyanide	mg/L	---	---	---	---	---	---	---	---
Free Cyanide	mg/L	0.0060U	0.0060U	0.022R	0.0060U	0.0060U	0.0060U	0.027J	0.0060U
WAD Cyanide	mg/L	---	---	---	---	---	---	---	---
Fluoride	mg/L	0.48	4.8	8.47	2.77	15.4	3.29	0.157	0.225
Sulfate	mg/L	417	77.1	233	72	240	98.4	271	412
PCBs									
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1254	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1260	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U

Sample ID Sample Date Parameter ID	Unit	MW-23-85S-1223 12/22/23	MW-26S-1223 12/14/23	MW-27S-1223 12/20/23	MW-28S-1223 12/13/23	MW-30S-1223 12/13/23	MW-31SR-1223 12/21/23	MW-31SR-1223D 12/21/23	MW-33S-1223 12/15/23	MW-34S-1223 12/20/23
Field Parameters										
pH	SU	7.25	7.43	7.23	8.1	6.85	7.53	---	7.45	7.49
Temperature	deg C	3	7.6	8.3	8.5	5.9	6.3	---	10.4	5.8
Specific Conductance	mS/cm	1.269	0.646	8.15	0.729	0.781	0.855	---	1.88	2.842
Turbidity	NTU	231	4.3	3.7	0.02	2.78	5.35	---	1.07	7.44
Oxidation Reduction Potential	mVolt	180.3	217.4	186.6	209	107.2	113.8	---	116.3	159.7
Conventionals										
Total Cyanide	mg/L	--	--	--	--	--	--	--	--	--
Free Cyanide	mg/L	0.0060U	0.0060U	0.0060U	0.020	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U
WAD Cyanide	mg/L	--	--	--	--	--	--	--	--	--
Fluoride	mg/L	0.374	5.61	2.87	13.8	6.35	0.68	0.681	--	--
Sulfate	mg/L	372	182	320	197	72.7	191	188	--	--
PCBs										
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	--	--
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	--	--
Aroclor 1254	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	--	--
Aroclor 1260	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	--	--

Sample ID Sample Date Parameter ID	Unit	MW-35SR-1223 12/21/23	MW-36-1223 12/22/23	MW-37-1223 12/26/23	MW-38-1223 12/27/23	MW-39S-1223 12/12/23	MW-39S-1223D 12/12/23	MW-40S-1223 12/13/23	MW-41-1223 12/27/23	MW-42-1223 12/27/23
Field Parameters										
pH	SU	7.12	8.37	7.4	7.96	7.14	---	7.02	7.4	7.59
Temperature	deg C	3.6	1.7	10.9	5.2	7.8	---	5.8	7.4	9.8
Specific Conductance	mS/cm	1.814	2.723	0.803	0.617	0.83	---	1.367	1.158	3.457
Turbidity	NTU	136	776	419	621	2.25	---	1.59	863	241
Oxidation Reduction Potential	mVolt	144.7	210	-55.5	137.5	-12.2	---	167.4	132.6	159.5
Conventionals										
Total Cyanide	mg/L	---	---	---	---	---	---	0.031	---	---
Free Cyanide	mg/L	0.0060U	0.0060U	0.0060UJ	0.0060UJ	0.0060U	0.0060U	0.0060U	0.0060UJ	0.0060UJ
WAD Cyanide	mg/L	---	---	---	---	---	---	0.01U	---	---
Fluoride	mg/L	0.911	1.75	0.332	0.494	1.54	1.59	0.15	0.234	25.5
Sulfate	mg/L	612	378	318	198	330	340	52.4	282	1170
PCBs										
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1254	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1260	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U

Sample ID Sample Date Parameter ID	Unit	MW-43-1223 12/14/23	MW-44-1223 12/14/23	MW-45-1223 12/14/23	MW-48-1223 12/28/23	MW-49-1223 12/28/23	MW-50-1223 12/20/23	MW-51-1223 12/28/23	MW-52-1223 12/28/23	MW-54-1223 12/27/23
Field Parameters										
pH	SU	6.91	6.9	7.12	7.85	7.88	7.56	7.38	7.53	7.89
Temperature	deg C	8.5	9.2	7.11	8.4	7	7.9	8.8	7.9	7.2
Specific Conductance	mS/cm	0.901	0.878	1.295	0.767	0.576	1.218	1.36	1.406	0.754
Turbidity	NTU	19.5	0.02	3.53	954	131	2	569	6.42	97.5
Oxidation Reduction Potential	mVolt	106.7	109.1	94.9	137.1	197.7	53	-46.8	220.1	54.8
Conventionals										
Total Cyanide	mg/L	---	---	---	---	---	---	---	---	---
Free Cyanide	mg/L	0.0060U	0.0060U	0.0060U	0.031J	0.031J	0.038	0.038J	0.032J	0.0060U
WAD Cyanide	mg/L	---	---	---	---	---	---	---	---	---
Fluoride	mg/L	0.284	0.327	0.387	0.193	1.67	0.373	0.207	0.207	0.492
Sulfate	mg/L	121	116	722	138	132	362	278	278	185
PCBs										
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1254	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1260	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U

Parameter ID	Unit	MW-55-1223 12/27/23	MW-56-1223 12/19/23	PZ-44-1223 12/20/23	PZ-45-1223 12/20/23	PZ-46-1223 12/20/23	SLPWETE-1223 12/13/23	SLPWETW-1223 12/13/23
Field Parameters								
pH	SU	7.68	7.17	7.53	7.32	7.38	6.9	7.44
Temperature	deg C	8.2	7.3	3.1	5.3	3.8	1.5	2.8
Specific Conductance	mS/cm	0.78	1.44	0.738	1.56	1.665	0.499	0.1744
Turbidity	NTU	10.2	670	0.6	6.6	12.6	4.54	3.7
Oxidation Reduction Potential	mVolt	32.1	82.6	114.7	222	216.3	201.6	98.9
Conventionals								
Total Cyanide	mg/L	---	---	---	---	---	---	---
Free Cyanide	mg/L	0.0060UJ	0.0060U	0.0060UJ	0.0060U	0.0060U	0.016	0.0060U
WAD Cyanide	mg/L	---	---	---	---	---	---	---
Fluoride	mg/L	0.306	0.47	4.43	1.99	3.22	2.72	0.603
Sulfate	mg/L	157	340	335	1410	1540	20.5	22
PCBs								
Aroclor 1242	µg/L	0.065U	---	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1248	µg/L	0.065U	---	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1254	µg/L	0.065U	---	0.065U	0.065U	0.065U	0.065U	0.065U
Aroclor 1260	µg/L	0.065U	---	0.065U	0.065U	0.065U	0.065U	0.065U

Key:
U = Nondetect
J = Estimated
--- = Not Analyzed
R = Rejected
UJ = Estimated nondetect

				Total Cyanide		Weak Acid Dissociable Cyanide		Free Cyanide						Fluoride		Sulfate		PCBs			
Sample ID	Sample Date	VTSR[1]	Days	Target - 12 Days VTSR to Analysis	Days	Target - 12 Days VTSR to Analysis	Days	Target - 12 Days VTSR to Analysis	Days	Sample ID	Sample Date	VTSR[1]	Days	Target - 26 Days VTSR to Analysis	Days	Target - 26 Days VTSR to Analysis	Days	Target - 365 Days from VTSR to Extraction	Days	Target - 40 Days from Extraction to Analysis	Days
FDRAIN-1223	12/14/23	12/15/23	1	---	---	---	---	12/27/23	12	FDRAIN-1223	12/14/23	12/15/23	1	12/29/23	14	12/29/23	14	---	---	---	---
MW-03S-1223	12/20/23	12/21/23	1	---	---	---	---	1/2/24	12	MW-03S-1223	12/20/23	12/21/23	1	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
MW-10S-1223	12/12/23	12/13/23	1	---	---	---	---	12/20/23	7	MW-10S-1223	12/12/23	12/13/23	1	12/21/23	8	12/20/23	7	12/19/23	6	12/21/23	2
MW-11SR-1223	12/14/23	12/15/23	1	---	---	---	---	12/27/23	12	MW-11SR-1223	12/14/23	12/15/23	1	12/29/23	14	12/29/23	14	12/19/23	4	12/21/23	2
MW-1213-1223FBW	12/14/23	12/15/23	1	---	---	---	---	12/27/23	12	MW-1213-1223FBW	12/14/23	12/15/23	1	12/29/23	14	12/29/23	14	12/19/23	4	1/16/24	28
MW-1214-1223FBW	12/15/23	12/15/23	0	12/29/23	14	---	---	12/29/23	14	MW-1214-1223FBW	12/15/23	12/15/23	0	12/30/23	15	12/30/23	15	1/5/24	21	1/13/24	8
MW-1215-1223FBW	12/12/23	12/13/23	1	---	---	---	---	12/20/23	7	MW-1215-1223FBW	12/12/23	12/13/23	1	12/20/23	7	12/20/23	7	12/19/23	6	12/21/23	2
MW-1216-1223FBW	12/13/23	12/13/23	0	---	---	---	---	12/27/23	---	MW-1216-1223FBW	12/13/23	12/13/23	0	12/20/23	7	12/20/23	7	12/19/23	6	12/21/23	2
MW-1217-1223FBW	12/18/23	12/19/23	1	---	---	---	---	12/29/23	10	MW-1217-1223FBW	12/18/23	12/19/23	1	1/5/24	17	1/5/24	17	1/5/24	17	1/13/24	8
MW-1218-1223FBW	12/19/23	12/19/23	0	---	---	---	---	1/2/24	14	MW-1218-1223FBW	12/19/23	12/19/23	0	1/5/24	17	1/5/24	17	1/5/24	17	1/13/24	8
MW-1219-1223FBW	12/20/23	12/21/23	1	---	---	---	---	1/2/24	---	MW-1219-1223FBW	12/20/23	12/21/23	1	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
MW-1220-1223FBW	12/21/23	12/22/23	1	---	---	---	---	1/4/24	13	MW-1220-1223FBW	12/21/23	12/22/23	1	12/27/23	5	12/27/23	5	1/31/24	40	2/2/24	2
MW-1221-1223FBW	12/22/23	12/22/23	0	---	---	---	---	1/4/24	13	MW-1221-1223FBW	12/22/23	12/22/23	0	12/27/23	5	12/27/23	5	1/31/24	40	2/2/24	2
MW-1222-1223FBW	12/26/23	12/28/23	2	---	---	---	---	1/8/24	11	MW-1222-1223FBW	12/26/23	12/28/23	2	1/10/24	13	1/10/24	13	1/31/24	34	2/2/24	2
MW-1223-1223FBW	12/27/23	12/28/23	1	---	---	---	---	1/8/24	11	MW-1223-1223FBW	12/27/23	12/28/23	1	1/10/24	13	1/10/24	13	1/31/24	34	2/2/24	2
MW-1224-1223FBW	12/28/23	12/28/23	0	---	---	---	---	1/11/24	14	MW-1224-1223FBW	12/28/23	12/28/23	0	12/29/23	1	12/29/23	1	1/31/24	34	2/2/24	2
MW-2024-FBW	2/9/24	2/9/24	0	2/16/24	7	2/15/24	6	2/14/24	5	MW-2024-FBW	2/09/24	2/09/24	0	---	---	---	---	---	---	---	---
MW-12S-1223	12/15/23	12/15/23	0	12/29/23	14	---	---	12/27/23	12	MW-12S-1223	12/15/23	12/15/23	0	12/29/23	14	12/29/23	14	1/5/24	21	1/13/24	8
MW-12S-1223D	12/15/23	12/15/23	0	12/29/23	14	---	---	12/29/23	14	MW-12S-1223D	12/15/23	12/15/23	0	12/29/23	14	12/29/23	14	1/5/24	21	1/13/24	8
MW-12S-0224	2/9/24	2/9/24	0	2/15/24	6	2/15/24	6	2/14/24	5	MW-12S-0224	2/09/24	2/09/24	0	---	---	---	---	---	---	---	---
MW-12S-0224D	2/9/24	2/9/24	0	2/16/24	7	2/15/24	6	2/14/24	5	MW-12S-0224D	2/09/24	2/09/24	0	---	---	---	---	---	---	---	---
MW-13S-1223	12/18/23	12/19/23	1	---	---	---	---	12/29/23	10	MW-13S-1223	12/18/23	12/19/23	1	1/4/24	16	1/4/24	16	1/5/24	17	1/13/24	8
MW-14S-1223	12/18/23	12/19/23	1	---	---	---	---	12/29/23	---	MW-14S-1223	12/18/23	12/19/23	1	1/5/24	17	1/4/24	16	1/5/24	17	1/13/24	8
MW-15S-87-1223	12/20/23	12/21/23	1	---	---	---	---	1/2/24	12	MW-15S-87-1223	12/20/23	12/21/23	1	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
MW-16S-1223	12/14/23	12/15/23	1	---	---	---	---	12/27/23	12	MW-16S-1223	12/14/23	12/15/23	1	12/29/23	14	12/29/23	14	12/19/23	4	12/21/23	2
MW-17S-1223	12/19/23	12/19/23	0	---	---	---	---	1/2/24	14	MW-17S-1223	12/19/23	12/19/23	0	1/4/24	16	1/4/24	16	1/5/24	17	1/13/24	8
MW-18S-1223	12/13/23	12/15/23	2	---	---	---	---	12/27/23	12	MW-18S-1223	12/13/23	12/15/23	2	12/29/23	14	12/29/23	14	1/5/24	21	1/13/24	8
MW-19S-1223	12/20/23	12/21/23	1	---	---	---	---	1/2/24	12	MW-19S-1223	12/20/23	12/21/23	1	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
MW-20-85S-1223	12/28/23	12/28/23	0	---	---	---	---	1/11/24	14	MW-20-85S-1223	12/28/23	12/28/23	0	12/29/23	1	12/29/23	1	1/31/24	34	2/2/24	2
MW-22-85S-1223	12/22/23	12/22/23	0	---	---	---	---	1/4/24	13	MW-22-85S-1223	12/22/23	12/22/23	0	12/27/23	5	12/27/23	5	1/31/24	40	2/2/24	2
MW-23-85S-1223	12/22/23	12/22/23	0	---	---	---	---	1/4/24	13	MW-23-85S-1223	12/22/23	12/22/23	0	12/27/23	5	12/27/23	5	1/31/24	40	2/2/24	2
MW-26S-1223	12/14/23	12/15/23	1	---	---	---	---	12/27/23	12	MW-26S-1223	12/14/23	12/15/23	1	12/29/23	14	12/29/23	14	12/19/23	4	1/16/24	28
MW-27S-1223	12/20/23	12/21/23	1	---	---	---	---	1/2/24	12	MW-27S-1223	12/20/23	12/21/23	1	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
MW-28S-1223	12/13/23	12/13/23	0	---	---	---	---	12/27/23	14	MW-28S-1223	12/13/23	12/13/23	0	12/20/23	7	12/20/23	7	12/19/23	6	12/21/23	2
MW-30S-1223	12/13/23	12/13/23	0	---	---	---	---	12/27/23	14	MW-30S-1223	12/13/23	12/13/23	0	12/20/23	7	12/20/23	7	12/19/23	6	12/21/23	2
MW-31SR-1223	12/21/23	12/21/23	0	---	---	---	---	1/4/24	14	MW-31SR-1223	12/21/23	12/21/23	0	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
MW-31SR-1223D	12/21/23	12/21/23	0	---	---	---	---	1/4/24	14	MW-31SR-1223D	12/21/23	12/21/23	0	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
MW-33S-1223	12/15/23	12/15/23	0	---	---	---	---	12/29/23	14	MW-33S-1223	12/15/23	12/15/23	0	---	---	---	---	---	---	---	---
MW-34S-1223	12/20/23	12/20/23	0	---	---	---	---	1/4/24	15	MW-34S-1223	12/20/23	12/20/23	0	---	---	---	---	---	---	---	---
MW-35SR-1223	12/21/23	12/21/23	0	---	---	---	---	1/4/24	14	MW-35SR-1223	12/21/23	12/21/23	0	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
MW-36-1223	12/22/23	12/22/23	0	---	---	---	---	1/4/24	13	MW-36-1223	12/22/23	12/22/23	0	12/27/23	5	12/27/23	5	1/31/24	40	2/2/24	2
MW-37-1223	12/26/23	12/28/23	2	---	---	---	---	1/8/24	11	MW-37-1223	12/26/23	12/28/23	2	1/11/24	14	1/10/24	13	1/31/24	34	2/2/24	2
MW-38-1223	12/27/23	12/28/23	1	---	---	---	---	1/8/24	11	MW-38-1223	12/27/23	12/28/23	1	1/11/24	14	1/10/24	13	1/31/24	34	2/2/24	2
MW-39S-1223	12/12/23	12/13/23	1	---	---	---	---	12/20/23	7	MW-39S-1223	12/12/23	12/13/23	1	12/20/23	7	12/20/23	7	12/19/23	6	12/21/23	2
MW-39S-1223D	12/12/23	12/13/23	1	---	---	---	---	12/20/23	7	MW-39S-1223D	12/12/23	12/13/23	1	12/20/23	7	12/20/23	7	12/19/23	6	12/21/23	2
MW-40S-1223	12/13/23	12/15/23	2	---	---	---	---	12/27/23	12	MW-40S-1223	12/13/23	12/15/23	2	12/30/23	15	12/30/23	15	1/5/24	21	1/13/24	8
MW-41-1223	12/27/23	12/28/23	1	---	---	---	---	1/8/24	11	MW-41-1223	12/27/23	12/28/23	1	1/11/24	14	1/10/24	13	1/31/24	34	2/2/24	2
MW-42-1223	12/27/23	12/28/23	1	---	---	---	---	1/8/24	11	MW-42-1223	12/27/23	12/28/23	1	1/11/24	14	1/11/24	14	2/6/24	40	2/7/24	1
MW-43-1223	12/14/23	12/15/23	1	---	---	---	---	12/27/23	12	MW-43-1223	12/14/23	12/15/23	1	12/30/23	15	12/29/23	14	12/19/23	4	1/16/24	28
MW-44-1223	12/14/23	12/15/23	1	---	---	---	---	12/27/23	12	MW-44-1223	12/14/23	12/15/23	1	12/30/23	15	12/29/23	14	12/19/23	4	1/16/24	28
MW-45-1223	12/12/23	12/13/23	1	---	---	---	---	12/20/23	7	MW-45-1223	12/12/23	12/13/23	1	12/21/23	8	12/20/23	7	12/19/23	6	12/21/23	2
MW-48-1223	12/28/23	12/28/23	0	---	---	---	---	1/11/24	14	MW-48-1223	12/28/23	12/28/23	0	12/29/23	1	12/29/23	1	1/31/24	34	2/5/24	5
MW-49-1223	12/28/23	12/28/23	0	---	---	---	---	1/11/24	14	MW-49-1223	12/28/23	12/28/23	0	12/29/23	1	12/29/23	1	1/31/24	34	2/5/24	5
MW-50-1223	12/20/23	12/21/23	1	---	---	---	---	1/2/24	12	MW-50-1223	12/20/23	12/21/23	1	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
MW-51-1223	12/28/23	12/28/23	0	---	---	---	---	1/11/24	14	MW-51-1223	12/28/23	12/28/23	0	12/29/23	1	12/29/23	1	1/31/24	34	2/2/24	2
MW-52-1223	12/28/23	12/28/23	0	---	---	---	---	1/11/24	14	MW-52-1223	12/28/23	12/28/23	0	12/29/23	1	12/29/23	1	1/31/24	34	2/2/24	2
MW-54-1223	12/27/23	12/28/23	1	---	---	---	---	1/8/24	11	MW-54-1223	12/27/23	12/28/23	1	1/11/24	14	1/10/24	13	1/31/24	34	2/2/24	2
MW-55-1223	12/27/23	12/28/23	1	---	---	---	---	1/8/24	11	MW-55-1223	12/27/23	12/28/23	1	1/11/24	14	1/10/24	13	1/31/24	34	2/2/24	2
MW-56-1223	12/19/23	12/21/23	2	---	---	---	---	1/2/24	12	MW-56-1223	12/19/23	12/21/23	2	12/27/23	6	12/27/23	6	---	---	---	---
PZ-44-1223	12/20/23	12/21/23	1	---	---	---	---	1/2/24	12	PZ-44-1223	12/20/23	12/21/23	1	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
PZ-45-1223	12/20/23	12/21/23	1	---	---	---	---	1/2/24	12	PZ-45-1223	12/20/23	12/21/23	1	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
PZ-46-1223	12/20/23	12/21/23	1	---	---	---	---	1/2/24	12	PZ-46-1223	12/20/23	12/21/23	1	12/27/23	6	12/27/23	6	1/31/24	41	2/2/24	2
SLPWETE-1223	12/13/23	12/13/23	0	---	---	---	---	12/27/23	14	SLPWETE-1223	12/13/23	12/13/23	0	12/21/23	8	12/21/23	8	12/19/23	6	12/21/23	2
SLPWETW-1223	12/12/23	12/13/23	1	---	---	---	---	12/20/23	7	SLPWETW-1223	12/12/23	12/13/23	1	12/21/23	8	12/21/23	8	12/19/23	6	12/21/23	2

Key:
1. VTSR = Verified time of sample receipt

Note:
--- = Not sampled

Sample ID Sample Date Parameter ID	Unit	MW-1213-1223FBW 12/14/23	MW-1214-1223FBW 12/15/23	MW-1215-1223FBW 12/12/23	MW-1216-1223FBW 12/13/23	MW-1217-1223FBW 12/18/23	MW-1218-1223FBW 12/19/23	MW-1219-1223FBW 12/20/23	MW-1220-1223FBW 12/21/23	MW-1221-1223FBW 12/22/23	MW-1222-1223FBW 12/26/23	MW-1223-1223FBW 12/27/23	MW-1224-1223FBW 12/28/23	MW-2024-FBW 2/9/24
Conventionals														
Total Cyanide	mg/L	---	0.005U	---	---	---	---	---	---	---	---	---	---	0.005U
Free Cyanide	mg/L	0.034	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.027	0.00099J
WAD Cyanide	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	0.01U
Fluoride	mg/L	0.05U	0.05U	0.05U	0.05U	0.05U	0.05U	0.05U	0.05U	0.05U	0.05U	0.05U	0.05U	---
Sulfate	mg/L	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	---
PCBs														
Aroclor 1242	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	---
Aroclor 1248	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	---
Aroclor 1254	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	---
Aroclor 1260	µg/L	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	0.065U	---

Key:
U = Nondetect
J = Estimated
--- = Not Analyzed

Table 3
East Plant
Summary of Field Blanks

Sample ID Sample Location Sample Date		Original Sample MW-12S-1223 MW-12S 12/15/23	Duplicate Sample MW-1209-1223BD MW-12S 12/15/23	Relative Percent Difference[1,2] %	Original Sample MW-39S-1223 MW-39S 12/12/23	Duplicate Sample MW-1210-1223BD MW-39S 12/12/23	Relative Percent Difference[1,2] %	Original Sample MW-31SR-1223 MW-31SR 12/21/23	Duplicate Sample MW-1211-1223BD MW-31SR 12/21/23	Relative Percent Difference[1,2] %	Original Sample MW-12S-0224 MW-12S 2/9/24	Duplicate Sample MW-2024-BD MW-12S 2/9/24	Relative Percent Difference[1,2] %
Parameter ID	**Unit**												
Conventionals													
Total Cyanide	mg/L	0.014J	0.021J	40.0	---	---	---	---	---	---	0.01J	0.015J	40.0
Free Cyanide	mg/L	0.0060U	0.0060U	---	0.0060U	0.0060U	---	0.0060U	0.0060U	---	0.001J	0.002U	---[3]
WAD Cyanide	mg/L	---	---	---	---	---	---	---	---	---	0.01UJ	0.01UJ	---
Fluoride	mg/L	9.54	10.2	6.7	1.54	1.59	3.2	0.68	0.681	0.1	---	---	---
Sulfate	mg/L	724	744	2.7	330	340	3.0	191	188	1.6	---	---	---
PCBs													
Aroclor 1242	µg/L	0.065U	0.065U	---	0.065U	0.065U	---	0.065U	0.065U	---	---	---	---
Aroclor 1248	µg/L	0.065U	0.065U	---	0.065U	0.065U	---	0.065U	0.065U	---	---	---	---
Aroclor 1254	µg/L	0.065U	0.065U	---	0.065U	0.065U	---	0.065U	0.065U	---	---	---	---
Aroclor 1260	µg/L	0.065U	0.065U	---	0.065U	0.065U	---	0.065U	0.065U	---	---	---	---

Notes:

1. Precision is evaluated by calculating the relative percent difference (RPD) using the following formula:

| 2 * (X1 - X2) / (X1 + X2) * 100 |

where X1 is the original sample value and X2 is the duplicate sample value.

2. --- = RPD not calculated for nondetected parameters.
3. When one or both results are less than five times the CRQL, the absolute difference is used to determine qualification.

Key:
U = Nondetect
J = Estimated
--- = Not Analyzed
UJ = Estimated Nondetect

Table 4
East Plant
Summary of Field Duplicate Samples

Appendix F Institutional and Engineering Controls Certification Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 645009

Site Name Reynolds Metals Company

Site Address: Route 37 Zip Code: 13662
City/Town: Massena
County: St Lawrence
Site Acreage: 112.000

Reporting Period: April 01, 2023 to April 01, 2024

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☒	☐
7. Are all ICs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 645009 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
6.003-1-1	REYNOLDS METALS COMPANY	

IC/EC controls include:

RI/FS Consent order executed 9/8/1987, RD/RA Consent order Executed 3/1/1993, Decision Documents dated 1/22/1992, 6/27/1995, and 2/5/1999.

Pursuant to the orders on consent and the decision documents the following engineering controls are required at the Reynolds Metals Company Site.

Black Mud Pond: Multi layer cover system, leachate collection/groundwater containment system, surface water runoff controls, and fencing/access control.

Industrial Landfill: Multi layer cover system, leachate collection/groundwater containment system, and surface water runoff controls, and fencing/access control.

North Yard: Cover system, groundwater collection system, and surface water runoff controls.

Potliner Storage Pad: Cover system and surface water runoff controls.

Miscellaneous Areas - Surface water runoff controls.

Wetlands and site-wide: Longterm groundwater monitoring, SPDES surface water/process water discharge monitoring, and fencing/access control.

The Consultant will certify that all controls are in place and/if any changes to current conditions have been conducted. In addition, the consultant will verify that all deed restrictions are in place and no change of use of the site has occurred.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
6.003-1-1	Groundwater Treatment System
	Cover System
	Groundwater Containment
	Leachate Collection
	Fencing/Access Control

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. 645009

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Robyn L. Gross (print name) at 201 Isabella Street, Pittsburgh, PA 15212 (print business address),

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Robyn L. Gross — 6/3/2024

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification — Date

EC CERTIFICATIONS

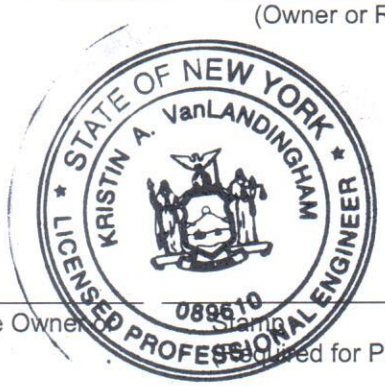
Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Kristin A. VanLandingham, P.E. at 5976 Thornton Ln, Tallahassee, FL 32308,
print name print business address

am certifying as a Professional Engineer for the Reynolds Metal Company
(Owner or Remedial Party)



Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification (Stamp if Required for PE)

4-26-2024
Date

Appendix G Daily Precipitation Data for 2023

Appendix G
Daily Precipitation Data for 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Date	Daily Precipitation (inches)	Monthly Cumulative Precipation (inches)
1/1/2023	0.03	0.03
1/2/2023	0.02	0.05
1/3/2023	0	0.05
1/4/2023	0.8	0.85
1/5/2023	0.02	0.87
1/6/2023	0.01	0.88
1/7/2023	0	0.88
1/8/2023	0	0.88
1/9/2023	0	0.88
1/10/2023	0	0.88
1/11/2023	0	0.88
1/12/2023	0.34	1.22
1/13/2023	0.3	1.52
1/14/2023	0	1.52
1/15/2023	0	1.52
1/16/2023	0	1.52
1/17/2023	0.07	1.59
1/18/2023	0.03	1.62
1/19/2023	0.07	1.69
1/20/2023	0.06	1.75
1/21/2023	0	1.75
1/22/2023	0.06	1.81
1/23/2023	0	1.81
1/24/2023	0	1.81
1/25/2023	0.23	2.04
1/26/2023	0.08	2.12
1/27/2023	0	2.12
1/28/2023	0	2.12
1/29/2023	0.18	2.3
1/30/2023	0	2.3
1/31/2023	0	2.3
2/1/2023	0	0
2/2/2023	0	0
2/3/2023	0	0
2/4/2023	0	0
2/5/2023	0	0
2/6/2023	0	0
2/7/2023	0.02	0.02
2/8/2023	0	0.02
2/9/2023	0.61	0.63
2/10/2023	0.04	0.67

Appendix G
Daily Precipitation Data for 2023
2023 Periodic Review Report for the Reynolds Metals Company, LLC
Massena East, Massena, New York
Alcoa Corporation

Date	Daily Precipitation (inches)	Monthly Cumulative Precipation (inches)
2/11/2023	0.02	0.69
2/12/2023	0	0.69
2/13/2023	0	0.69
2/14/2023	0	0.69
2/15/2023	0.02	0.71
2/16/2023	0	0.71
2/17/2023	0.3	1.01
2/18/2023	0	1.01
2/19/2023	0	1.01
2/20/2023	0.02	1.03
2/21/2023	0.02	1.05
2/22/2023	0	1.05
2/23/2023	0.05	1.1
2/24/2023	0	1.1
2/25/2023	0.01	1.11
2/26/2023	0	1.11
2/27/2023	0	1.11
2/28/2023	0.21	1.32
3/1/2023	0	0
3/2/2023	0.01	0.01
3/3/2023	0.02	0.03
3/4/2023	0.2	0.23
3/5/2023	0	0.23
3/6/2023	0	0.23
3/7/2023	0	0.23
3/8/2023	0	0.23
3/9/2023	0	0.23
3/10/2023	0	0.23
3/11/2023	0	0.23
3/12/2023	0	0.23
3/13/2023	0.09	0.32
3/14/2023	0.1	0.42
3/15/2023	0	0.42
3/16/2023	0.01	0.43
3/17/2023	0.17	0.6
3/18/2023	0	0.6
3/19/2023	0	0.6
3/20/2023	0	0.6
3/21/2023	0	0.6
3/22/2023	0	0.6
3/23/2023	0.38	0.98

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3/24/2023	0	0.98
3/25/2023	0.34	1.32
3/26/2023	0	1.32
3/27/2023	0	1.32
3/28/2023	0	1.32
3/29/2023	0.01	1.33
3/30/2023	0	1.33
3/31/2023	0.13	1.46
4/1/2023	0.35	0.35
4/2/2023	0	0.35
4/3/2023	0	0.35
4/4/2023	0	0.35
4/5/2023	1.55	1.9
4/6/2023	0	1.9
4/7/2023	0	1.9
4/8/2023	0	1.9
4/9/2023	0	1.9
4/10/2023	0	1.9
4/11/2023	0	1.9
4/12/2023	0	1.9
4/13/2023	0	1.9
4/14/2023	0	1.9
4/15/2023	0	1.9
4/16/2023	0	1.9
4/17/2023	0.1	2
4/18/2023	0.01	2.01
4/19/2023	0	2.01
4/20/2023	0	2.01
4/21/2023	0.03	2.04
4/22/2023	0.18	2.22
4/23/2023	0.3	2.52
4/24/2023	0.04	2.56
4/25/2023	0.01	2.57
4/26/2023	0.11	2.68
4/27/2023	0	2.68
4/28/2023	0	2.68
4/29/2023	0.42	3.1
4/30/2023	0.34	3.44
5/1/2023	0.83	0.83
5/2/2023	0.09	0.92
5/3/2023	0.2	1.12

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5/4/2023	0	1.12
5/5/2023	0	1.12
5/6/2023	0	1.12
5/7/2023	0	1.12
5/8/2023	0	1.12
5/9/2023	0	1.12
5/10/2023	0	1.12
5/11/2023	0	1.12
5/12/2023	0.05	1.17
5/13/2023	0	1.17
5/14/2023	0	1.17
5/15/2023	0	1.17
5/16/2023	0.02	1.19
5/17/2023	0	1.19
5/18/2023	0	1.19
5/19/2023	0	1.19
5/20/2023	0.26	1.45
5/21/2023	0	1.45
5/22/2023	0	1.45
5/23/2023	0	1.45
5/24/2023	0.3	1.75
5/25/2023	0	1.75
5/26/2023	0	1.75
5/27/2023	0	1.75
5/28/2023	0	1.75
5/29/2023	0	1.75
5/30/2023	0	1.75
5/31/2023	0	1.75
6/1/2023	0	0
6/2/2023	0.02	0.02
6/3/2023	0	0.02
6/4/2023	0	0.02
6/5/2023	0	0.02
6/6/2023	0	0.02
6/7/2023	0.02	0.04
6/8/2023	0.19	0.23
6/9/2023	0	0.23
6/10/2023	0	0.23
6/11/2023	0	0.23
6/12/2023	0.03	0.26
6/13/2023	0.68	0.94

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6/14/2023	0.17	1.11
6/15/2023	0	1.11
6/16/2023	0	1.11
6/17/2023	0.25	1.36
6/18/2023	0	1.36
6/19/2023	0.06	1.42
6/20/2023	0	1.42
6/21/2023	0	1.42
6/22/2023	0	1.42
6/23/2023	0	1.42
6/24/2023	0.13	1.55
6/25/2023	0	1.55
6/26/2023	0	1.55
6/27/2023	0.32	1.87
6/28/2023	0.02	1.89
6/29/2023	0	1.89
6/30/2023	0	1.89
7/1/2023	2.19	2.19
7/2/2023	0.36	2.55
7/3/2023	0	2.55
7/4/2023	0	2.55
7/5/2023	0	2.55
7/6/2023	0	2.55
7/7/2023	0.05	2.6
7/8/2023	0	2.6
7/9/2023	0	2.6
7/10/2023	0.27	2.87
7/11/2023	0.08	2.95
7/12/2023	0	2.95
7/13/2023	0.46	3.41
7/14/2023	0	3.41
7/15/2023	0	3.41
7/16/2023	0.26	3.67
7/17/2023	0	3.67
7/18/2023	0.29	3.96
7/19/2023	0	3.96
7/20/2023	0	3.96
7/21/2023	0.07	4.03
7/22/2023	0	4.03
7/23/2023	0	4.03
7/24/2023	0.54	4.57

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Date	Daily Precipitation (inches)	Monthly Cumulative Precipation (inches)
7/25/2023	0	4.57
7/26/2023	0	4.57
7/27/2023	1.22	5.79
7/28/2023	0.17	5.96
7/29/2023	0.07	6.03
7/30/2023	0	6.03
7/31/2023	0.05	6.08
8/1/2023	0	0
8/2/2023	0	0
8/3/2023	0.07	0.07
8/4/2023	0.02	0.09
8/5/2023	0	0.09
8/6/2023	0	0.09
8/7/2023	0.26	0.35
8/8/2023	0.26	0.61
8/9/2023	0	0.61
8/10/2023	0.44	1.05
8/11/2023	0	1.05
8/12/2023	0.75	1.8
8/13/2023	0	1.8
8/14/2023	0	1.8
8/15/2023	0	1.8
8/16/2023	0.08	1.88
8/17/2023	0	1.88
8/18/2023	0.91	2.79
8/19/2023	0.12	2.91
8/20/2023	0	2.91
8/21/2023	0	2.91
8/22/2023	0	2.91
8/23/2023	0	2.91
8/24/2023	0.1	3.01
8/25/2023	0.03	3.04
8/26/2023	0.11	3.15
8/27/2023	0	3.15
8/28/2023	0	3.15
8/29/2023	0.03	3.18
8/30/2023	0.48	3.66
8/31/2023	0	3.66
9/1/2023	0	0
9/2/2023	0	0
9/3/2023	0	0

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9/4/2023	0	0
9/5/2023	0	0
9/6/2023	0	0
9/7/2023	0	0
9/8/2023	0.04	0.04
9/9/2023	0	0.04
9/10/2023	0.99	1.03
9/11/2023	0	1.03
9/12/2023	0.02	1.05
9/13/2023	0.29	1.34
9/14/2023	0	1.34
9/15/2023	0	1.34
9/16/2023	0	1.34
9/17/2023	0	1.34
9/18/2023	0.03	1.37
9/19/2023	0.19	1.56
9/20/2023	0	1.56
9/21/2023	0	1.56
9/22/2023	0	1.56
9/23/2023	0	1.56
9/24/2023	0	1.56
9/25/2023	0	1.56
9/26/2023	0	1.56
9/27/2023	0	1.56
9/28/2023	0	1.56
9/29/2023	0	1.56
9/30/2023	0	1.56
10/1/2023	0	0
10/2/2023	0	0
10/3/2023	0	0
10/4/2023	0	0
10/5/2023	0	0
10/6/2023	0.42	0.42
10/7/2023	0.98	1.4
10/8/2023	0.06	1.46
10/9/2023	0.04	1.5
10/10/2023	0.05	1.55
10/11/2023	0.02	1.57
10/12/2023	0	1.57
10/13/2023	0	1.57
10/14/2023	0	1.57

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Date	Daily Precipitation (inches)	Monthly Cumulative Precipation (inches)
10/15/2023	0.02	1.59
10/16/2023	0	1.59
10/17/2023	0	1.59
10/18/2023	0	1.59
10/19/2023	0	1.59
10/20/2023	0	1.59
10/21/2023	0.44	2.03
10/22/2023	0.16	2.19
10/23/2023	0.01	2.2
10/24/2023	0	2.2
10/25/2023	0.06	2.26
10/26/2023	0.11	2.37
10/27/2023	0.03	2.4
10/28/2023	0.05	2.45
10/29/2023	0	2.45
10/30/2023	0.22	2.67
10/31/2023	0	2.67
11/1/2023	0.01	0.01
11/2/2023	0	0.01
11/3/2023	0	0.01
11/4/2023	0	0.01
11/5/2023	0	0.01
11/6/2023	0	0.01
11/7/2023	0.28	0.29
11/8/2023	0	0.29
11/9/2023	0.26	0.55
11/10/2023	0	0.55
11/11/2023	0	0.55
11/12/2023	0	0.55
11/13/2023	0	0.55
11/14/2023	0.02	0.57
11/15/2023	0	0.57
11/16/2023	0	0.57
11/17/2023	0.36	0.93
11/18/2023	0	0.93
11/19/2023	0.01	0.94
11/20/2023	0	0.94
11/21/2023	0.26	1.2
11/22/2023	0.12	1.32
11/23/2023	0	1.32
11/24/2023	0	1.32

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11/25/2023	0	1.32
11/26/2023	0.13	1.45
11/27/2023	0	1.45
11/28/2023	0	1.45
11/29/2023	0	1.45
11/30/2023	0	1.45
12/1/2023	0.14	0.14
12/2/2023	0.07	0.21
12/3/2023	0.43	0.64
12/4/2023	0.39	1.03
12/5/2023	0	1.03
12/6/2023	0	1.03
12/7/2023	0	1.03
12/8/2023	0	1.03
12/9/2023	0	1.03
12/10/2023	0.2	1.23
12/11/2023	0.09	1.32
12/12/2023	0	1.32
12/13/2023	0	1.32
12/14/2023	0	1.32
12/15/2023	0	1.32
12/16/2023	0	1.32
12/17/2023	0.1	1.42
12/18/2023	1.16	2.58
12/19/2023	0.03	2.61
12/20/2023	0	2.61
12/21/2023	0	2.61
12/22/2023	0	2.61
12/23/2023	0.02	2.63
12/24/2023	0	2.63
12/25/2023	0	2.63
12/26/2023	0.07	2.7
12/27/2023	0.02	2.72
12/28/2023	0.05	2.77
12/29/2023	0.12	2.89
12/30/2023	0	2.89
12/31/2023	0	2.89

Notes:
Daily precipitation data from NOAA Station USW00094725 at the Massena International Airport, NY, USA.