2025 Periodic Review Report

Old Cortland County (Towslee) Landfill

Site No. 712001
Cortland County, New York

Prepared For

Cortland County Highway Department

60 Central Avenue
Cortland, New York 13045

May 2025

Barton&Loguidice

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1.0 Introduction

1.1 Site Summary/Description

NYSDEC Site # 712001, also known as the Old Cortland Landfill or the Towslee Landfill, is east of Town Line Road, Town of Solon, New York (Figure 1), roughly 5 miles northeast of the City of Cortland. The closed landfill is thirty-six acres in size and is part of a 539.9-acre parcel currently owned and operated by Cortland County. The parcel includes the Old Cortland Landfill as well as the Abandoned City of Cortland Landfill, the Buckbee-Mears Sludge Disposal Areas, the closed Pine Tree Landfill, and the active Cortland County (West Side) Landfill. Landfilling began onsite in the 1940s by a private disposal company and was later leased to the City of Cortland for waste disposal operations in the 1960s. In 1972 Cortland County purchased the site from a private landowner and began landfilling operations in what is now the Old Cortland Landfill. This area was open for disposal until 1987 for municipal solid waste (MSW) and until 1992 for construction and demolition debris (C&D).

A Remedial Investigation/Feasibility Study (RI/FS) was conducted for the County of Cortland in accordance with NYSDEC Order on Consent #B7-0486-12-95, effective May 31, 1996 and the Old Cortland County landfill was classified by NYSDEC as a Class 2 Inactive Hazardous Waste Site. The RI was completed in March 1998 and the FS was completed in July 1998. The Record of Decision (ROD) was issued by the NYSDEC in March 1999 and called for controls to restrict access to the landfill, contain the hazardous waste, and monitor the effect on the surrounding area. Remedial activities at the landfill were substantially completed in December 2001 and the Old Cortland County Landfill was reclassified as a Class 4 Inactive Hazardous Waste Site, assigned No. 7-12-001. The landfill cap is in place and signage has been installed. Post-closure monitoring has been underway since 2006.

The landfill is surrounded by woods and agricultural property, as well as the active and closed landfills which share the parcel owned by Cortland County. Two surface water bodies, Mosquito Creek and an unnamed tributary to Trout Brook, intersect the landfill property and are approximately 2,500 and 2,100 feet away from the Old Cortland County Landfill, respectively. The landfill property is also bounded to the east by Maybury Brook, which lies approximately 1,550 feet from the Old Cortland Landfill.

Surface water sampling was conducted during the remedial investigation but will not continue through the post-closure monitoring period; the RI determined no significant risk of contamination to these surface waters. Groundwater contamination was the primary concern designated in the RI and monitoring wells have been installed in appropriate downgradient locations (see Figure 2). Figure 2A depicts overburden water-table contours from October 2024. Figure 2B depicts bedrock potentiometric surface contours from October 2024. Historically, the Old Cortland County Landfill was used for MSW and C&D waste disposal but may have also taken on some hazardous wastes from local industrial manufacturing facilities. Site investigations showed mild contamination in groundwater, surface water, and sediments from VOCs and leachate indicators as a result of the unlined landfill areas.

1.2 Effectiveness of the Remedial Program

The main components of the Remedial Program are itemized below. The remedy is performing properly and as designed:

- Site access restrictions are maintained by fencing and a gating system that serves to limit public access to the facility at the Town Line Road entrance.
- The landfill cover system prevents direct contact with waste materials and minimizes infiltration of precipitation, thus reducing the rate of leachate generation.
- The gas venting system prevents excessive buildup of landfill decomposition gases and protects the integrity of the landfill cover system.
- Surface water drainage is maintained to limit excessive erosion and sedimentation in site surface waters.
- Deed restriction and appropriate signage indicate the closed Inactive Hazardous Waste Disposal Site to prevent future groundwater usage.
- Periodic monitoring indicates that the remedy has reduced the concentrations of indicator constituents in several of the groundwater wells.

The results of groundwater monitoring described in Section 5.3 below demonstrate progress towards the remedial objective of restoration of groundwater quality through natural attenuation. With ongoing maintenance of the integrity of the landfill cap system, continued improvement in water quality is expected to occur over time.

1.3 Compliance

There were no significant deficiencies noted in the integrity or performance of the engineering controls in the most recent inspection report (Attachment A) and Environmental Monitoring Reports (Attachment B). Some contraventions of water quality standards occur but are mostly on a steady trend consistent with historical monitoring data. These parameters continue to be monitored according to the post-closure monitoring plan.

1.4 Recommendations

There are no recommended changes to the Post-Closure Monitoring and Site Maintenance Plan required as a result of this Periodic Review. While water quality has improved since implementation of the monitoring plan, the requirements for discontinuing site management have not yet been met.

2.0 Site Overview

2.1 Site Location

The Old Cortland County Landfill site is located on the east side of Town Line Road in the Town of Solon, approximately 5 miles northeast of the City of Cortland, New York (Figure 1). The landfill is part of a 539.9-acre parcel of land currently owned by Cortland County which encompasses the Old Cortland County Landfill (also known as the Towslee Landfill), the Abandoned City of Cortland Landfill, the Buckbee-Mears Sludge Disposal Areas, the closed Pine Tree Landfill, and the currently active Cortland County landfill. The Old Cortland Landfill is approximately 36 acres in size and is located on the southeast portion of the landfill property.

The landfill property occupies portions of the Towns of Solon, Cortlandville, and Homer. The County property is bordered by Maybury Brook to the east, Mosquito Creek to the west, Heath Road to the south, and Parks Road to the north. An unnamed tributary to Trout Brook originates at the outflow of the settlement ponds situated south of the Old Cortland County Landfill and flows south beyond the property boundary. Trout Brook is located approximately 1.8 miles south of the site. The unnamed tributary to Trout Brook is the closest surface water body, located approximately 1,550 feet south of the Old Cortland County Landfill limits.

The area immediately adjacent to the landfill property is sparsely populated, comprised mostly of wooded or agricultural areas. The closest residence is roughly 3,500 feet south of the landfill. The site has historically been used for waste disposal. The site was owned by a private waste disposal company beginning in the 1940s and was later leased to the City of Cortland in the mid-1960s for continued waste disposal. Cortland County has owned and operated the site since 1972 when it acquired the land from the former owner. The Old Cortland Landfill was operational from 1972 until early 1992.

2.2 Site Chronology

The RI/FS was conducted for the County of Cortland in accordance with NYSDEC Order on Consent #B7-0486-12-95, effective May 31, 1996. The RI was completed in March 1998 and the FS was completed in July 1998. The ROD was issued by the NYSDEC in March 1999. The ROD called for construction of a Part 360 landfill cap and a long-term monitoring plan. In addition, the ROD required implementation of institutional controls/engineering controls (IC/ECs) consisting of site access restrictions (fencing and signage) and implementation of a landfill buffer to deter future incompatible uses of adjacent lands. Remedial activities at the landfill were substantially completed in December 2001. The landfill cap is in place, and fencing and signage have been installed. Post-closure monitoring has been underway since 2006. See Figure 2 for monitoring well locations. Deed restriction was established on March 6, 2012 to prevent inappropriate future use of the site as determined by the ROD.

There have been no significant changes to the remedy since the selected remedial alternative was implemented in 2001.

3.0 Evaluation of Remedy Performance, Effectiveness, and Protectiveness

Implementation of the selected remedy has successfully mitigated potential risks and the remedial system continues to operate effectively to protect public health and the environment. A summary of the remedy system and its effectiveness is below:

- Site access restrictions are maintained by a gate system that serves to limit public access to the facility. An upgrade to the Town Line Road access gate system and fencing were completed in 2008 along with a new access control building/office building.
- The landfill cover system consists of a 40 mil LLDPE geomembrane hydraulic barrier overlain by a geocomposite lateral drainage layer and 1 ½ feet of cover soils (1-foot barrier protection, 6 inches of topsoil). The limits of the landfill cover system also extended around the existing landfill maintenance building to cap the abandoned City of Cortland Landfill. Waste was consolidated prior to landfill cover system installation including excavation and relocation of sludge from the former Buckbee Mears disposal areas to the Old Cortland County Landfill limits. The landfill cover system prevents direct contact with waste materials and minimizes infiltration of precipitation, thus reducing the rate of leachate generation. The landfill cap is mowed annually which has sufficiently prevented excessive vegetation from damaging the cap's integrity.
- The gas venting system consists of four gas vents per acre. One of the four per acre was constructed as a deep gas vent rotary drilled to approximately ¾ depth of waste. A building perimeter gas venting trench was also installed around the landfill maintenance building. The gas venting system prevents excessive buildup of landfill decomposition gases and protects the integrity of the landfill cover system.
- Surface water drainage is maintained to limit excessive erosion and sedimentation in site surface waters. The surface water drainage system consists of a series of side slope diversion berms, stone lined down chutes, and perimeter swales.
- Deed restriction and appropriate signage indicate the closed Inactive Hazardous Waste Disposal Site to prevent future groundwater usage. The Deed Restriction was signed by the County on March 6, 2012 and filed with the County Clerk's office on March 7, 2012.
- Periodic monitoring indicates that the remedy has reduced the concentrations of indicator constituents in several of the groundwater wells.

The monitoring results are discussed in more detail in Section 5.3.

4.0 IC/EC Plan Compliance Report

The deed restriction, signage, and Post-Closure Monitoring and Site Maintenance Plan are the institutional controls specified in the Record of Decision for the Old Cortland County Landfill site. Required engineering controls include site access control, a gas venting system, and the landfill cap.

4.1 IC/EC Requirements and Compliance

- A site access gate and signage were installed to limit public access to the site. Performance of this control is evaluated through a periodic visual inspection, which is reported as part of the on-going monitoring program for the site.
- Deed restriction and appropriate signage indicate the closed Inactive Hazardous Waste Disposal Site to prevent future groundwater usage. The Deed Restriction was signed by the County on March 6, 2012 and filed with the County Clerk's office on March 7, 2012.
- A gas venting system was installed to prevent excessive buildup of landfill decomposition gases and protect the integrity of the landfill cover system. Performance of this control is evaluated through a periodic visual inspection, which is reported as part of the on-going monitoring program for the site.
- Surface water drainage performance is evaluated through a periodic visual inspection, which is reported as part of the on-going monitoring program for the site.
- The landfill cap system was installed to prevent direct contact with waste materials and minimize infiltration of precipitation, thus reducing the rate of leachate generation. The integrity of the cap is evaluated through periodic visual inspection. Performance of this control is assessed through review of the ongoing monitoring data, as described in Section 5.3. The results of the visual inspection and water quality monitoring are reported as part of the ongoing monitoring program for the site.

There were no significant deficiencies noted in the integrity or performance of the engineering controls in the most recent landfill visual inspection (Attachment A) and Environmental Monitoring Reports (Attachment B).

4.2 IC/EC Certification

The IC/EC Certification form is provided in Attachment C.

5.0 Post-Closure Monitoring, Maintenance & Contingency Plan Compliance Report

Site operations, maintenance, and monitoring are conducted in accordance with the Post-Closure Monitoring and Site Maintenance Plan developed by Barton & Loguidice, D.P.C. on behalf of the County of Cortland in October 2002 and revised in June 2006.

The Post-Closure Monitoring and Site Maintenance Plan includes details on facility and environmental monitoring and maintenance, and describes the recordkeeping requirements applicable to the site. The Post-Closure Monitoring and Site Maintenance Plan calls for periodic inspection of the perimeter fence and associated gates and signs, the landfill cover and gas venting systems, and the surface water drainage. In addition, the plan summarizes maintenance activities that are to be implemented in the event that damage to these systems is detected during the required inspections.

The Post-Closure Monitoring and Site Maintenance Plan also describes the environmental monitoring program that has been established for the site, including required monitoring locations in groundwater, the parameters to be analyzed, sample collection methods, equipment cleaning and decontamination methods, and procedures to maintain sample quality and control. Historical monitoring data is included in the EMRs (Appendices B and C in Attachment B).

5.1 Monitoring Plan Components

The monitoring plan includes the following components:

- Quarter 2, 3 and 4 groundwater quality monitoring at five locations in the overburden groundwater (wells CD-1, MW-1A, MW-2A, MW-6A, MW-7A) and two contingency wells (wells RE-4 and DO-2).
- Quarter 2, 3 and 4 groundwater quality monitoring at eight locations in the bedrock groundwater (wells CD-1RA, MW-1B, MW-2B, MW-3A, MW-3B, MW-4A, MW-5A, MW-6B) and two contingency wells (wells D-1 and D-2). Well MW-5A was not historically monitored due to a blockage but was rehabilitated and sampled for Quarter 4 of 2012.
- Visual inspection of the perimeter fencing and signage system, site drainage, and landfill cap integrity.
- The results of the monitoring are reported annually to NYSDEC.

5.2 Summary of Monitoring Completed During Reporting Period

The Old Cortland County Landfill environmental monitoring network was sampled periodically starting in 2006. Cortland County currently samples the wells in Quarters 2, 3, and 4. Cortland County representatives completed landfill inspections of the facility.

The landfill inspection report form is provided in Attachment A. Historical analytical data is included in Appendices B and C to the Environmental Monitoring Reports (Attachment B).

5.3 Comparisons with Remedial Objectives

The results of the groundwater monitoring demonstrate progress towards the remedial objective of restoration of groundwater quality through natural attenuation, as described below. Groundwater monitoring at the site includes testing for many leachate indicators as identified by Barton & Loguidice, D.P.C. (B&L) in 1997. However, of note in the Periodic Review are the Contaminants of Concern (COCs) indicated by the Record of Decision in 1999 and noted in Table 1.

Table 1 – Contaminants of Concern

Media	Class	Contaminant of Concern
Groundwater	Volatile Organic Compounds (VOCs)	Benzene
	Inorganics	Arsenic
		Lead
Soils	Leachate Indicators	Chloride
		COD
		Ammonia
Leachate	VOCs	Xylene (total)
		Ethylbenzene
		Chlorobenzene
	Semi-Volatile Organic Compounds (SVOCs)	Phenol
	Leachate Indicators	Chloride
		Ammonia
		Total Dissolved Solids
Sediments	Inorganics	Arsenic
		Chromium
		Copper
		Zinc
		Manganese

A Corrective Measures Work Plan was required by the NYSDEC after review of the October 2023 Periodic Review Report. The Corrective Measures Work Plan detailed tasks to further evaluate volatile organic compounds in and downgradient of bedrock monitoring well MW-2B which has repeatedly had detections of cis-1,2-dichloroethene (cis-1,2 DCE) and vinyl chloride in

exceedance of groundwater quality standards. A Corrective Measures Work Plan was submitted to the NYSDEC in January 2024, and conditionally approved in February 2024. The work plan and approval included quarterly sampling of VOCs in MW-2B, two contingency overburden wells (DO-2 and RE-4), and two contingency bedrock wells (D-1 and D-2) downgradient relative to the Old Cortland County Landfill and MW-2B. Figure 2A depicts overburden water-table contours from October 2024. Figure 2B depicts bedrock potentiometric surface contours from October 2024.

As noted in the Corrective Measures Work Plan, Towslee Closed Landfill monitoring well MW-2B had concentrations of cis-1,2 DCE and vinyl chloride in exceedance of NYSDEC groundwater quality standards since prior to 2014. From 2013 to current, cis-1,2 DCE concentrations in MW-2B range from non-detect to 49 ug/l (May 2024). During that same period vinyl chloride concentrations in MW-2B range from non-detect to 20 ug/l (November 2021) with a current concentration of 16 ug/l. Monitoring well MW-2B is a bedrock well on the south side of the Towslee Closed Landfill. The ground surface and bedrock surface slopes to the south relative to MW-2B. Bedrock monitoring wells D-1 and D-2 (installed during of the Old Cortland County Landfill Remedial Investigation (RI) in 1997-1998) were identified and sampled to represent bedrock water quality down-gradient from MW-2B. Overburden monitoring wells DO-2 and RE-4 were sampled to represent overburden water quality down-gradient from MW-2B. During the Q2 and Q3 2024 sampling events, cis-1,2 DCE, vinyl chloride, and chloroethane were identified only in MW-2B. The remaining monitoring wells targeted for sampling in the Corrective Measures Work Plan did not contain detected VOCs other than methylene chloride. Methylene chloride was detected in 4 of the 5 samples during the Q3 2024 event.

5.3.1 Overburden Unit Groundwater Trends

Groundwater sampling during the reporting period indicates significant improvement in water quality since initial monitoring results during the Remedial Investigation in 1997. Groundwater quality in the overburden wells has remained consistent since closure of the landfill; concentrations of the contaminants of concern have remained generally steady or declining since 2006. Figure 2 depicts overburden monitoring wells, and Figure 2A depicts overburden water-table contours from October 2024.

In all of the overburden monitoring wells manganese was measured at levels that exceed water quality standards. Ammonia, arsenic, and total dissolved solids (TDS) were detected in one of the overburden wells, MW-2A, at exceeding levels. The COCs not detected or at compliant levels in the overburden wells include: benzene, chloride, chlorobenzene, chromium, copper, ethylbenzene, lead, phenols, xylenes, and zinc. Table 2 summarizes, for each monitoring well, which COC water quality standards were exceeded at least once during the reporting period.

The majority of COCs in the overburden wells have been at or near steady state or some with fluctuating concentrations at or near non-detect concentrations during the reporting period. Apparent increasing trends are not readily discernable in the overburden groundwater quality database. See Figures 3 through 13 for the overburden

trend analyses of the COCs. Table 3, attached, summarizes the trend analyses of the COCs for each monitoring well.

1,2-Dichloroethene, chloroethane, vinyl chloride, and methylene chloride have been detected in bedrock monitoring well MW-2B as noted in Table 4. Figures 25 through 28 depict these VOC concentrations in MW-2B and contingency monitoring wells. The only remaining groundwater monitoring well in the groundwater database for Pine Tree and Towslee Landfills that contains cis-1,2 DCE and/or vinyl chloride, is overburden well MW-7A, also located on the southern side of the Closed Old Cortland County Landfill. From 2013 to current, cis-1,2 DCE concentrations in MW-7A range from non-detect to 6.59 ug/l (May 2013) with the most recent concentration of 3.3 ug/l. During that same period vinyl chloride concentrations in MW-7A range from non-detect to 3.2 ug/l (August 2014) with a current concentration of 1.6 ug/l. Methylene chloride has recently been detected in multiple contingency well samples collected during the Q3 2024 sampling event, but this compound has not been reported in well samples in the groundwater quality database.

Additional parameters identified by B&L in 1997 as indicative of mild leachate contamination included in the monitoring follow similar trends. The indicators include Alkalinity, Hardness, Total Kjeldahl Nitrogen (TKN), Total Organic Carbon (TOC), Aluminum, Calcium, Cobalt, Iron, Magnesium, Potassium, Sodium, and Vanadium. All show a fairly steady or declining trend in overburden wells. However, iron and sodium levels are steady, but do not meet water quality standards in the overburden wells.

5.3.2 Bedrock Unit Groundwater Trends

Groundwater sampling of bedrock wells yielded similar results to the overburden wells. In half of the bedrock monitoring wells manganese was measured at levels that exceed water quality standards. Total dissolved solids (TDS) was detected in a couple of the bedrock wells, MW-2B and MW-4A, at exceeding levels. The COCs not detected or at compliant levels in the bedrock wells include: ammonia, arsenic, benzene (VOCs), chloride, chlorobenzene, chromium, copper, ethylbenzene, lead, phenols, xylenes, and zinc. Table 2, attached, summarizes, for each monitoring well, which COC water quality standards were exceeded at least once during the reporting period.

The majority of COCs in the bedrock wells have been at or near steady state or some with fluctuating concentrations at or near non-detect during the reporting period. However, manganese levels have apparent slight increases in two bedrock wells (MW-1B and MW-4A), chloride levels increased slightly in one bedrock well (MW-6B), and COD in one bedrock well (MW-5A) relative to historical data. Manganese levels have apparent slight decreases in MW-2B and MW-3A. See Figures 14 through 24 for the bedrock trend analyses of the COCs. Table 3, attached, summarizes the trend analyses of the COCs for each monitoring well.

Chloroethane, cis-1,2-DCE, and vinyl chloride were detected in one of the bedrock wells, MW-2B, at concentrations exceeding standards in monitoring well MW-2B as noted in Table 4. These compounds have not been detected in the bedrock monitoring network or contingency wells other than methylene chloride, which was detected in multiple wells during the Q3 2024 sampling event. Figures 25 through 28 depict these VOC concentrations in MW-2B and contingency monitoring wells.

Additional parameters identified by B&L in 1997 as indicative of mild leachate contamination included in the monitoring follow similar historical trends. These indicators, as listed in Section 5.3.1 show steady or declining trends in bedrock wells. As in the overburden monitoring wells, iron levels do not meet water quality standards in most bedrock wells, despite showing a general decline in concentrations. Potassium and sodium levels in MW-2A have been historically elevated but seem to be declining overall with the exception of a few spikes in concentration. Calcium levels in MW-2B have been historically elevated, but seems to be declining overall. TOC levels in MW-2B have been historically inconsistent but seem to be declining overall with the exception of a few spikes in concentration.

5.4 Monitoring Deficiencies

It should be noted that in 2015 site operators received permission to omit first quarter sampling due to winter conditions, so groundwater is only monitored for three of the four quarters each year since then. Additionally, the sample detection limit of phenol (0.01 mg/L) is above the water quality standard concentration (0.001 mg/L), so samples may have a phenol concentration above water quality standards, even though it is not detected.

5.5 Evaluation of Remedial Systems

The remedial system continues to operate effectively to protect the public health and environment. The effectiveness of all remedial systems is described in Section 1.2. The minor deficiencies noted below are being addressed and do not significantly impair the ability of the remedial system to function as designed.

5.6 O&M Deficiencies

The Cortland County Soil and Water Conservation District staff conduct groundwater quality sampling. During their sampling events, no deficiencies were observed; the capping system, drainage system, and access roads are all maintained and/or functioning properly.

5.7 Conclusions and Recommendations

The facility is well maintained and operates effectively in accordance with the Post-Closure Monitoring and Maintenance Operations Manual (revised June 2006). As noted previously, the results of the monitoring demonstrates generally consistent groundwater quality since closure

of the landfill for most COCs. The general trend of improving water quality indicates the remedial plan is working; however, some parameters still consistently do not meet water quality standards. The continued detection of VOCs in two of the facility wells south of the Closed Old Cortland County Landfill will be monitored and evaluated during subsequent groundwater sampling events. Groundwater quality monitoring downgradient of this area has demonstrated that VOC concentrations are not a levels capable of impacting downgradient groundwater quality in both the overburden and bedrock monitoring units. Natural attenuation appears to be effective; there are no recommendations as to changes in the remedial plan.

6.0 Overall PRR Conclusions and Recommendations

6.1 Compliance with SMP/ Post-Closure Monitoring and Site Maintenance Plan

There were no significant deficiencies noted in the integrity or performance of the engineering controls in the most recent inspection and report (attached). There are no recommended changes to the Post-Closure Monitoring and Site Maintenance Plan required as a result of this Periodic Review.

6.2 Performance and Effectiveness of the Remedy

The remedy is performing properly and as designed. A list describing the effectiveness of all remedial systems is included in Section 1.2.

The results of groundwater monitoring demonstrate substantial progress towards the remedial objective of restoration of groundwater quality through natural attenuation. With ongoing maintenance of the integrity of the landfill cap system, continued improvement in water quality is expected to occur over time.

6.3 Future PRR Submittals

While there has been improvement in water quality since implementation of the remedy, the requirements for discontinuing site management have not yet been met. Future PRRs will be submitted in accordance with the NYSDEC.

Tables

Table 2

Contaminants of Concern Concentrations vs Water Quality Standards

Table 2 - Contaminants of Concern Concentrations vs Water Quality Standards - Current Reporting Period

Contaminant of Concern	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Ammonia (Standard 2 mg/L)	Compliant	Compliant	Compliant	Compliant	Exceeds	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Arsenic (Standard 0.025 mg/L)	Compliant	Compliant	Compliant	Compliant	Exceeds	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Benzene (Standard 1 ug/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Chloride (Standard 250 mg/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Chlorobenzene (Standard 5 ug/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Chromium (Standard 0.05 mg/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Copper (Standard 0.2 mg/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Ethylbenzene (Standard 5 ug/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Lead (Standard 0.025 mg/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Manganese (Standard 0.3 mg/L)	Exceeds	Exceeds	Exceeds	Compliant	Exceeds	Exceeds	Exceeds	Compliant	Exceeds	Compliant	Exceeds	Compliant	Exceeds
Phenolics, Total Recoverable (Standard 0.001 mg/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Total Dissolved Solids (Standard 500 mg/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Exceeds	Compliant	Compliant	Exceeds	Compliant	Compliant	Compliant	Exceeds
Xylenes, Total (Standard 5 ug/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Zinc (Standard 5 mg/L)	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant

= Overburden Well

= Bedrock Well

Table 3

Contaminants of Concern Concentration Trends

Table 3 - Contaminants of Concern Concentration Trends - (1997-2024)

Contaminant of Concern	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Ammonia (Standard 2 mg/L)	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady
Arsenic (Standard 0.025 mg/L)	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady
Chemical Oxygen Demand	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Increasing	Steady	Steady	Steady
Chloride (Standard 250 mg/L)	Steady	Steady	Steady	Steady	Steady	Decreasing	Steady	Steady	Steady	Steady	Steady	Increasing	Steady
Chromium (Standard 0.05 mg/L)	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady
Copper (Standard 0.2 mg/L)	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady
Lead (Standard 0.025 mg/L)	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady
Manganese (Standard 0.3 mg/L)	Steady	Steady	Steady	Increasing	Steady	Decreasing	Decreasing	Steady	Increasing	Steady	Steady	Steady	Decreasing
Phenolics, Total Recoverable (Standard 0.001 mg/L)	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady
Total Dissolved Solids (Standard 500 mg/L)	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady
Zinc (Standard 5 mg/L)	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady	Steady

= Overburden Well

= Bedrock Well

Table 4

Detected VOCs in Monitoring Well MW-2B and Contingency Wells

Table 4 - Detected Volatile Organic Compounds in Monitoring Well MW-2B and Contingency Wells

Parameter	Sampling Event	MW-2B	D-1	D-2	DO-2	RE-4
		Bedrock	Bedrock	Bedrock	Overburden	Overburden
Cis-1,2 DCE	Q2 2024	Not Analyzed	<1	<1	<1	<1
	Q3 2024	44	<1	<1	<2	<1
	Q4 2024	49	<1	<1	<1	<1
Vinyl Chloride	Q2 2024	Not Analyzed	<1	<1	<1	<1
	Q3 2024	10	<1	<1	<2	<1
	Q4 2024	16	<1	<1	<1	<1
Chloroethane	Q2 2024	Not Analyzed	<1	<1	<1	<1
	Q3 2024	3.2	<1	<1	<2	<1
	Q4 2024	3.9	<1	<1	<1	<1
Methylene Chloride	Q2 2024	Not Analyzed	<1	<1	<1	<1
	Q3 2024	7.8	3.8	3.5	<2	2.6
	Q4 2024	<1	<1	<1	<1	<1

Notes:

= Overburden Well

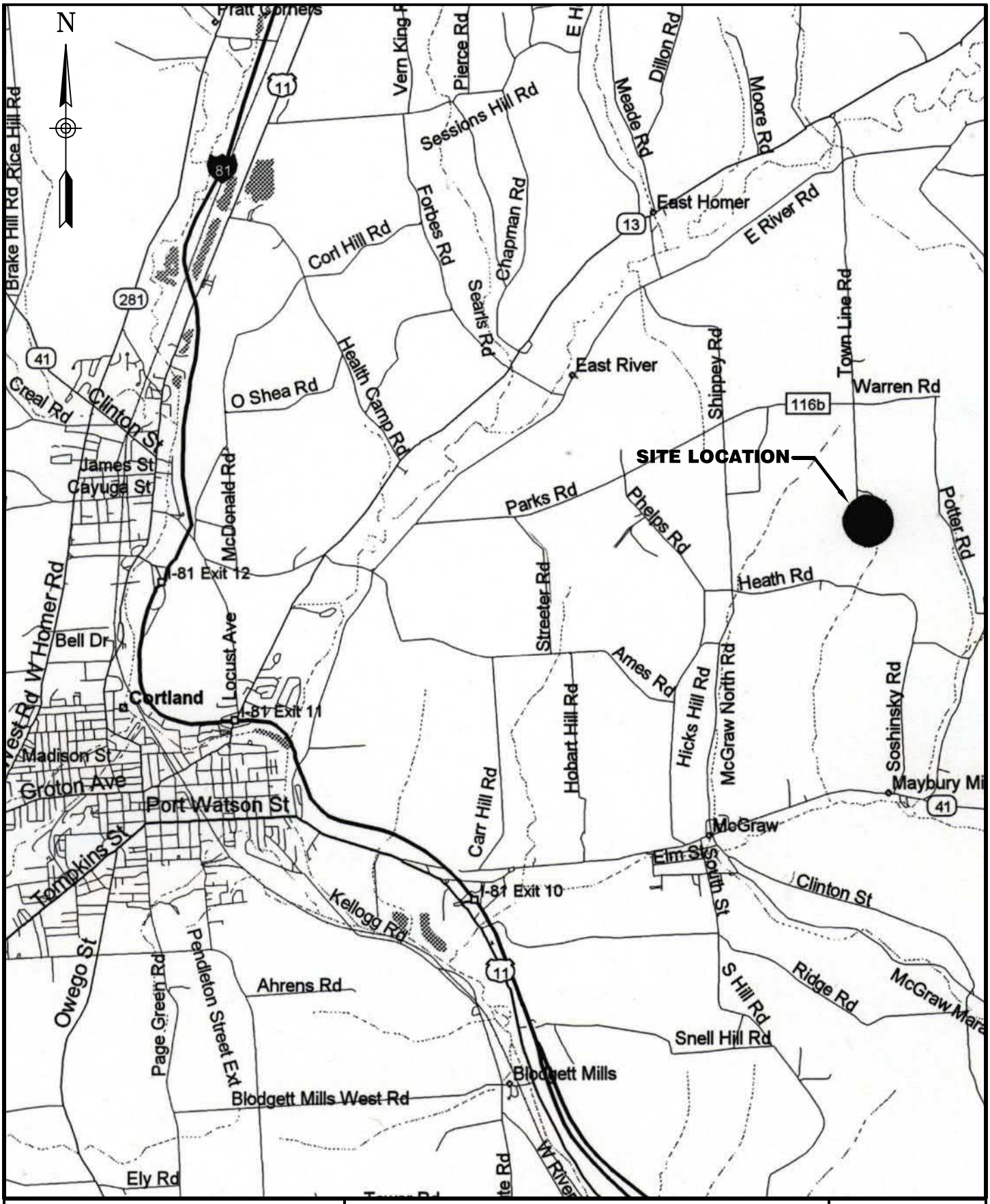
= Bedrock Well

All result in micrograms per liter (ug/L)

Figures

Figure 1

Site Location Map



Barton & Loguidice

OLD CORTLAND COUNTY LANDFILL

SITE LOCATION MAP

TOWN OF SOLON — CORTLAND COUNTY, NEW YORK

Date	Scale
OCTOBER, 2020	1" = 1 MILE

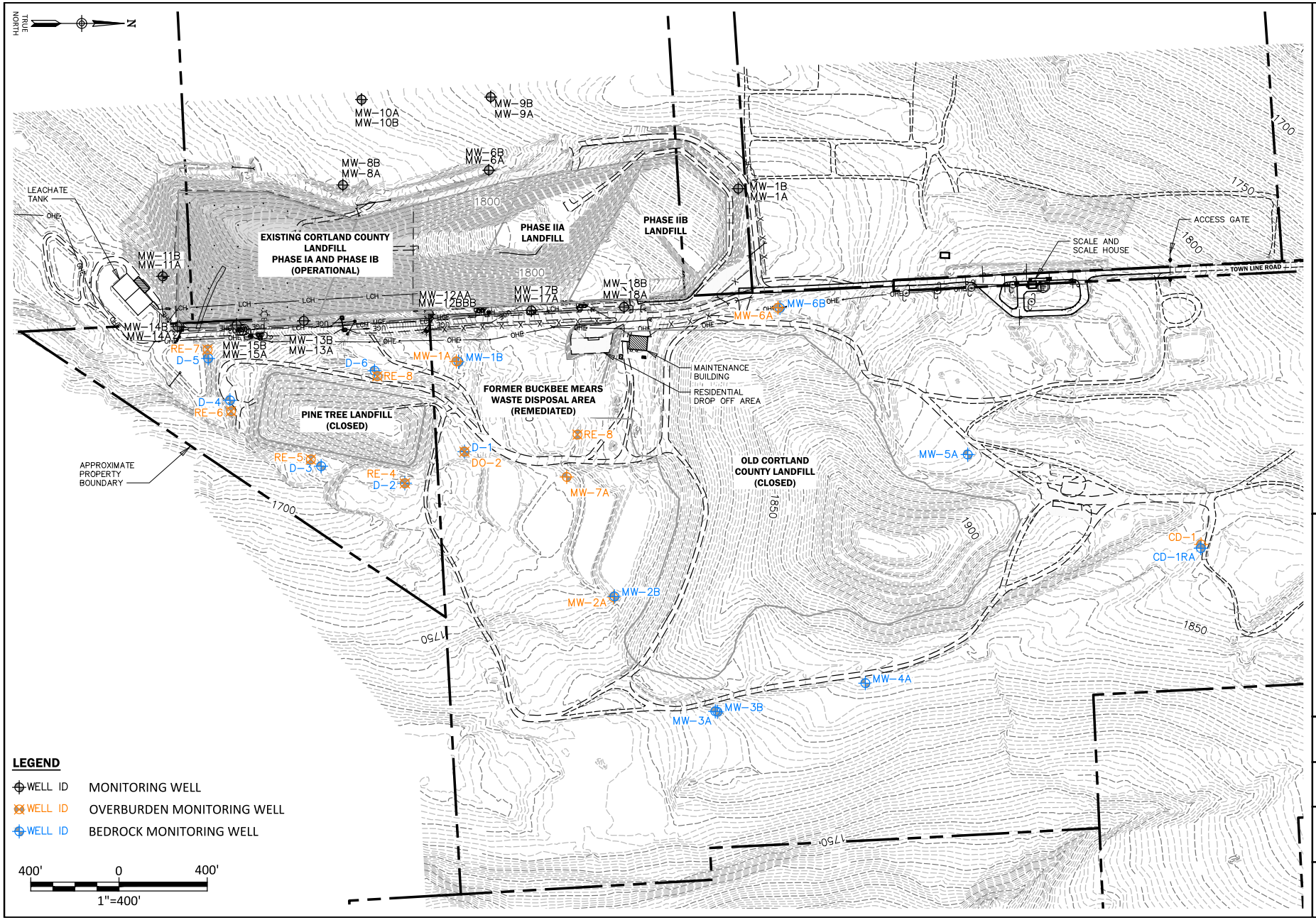
Figure Number: 1

Project Number: 331.152.001

Plotted: Sep 29, 2020 - 10:47AM SYR By: gmeyerson
I:\Shared\300\331 - Cortland County\331107\331107_FIG1_SITE LOCATION MAP.dwg

Figure 2

Closed Landfill Monitoring Locations



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OLD CORTLAND COUNTY LANDFILL

CORRECTIVE MEASURES MONITORING WELLS

CORTLAND COUNTY, NEW YORK

TOWN OF SOLON

Barton & Loguidice
443 Electronics Parkway
Liverpool, NY 13088

Date	MAY 2025
Scale	1" = 400'
Figure Number	2
Project Number	331.152.002

Figure 2A

Overburden Water Table Map

Plotted: Mar 04, 2025 - 3:42PM SYR By: WBG
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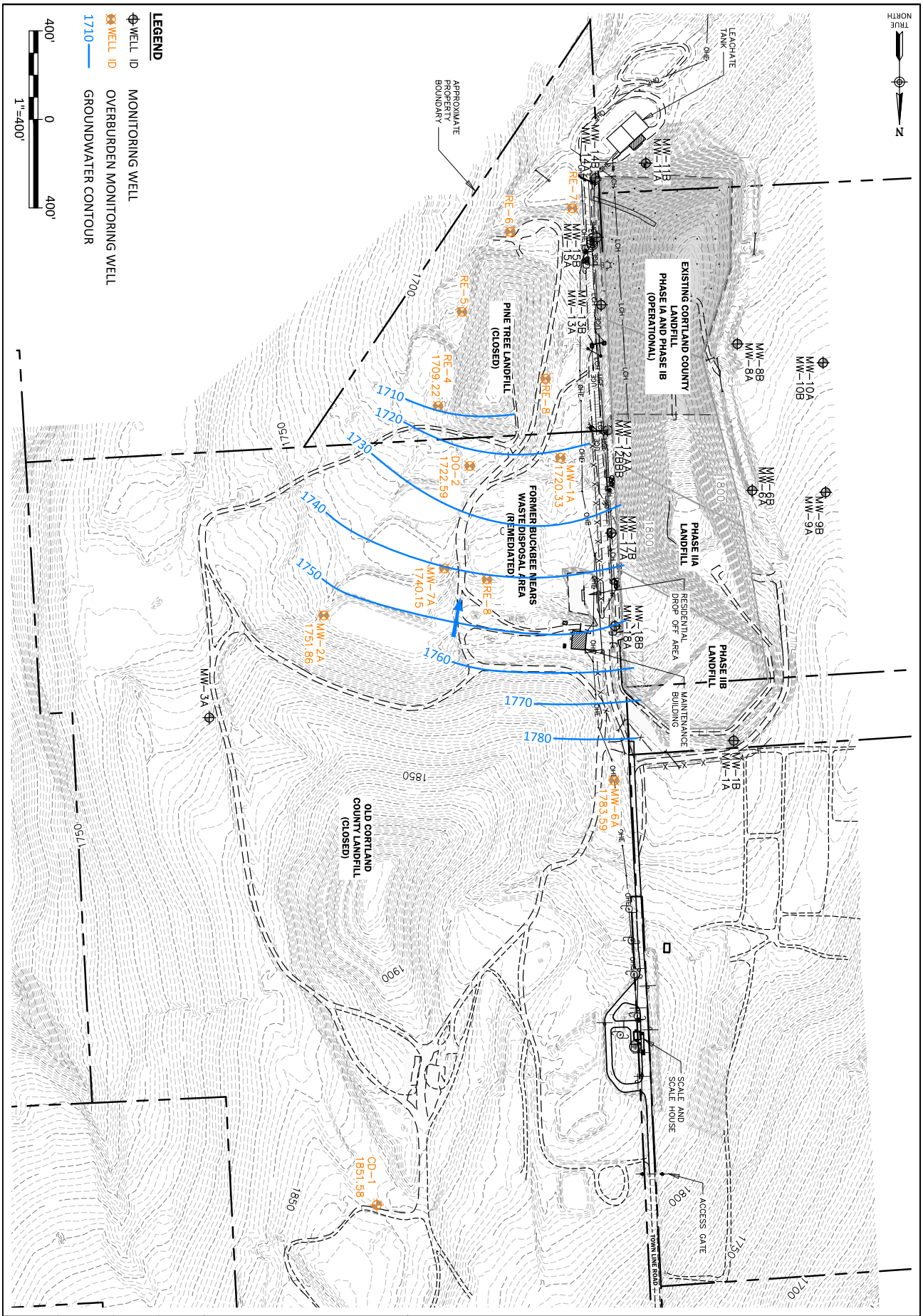

Project Number	331.152.002
Figure Number	2A
Scale	1" = 400'
Date	MARCH 2025

Barton & Loguidice
443 Electronics Parkway
Liverpool, NY 13088

OLD CORTLAND COUNTY LANDFILL

OVERBURDEN WATER TABLE MAP
OCTOBER 02, 2024

TOWN OF SOLON CORTLAND COUNTY, NEW YORK

Figure 2B

Bedrock Potentiometric Map

Plotted: Mar 04, 2025 - 3:43PM SYR By: WBG
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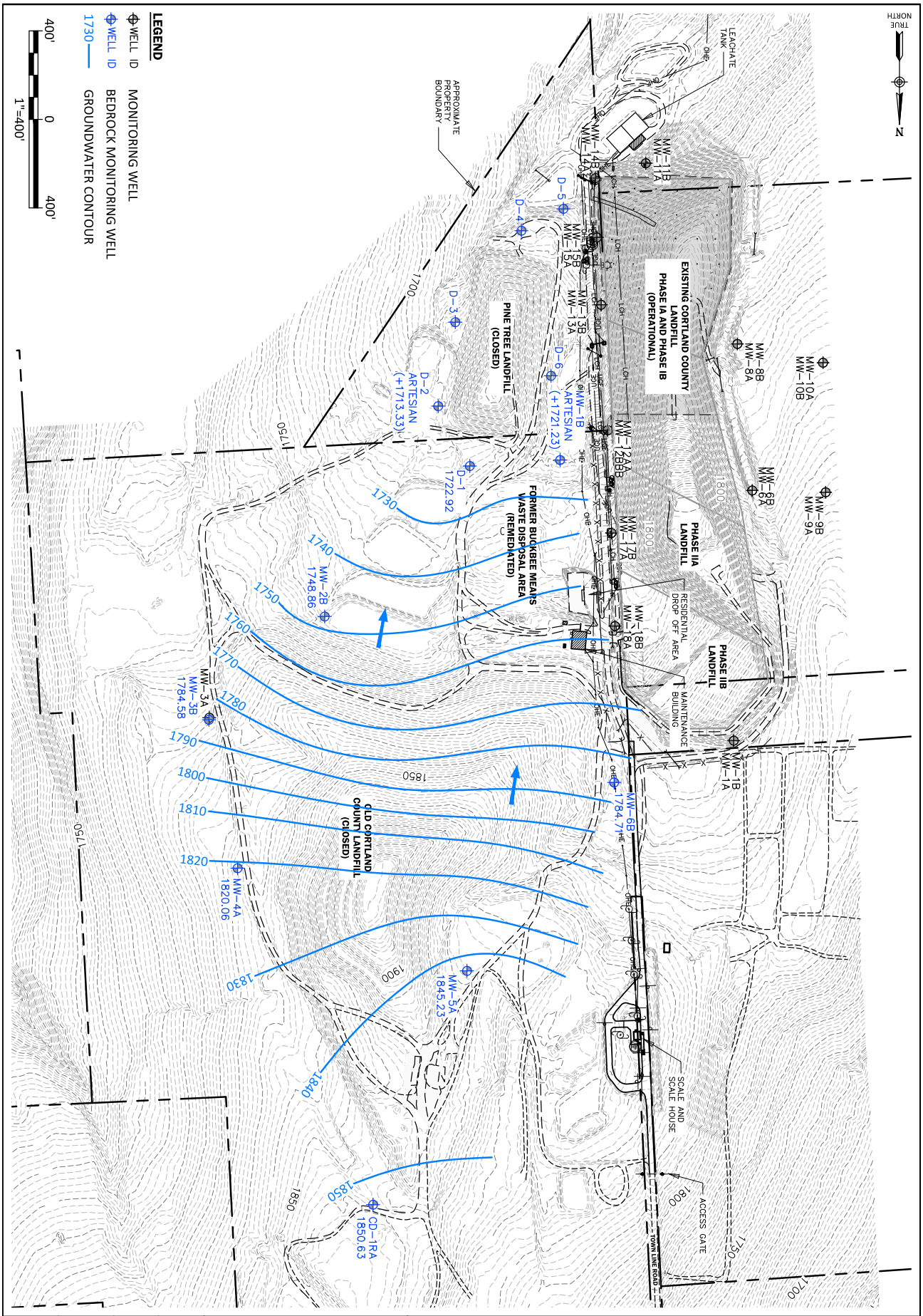


Project Number	331.152.002
Figure Number	2B
Scale	1" = 400'
Date	MARCH 2025

Barton & Loguidice
443 Electronics Parkway
Liverpool, NY 13088

OLD CORTLAND COUNTY LANDFILL

BEDROCK POTENTIOMETRIC MAP
OCTOBER 02, 2024

TOWN OF SOLON — CORTLAND COUNTY, NEW YORK

Figure 3

Trend Analysis – Ammonia in Overburden Wells

Figure 3 - Trend Analysis - Ammonia in Overburden Wells

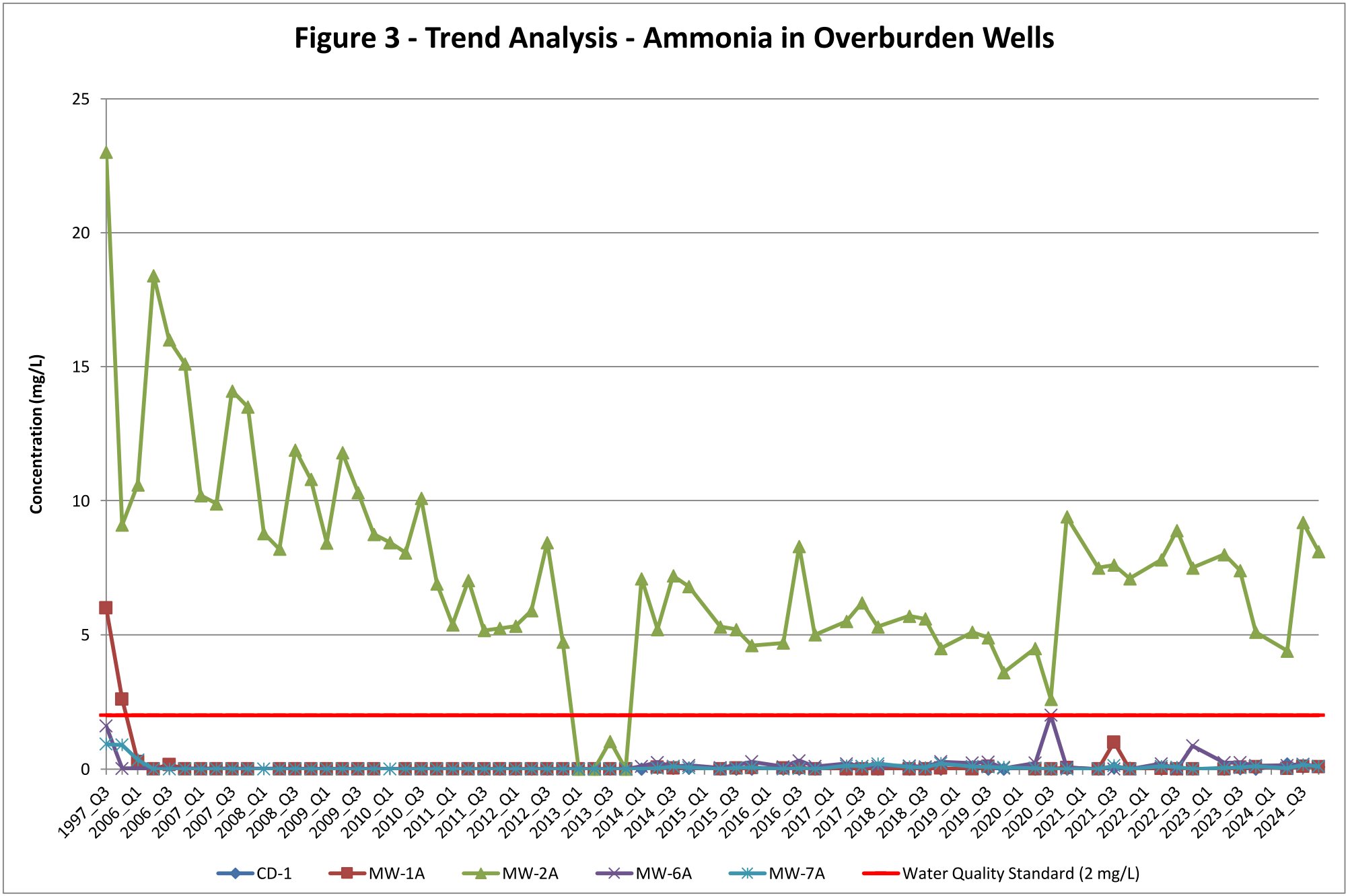


Figure 4

Trend Analysis – Chloride in Overburden Wells

Figure 4 - Trend Analysis - Chloride in Overburden Wells

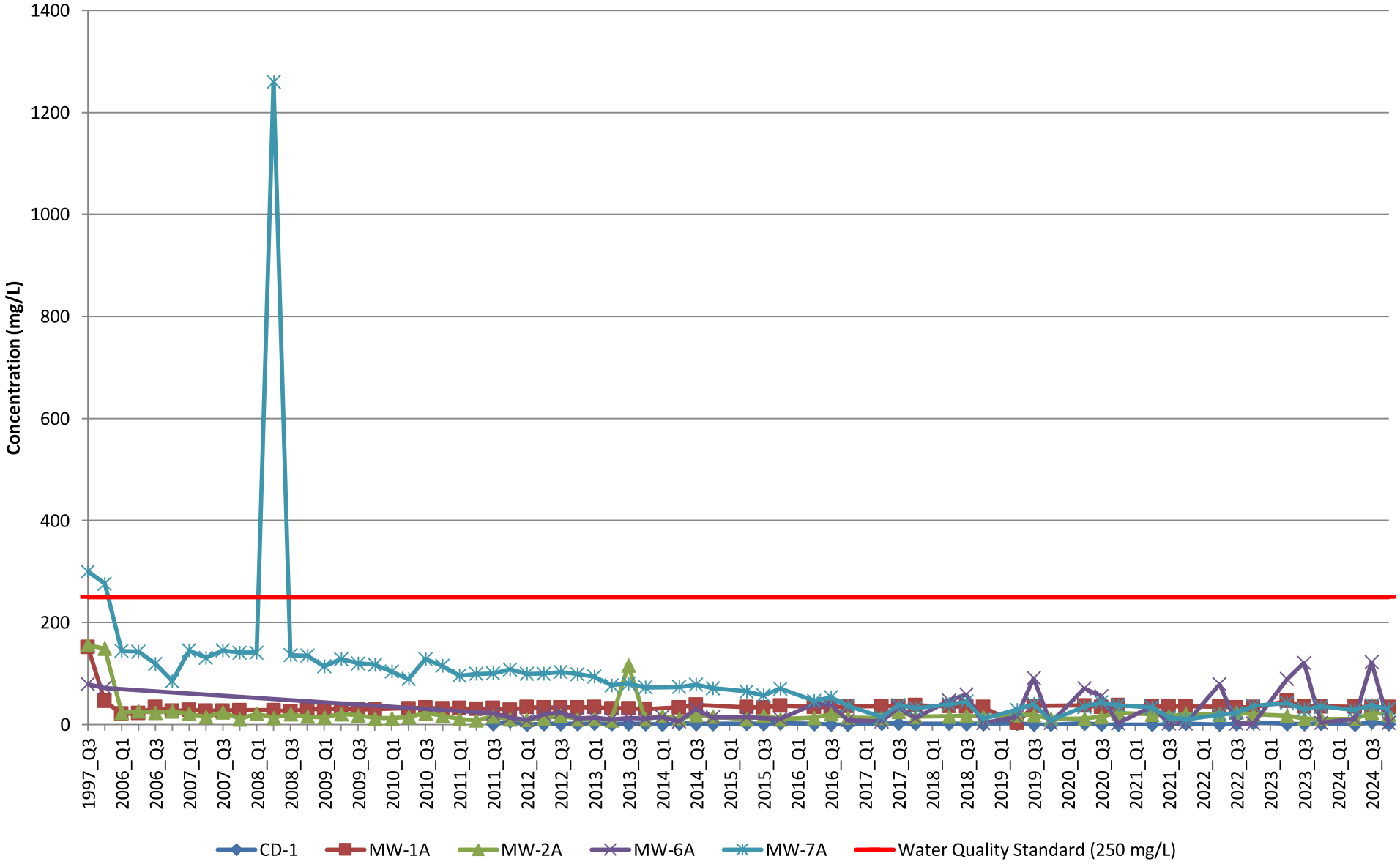


Figure 5

Trend Analysis – Chemical Oxygen Demand in Overburden Wells

Figure 5 - Trend Analysis - Chemical Oxygen Demand in Overburden Wells

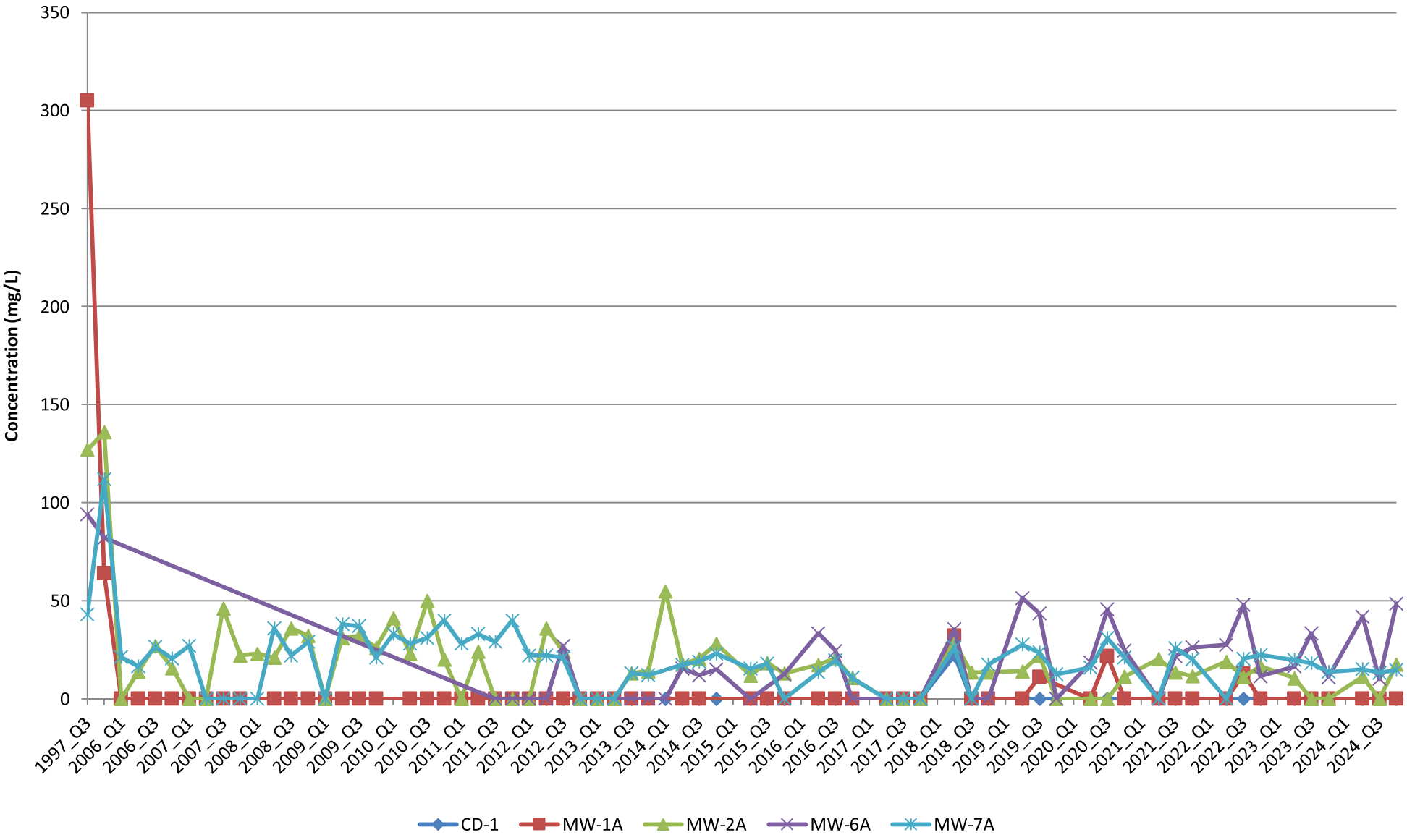


Figure 6

Trend Analysis – Total Dissolved Solids in Overburden Wells

Figure 6 - Trend Analysis - Total Dissolved Solids in Overburden Wells

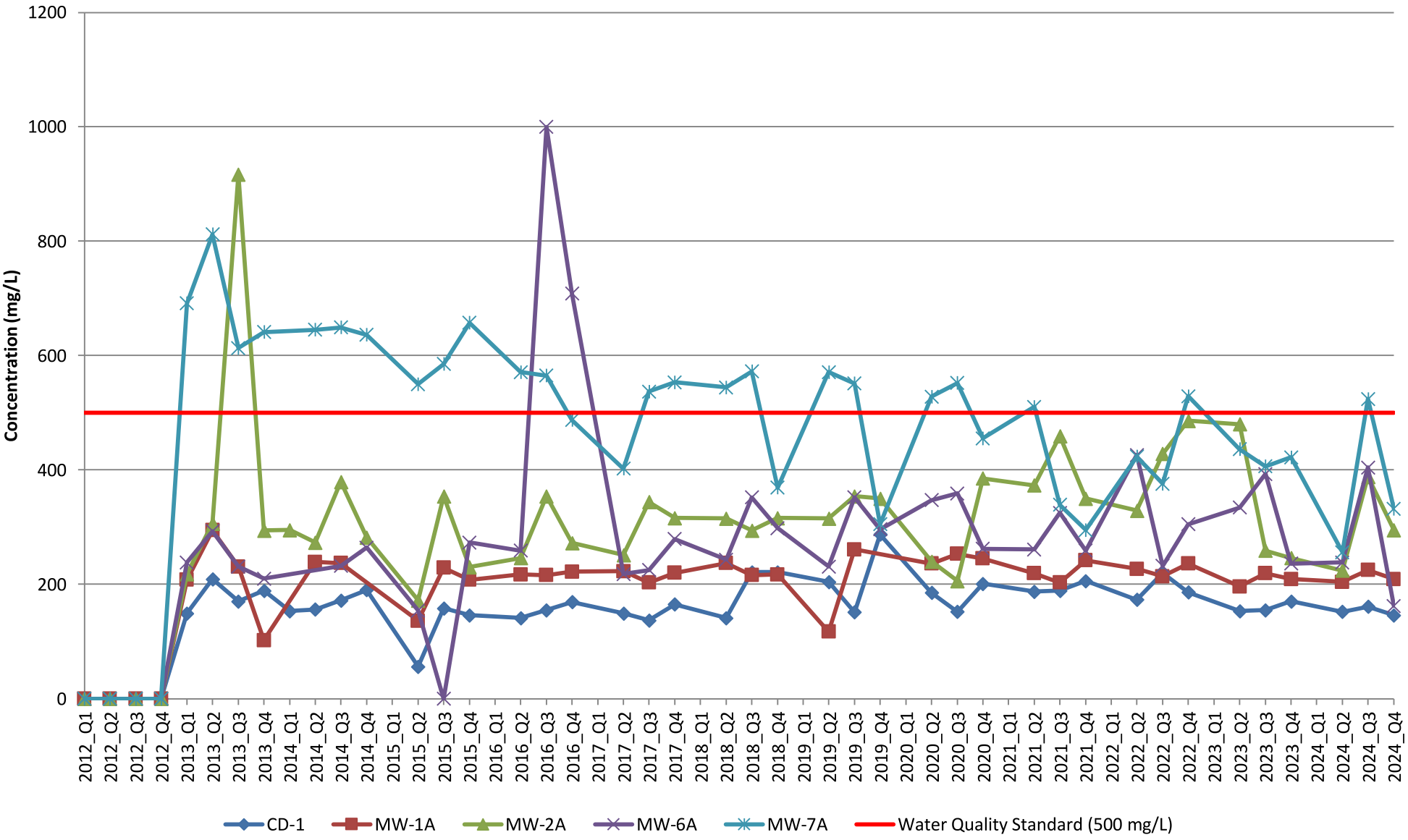


Figure 7

Trend Analysis – Arsenic in Overburden Wells

Figure 7 - Trend Analysis - Arsenic in Overburden Wells

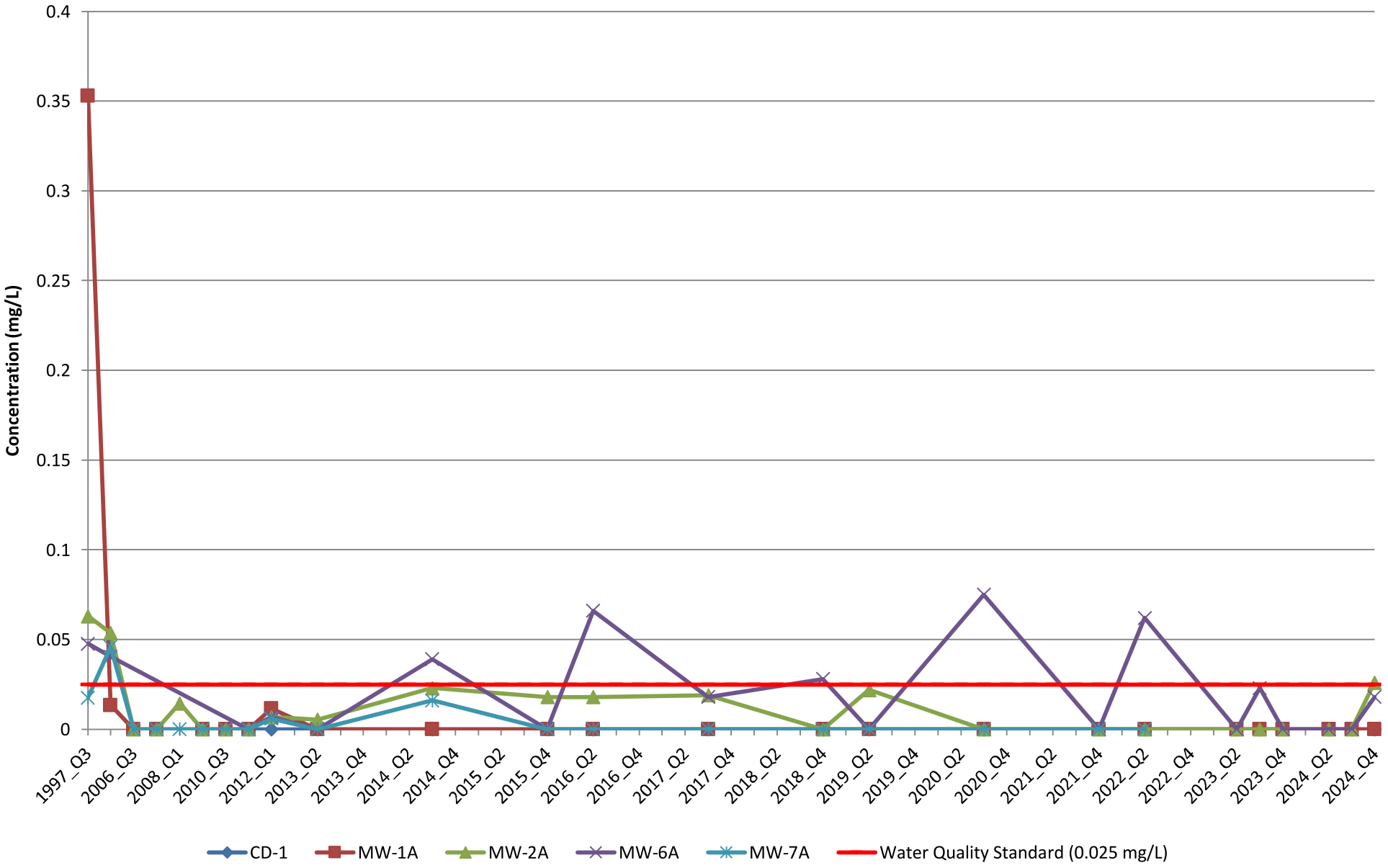


Figure 8

Trend Analysis – Chromium in Overburden Wells

Figure 8 - Trend Analysis - Chromium in Overburden Wells

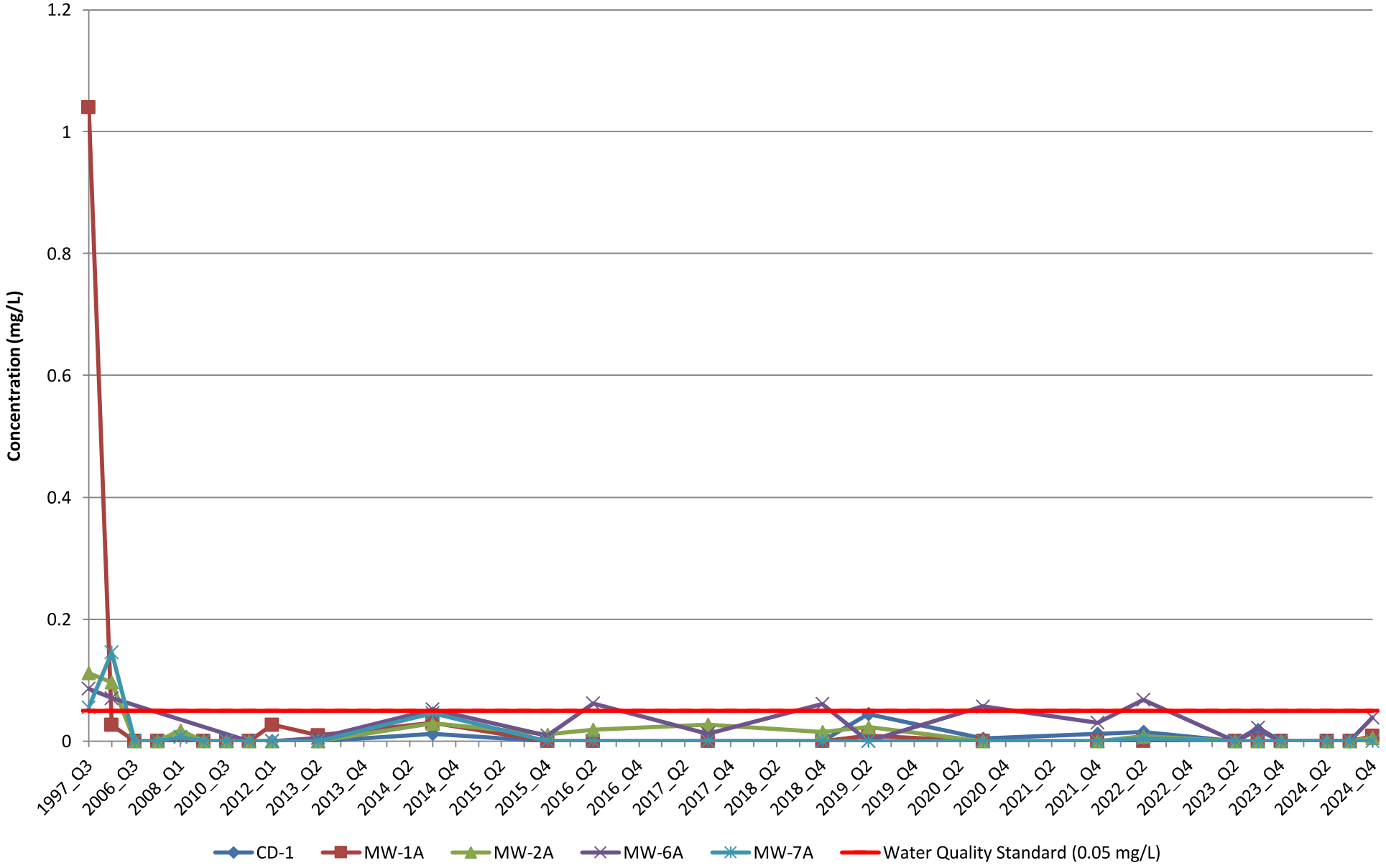


Figure 9

Trend Analysis – Copper in Overburden Wells

Figure 9 - Trend Analysis - Copper in Overburden Wells

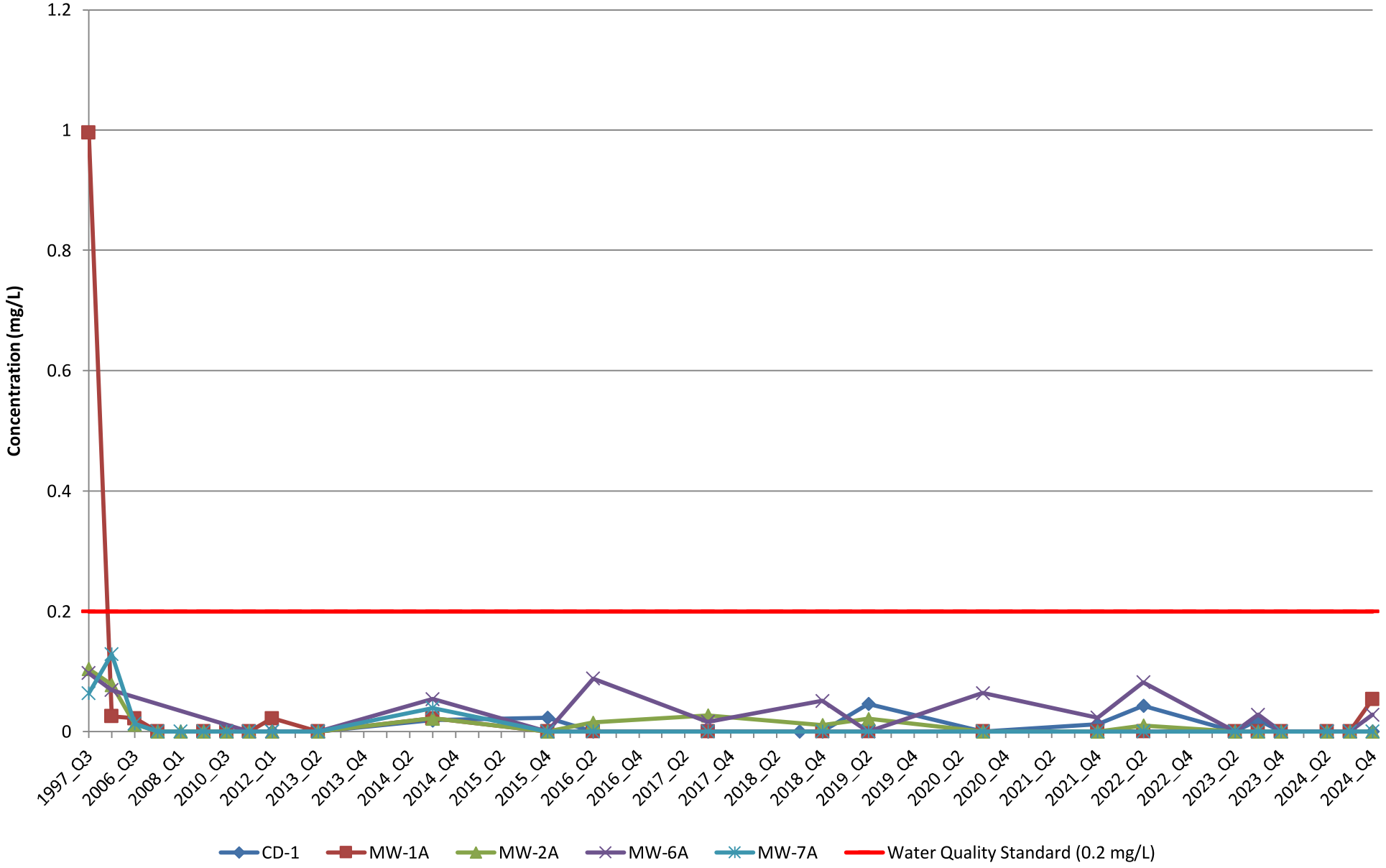


Figure 10

Trend Analysis – Lead in Overburden Wells

Figure 10 - Trend Analysis - Lead in Overburden Wells

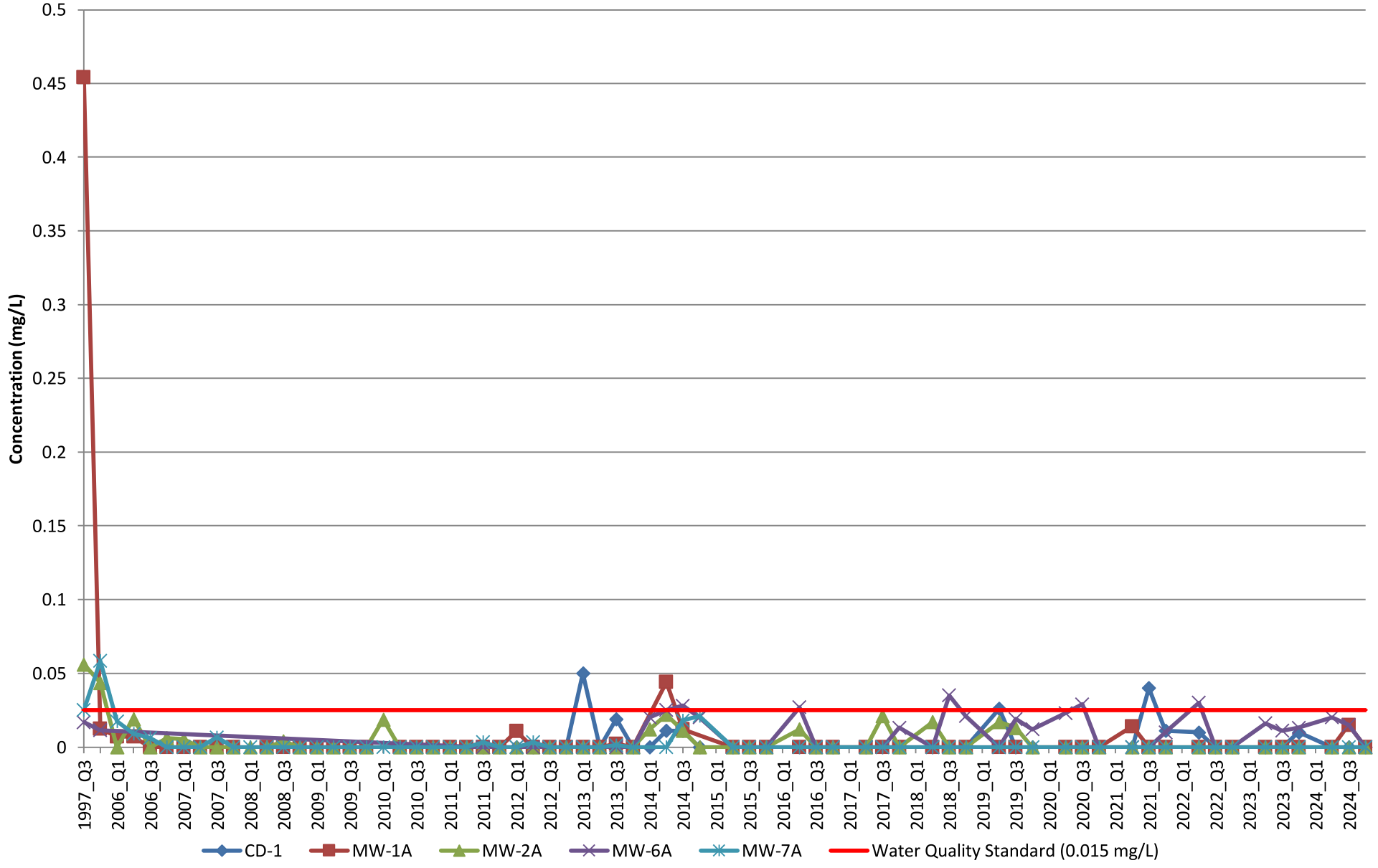


Figure 11

Trend Analysis – Manganese in Overburden Wells

Figure 11 - Trend Analysis - Manganese in Overburden Wells

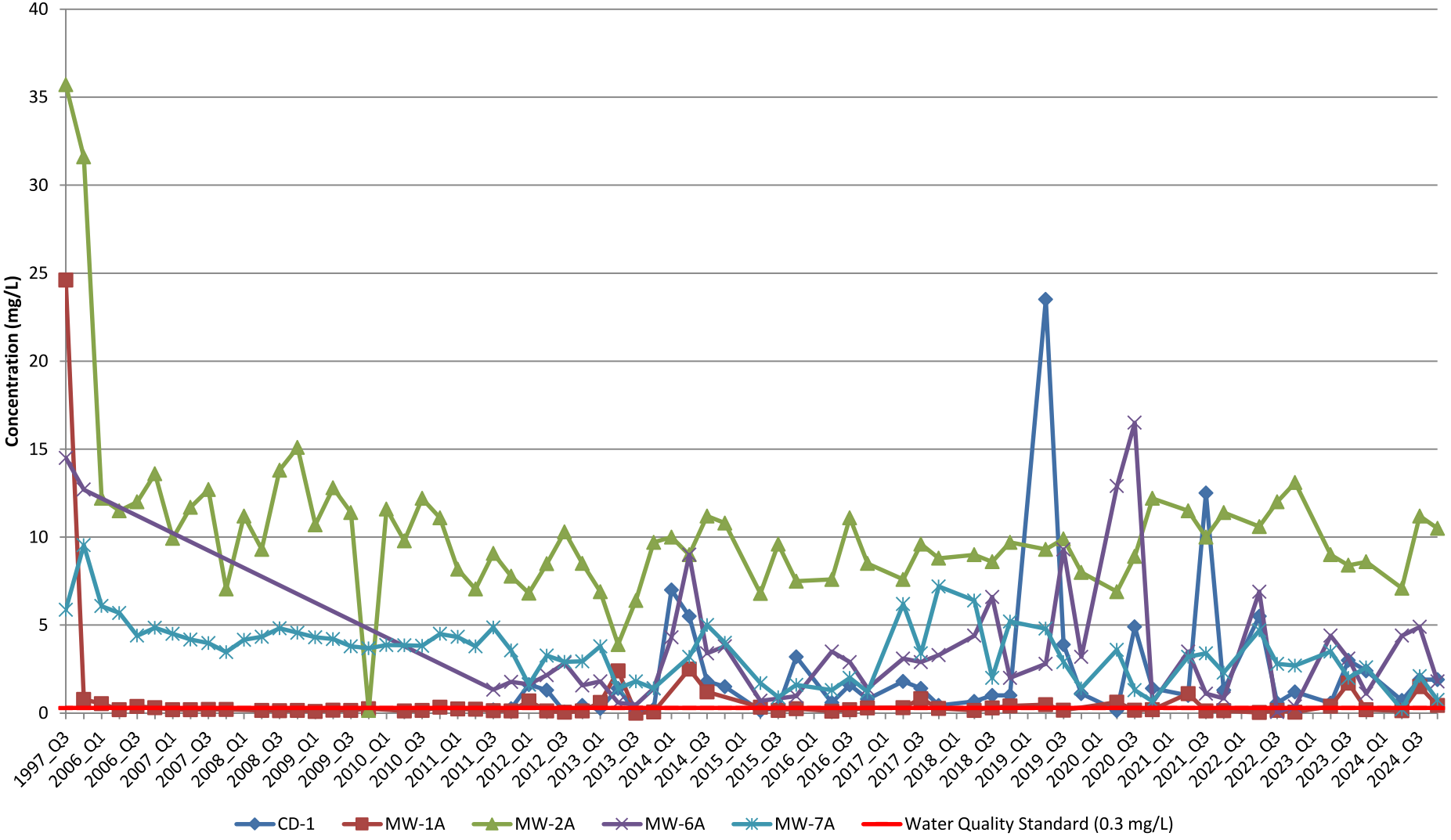


Figure 12

Trend Analysis – Zinc in Overburden Wells

Figure 12 - Trend Analysis - Zinc in Overburden Wells

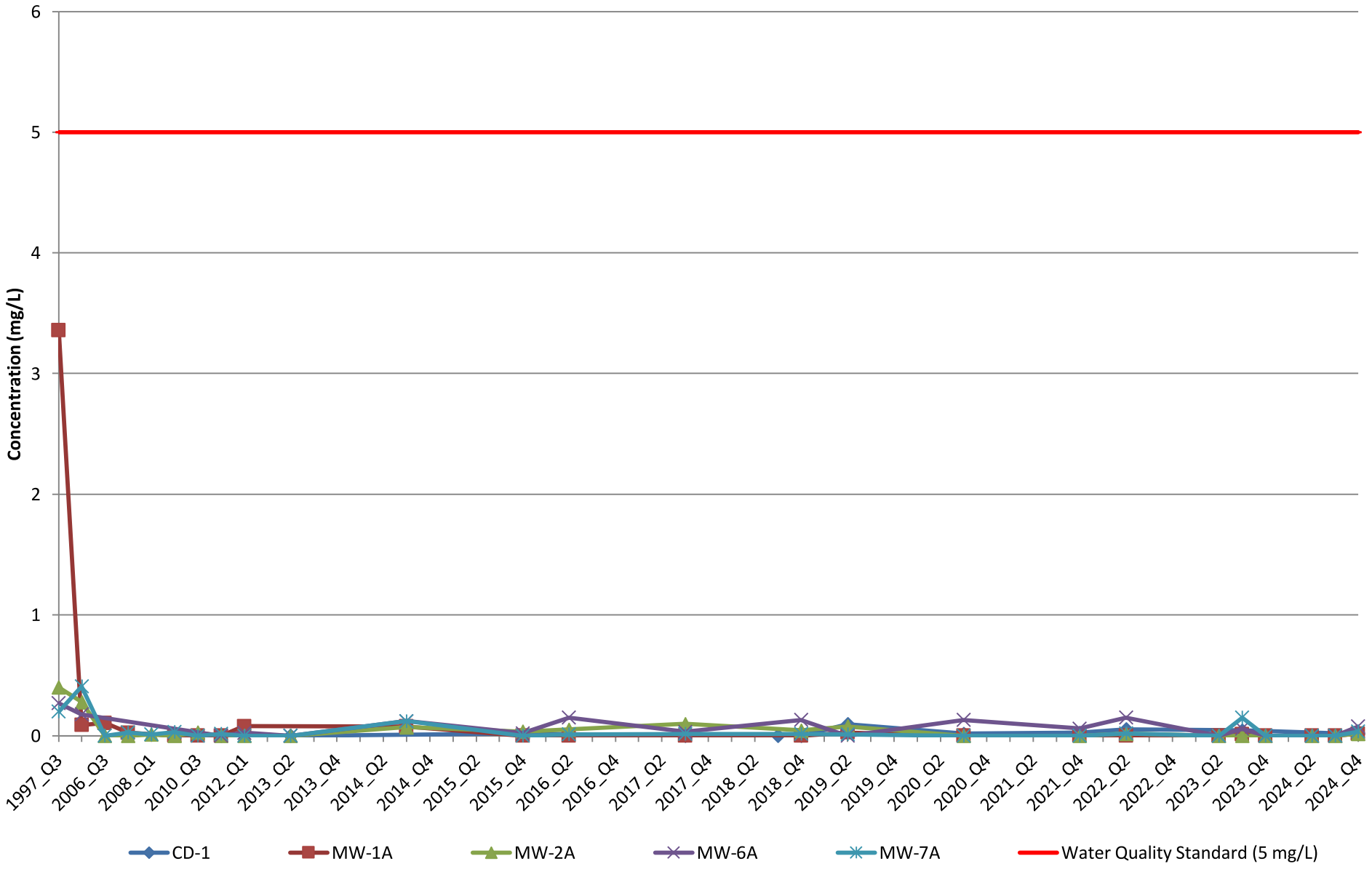


Figure 13

Trend Analysis – Phenol in Overburden Wells

Figure 13 - Trend Analysis - Phenol in Overburden Wells

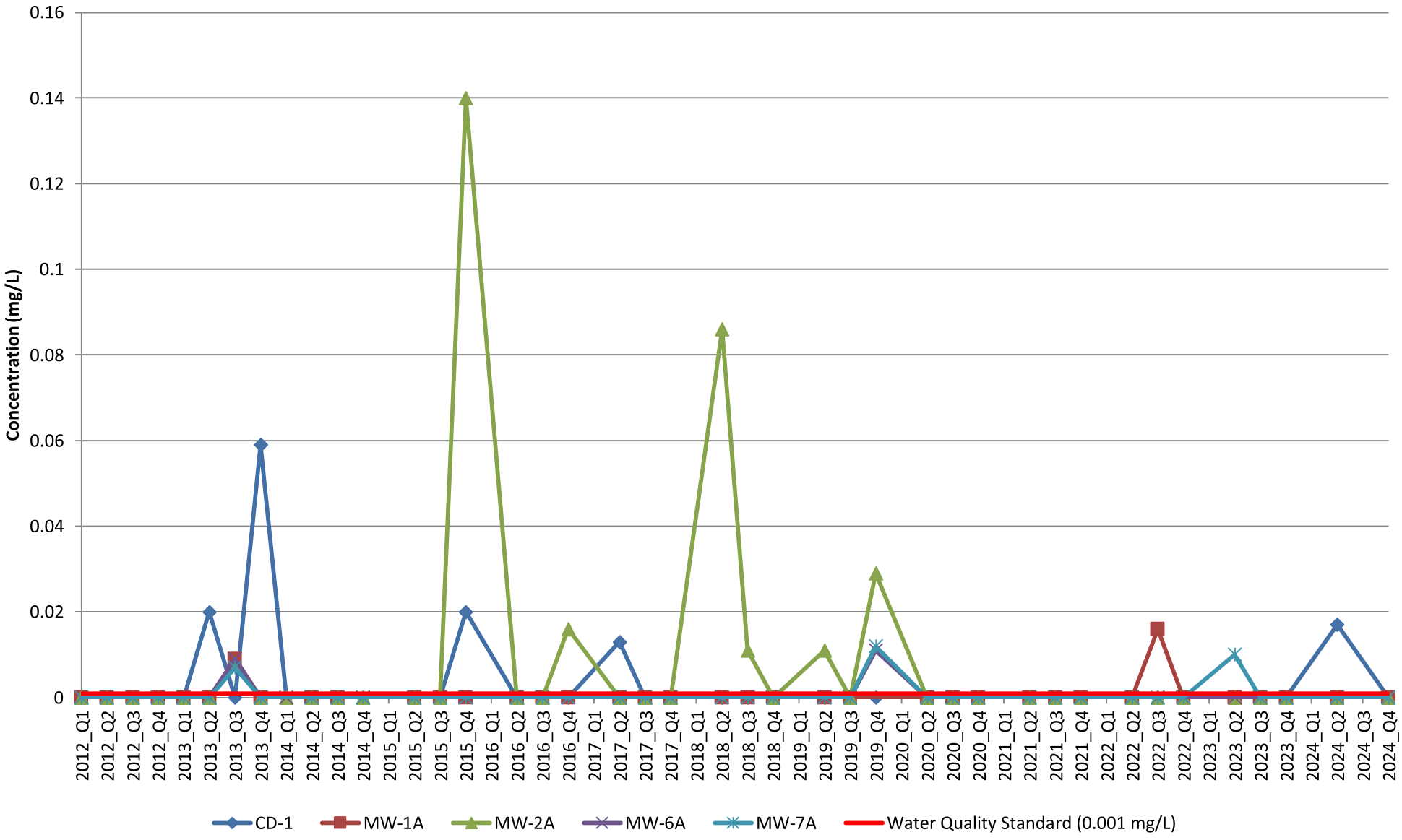


Figure 14

Trend Analysis – Ammonia in Bedrock Wells

Figure 14 - Trend Analysis - Ammonia in Bedrock Wells

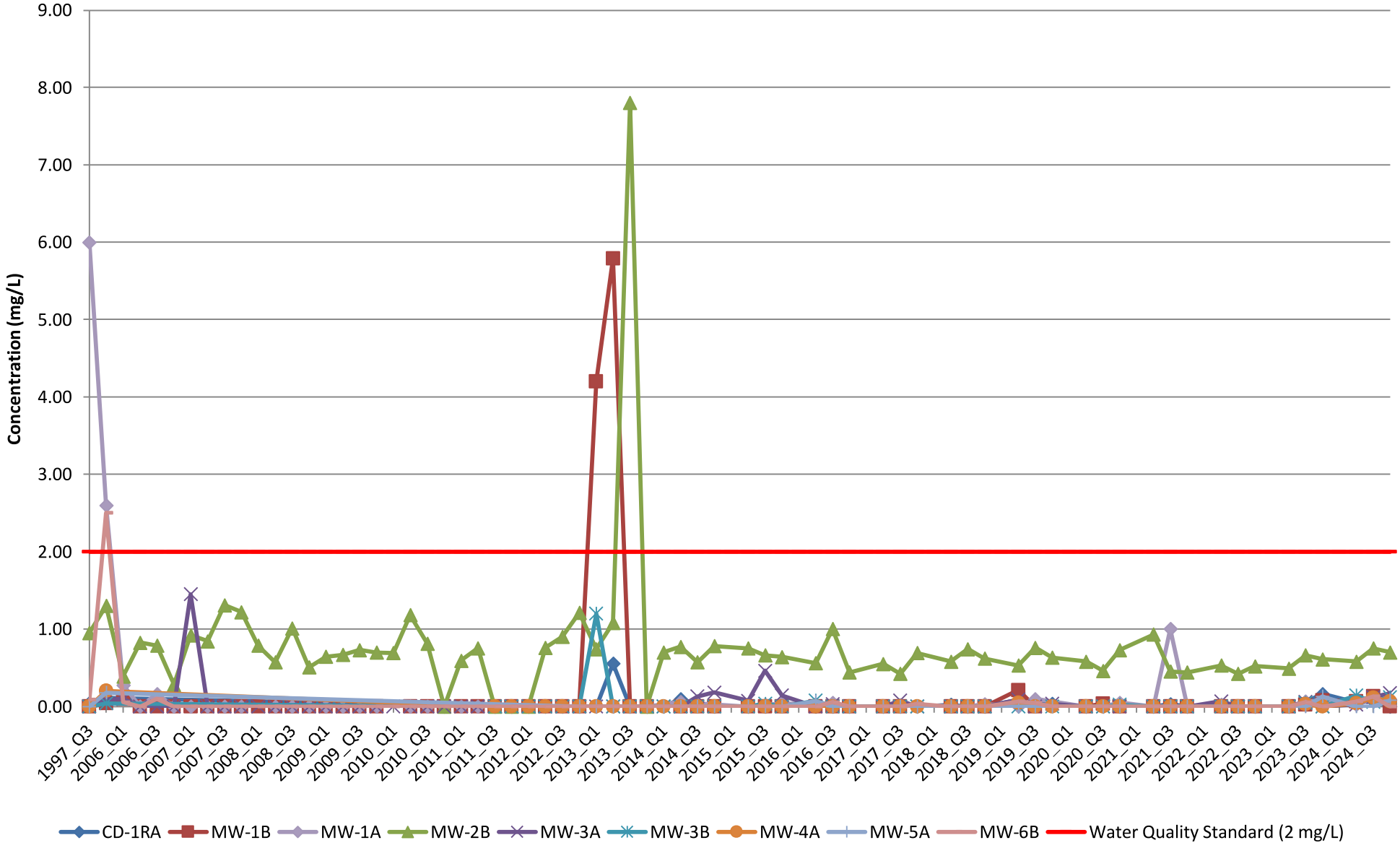


Figure 15

Trend Analysis – Chloride in Bedrock Wells

Figure 15 - Trend Analysis - Chloride in Bedrock Wells

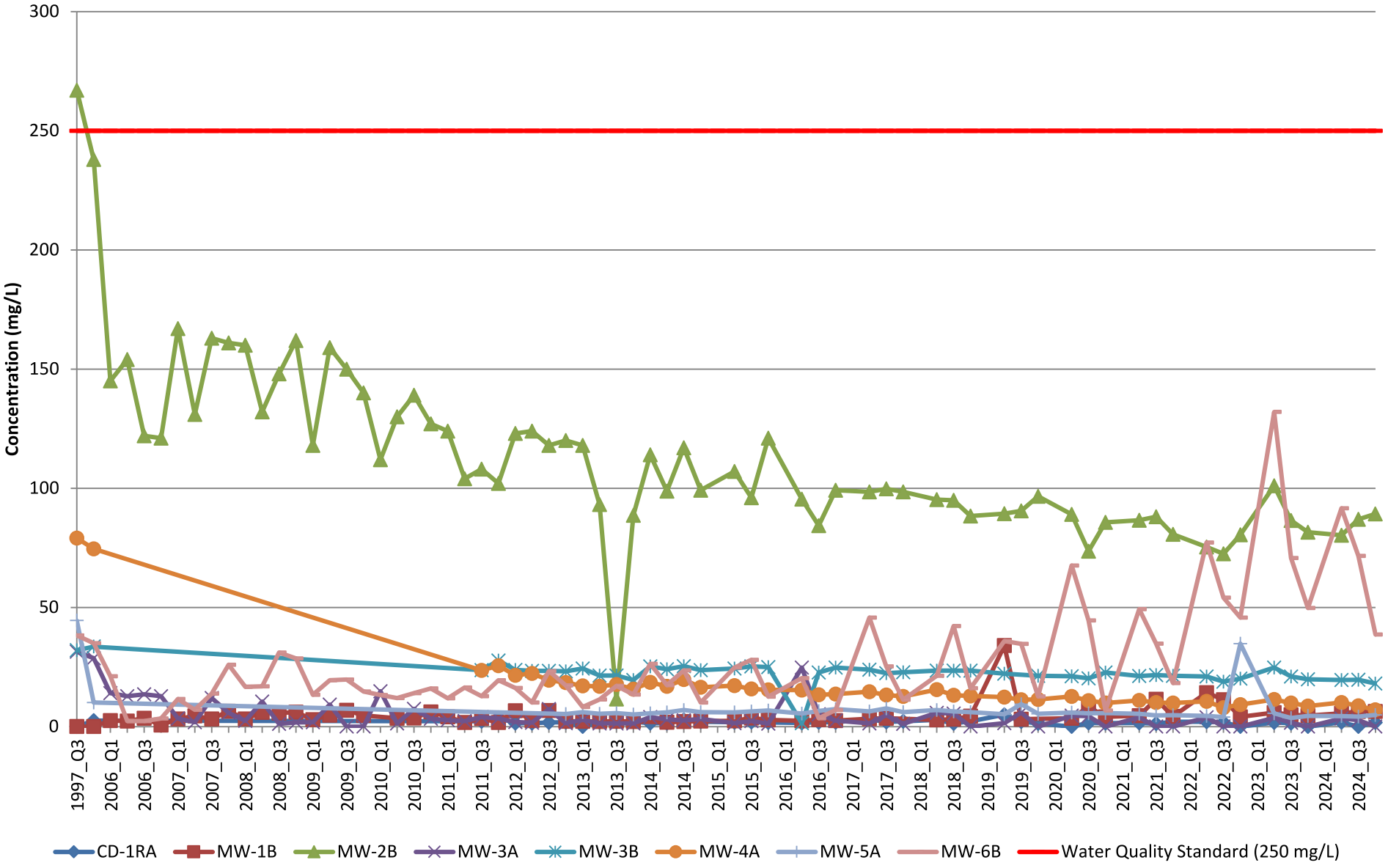


Figure 16

Trend Analysis – Chemical Oxygen Demand in Bedrock Wells

Figure 16 - Trend Analysis - Chemical Oxygen Demand in Bedrock Wells

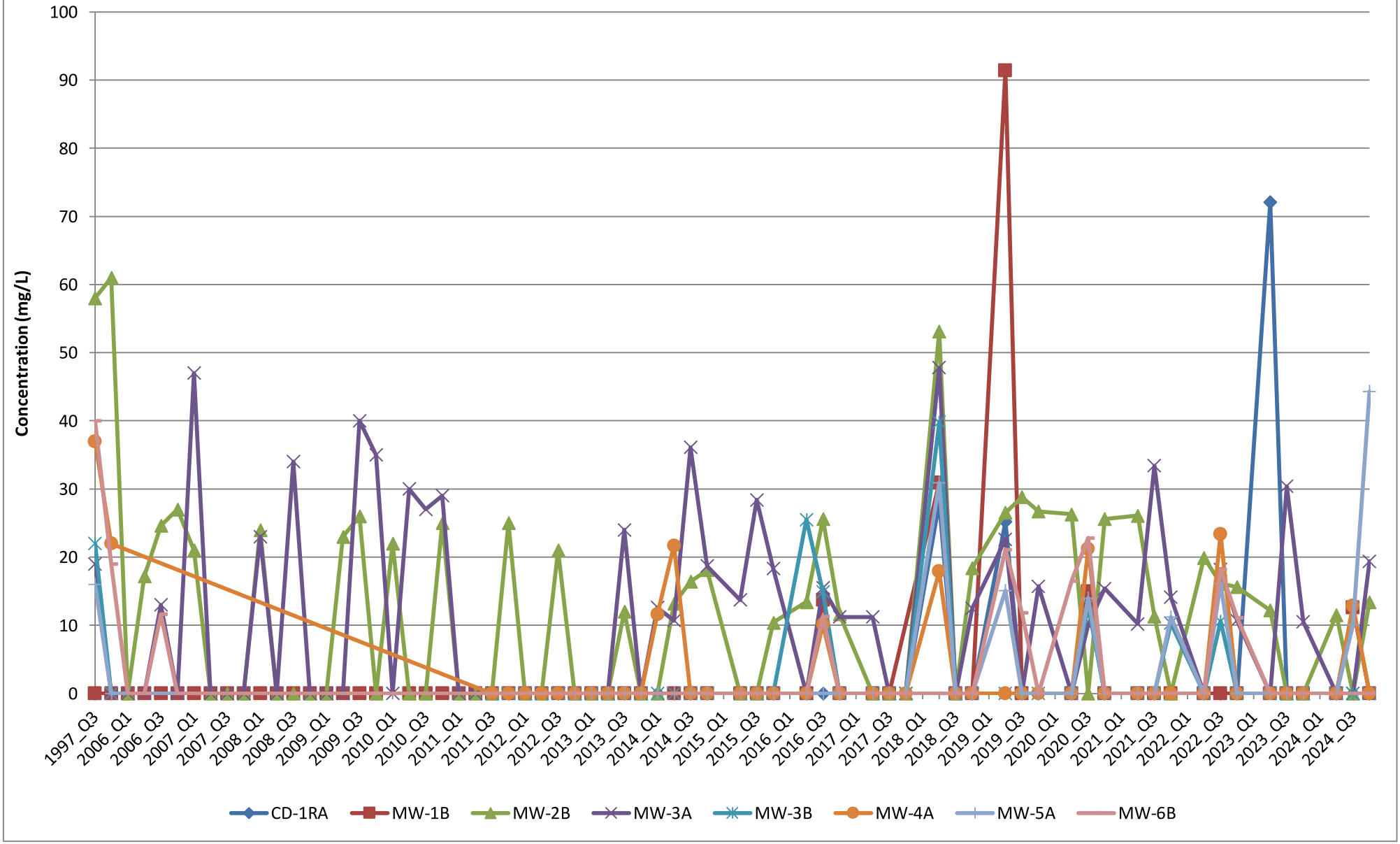


Figure 17

Trend Analysis – Total Dissolved Solids in Bedrock Wells

Figure 17 - Trend Analysis - Total Dissolved Solids in Bedrock Wells

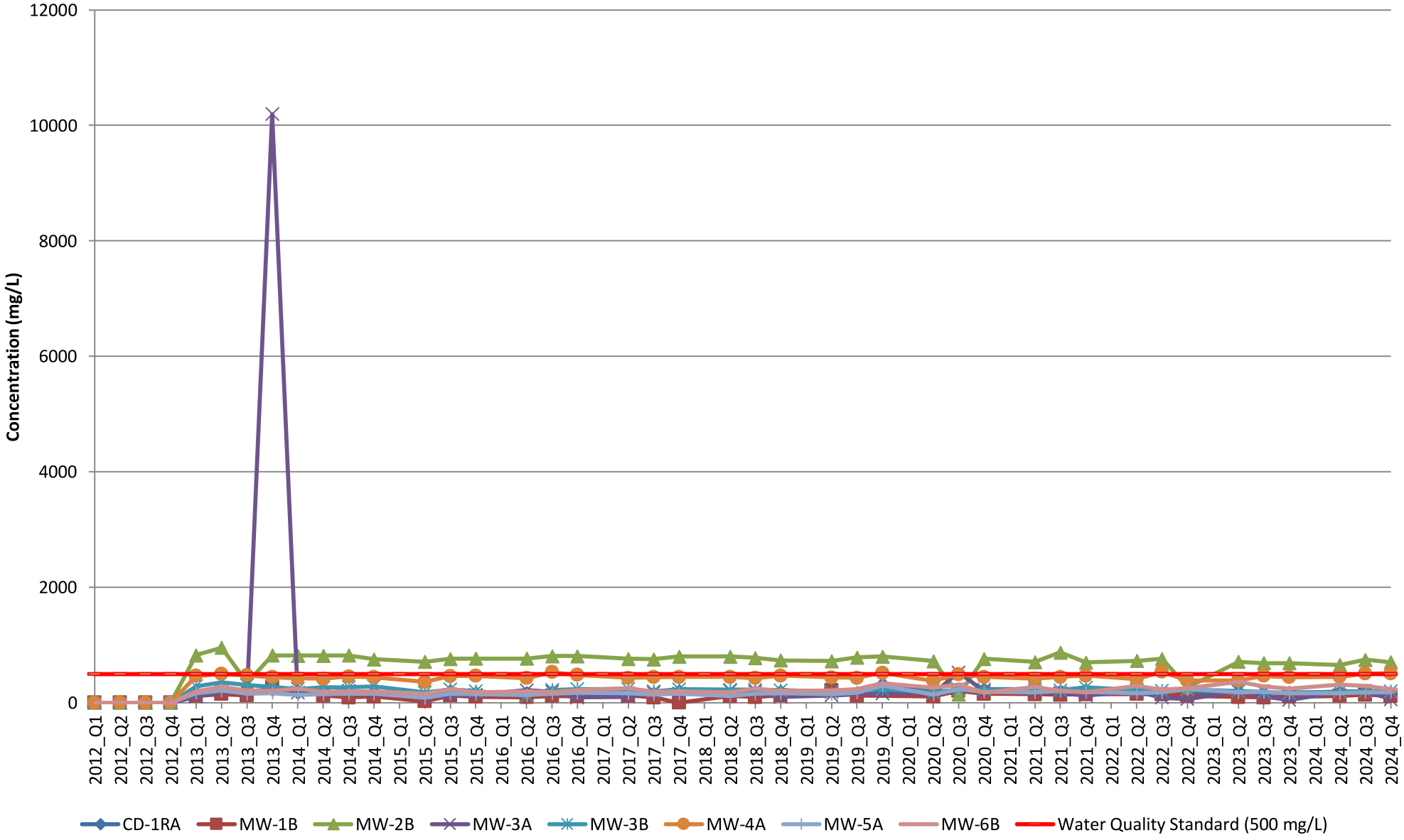


Figure 18

Trend Analysis – Arsenic in Bedrock Wells

Figure 18 - Trend Analysis - Arsenic in Bedrock Wells

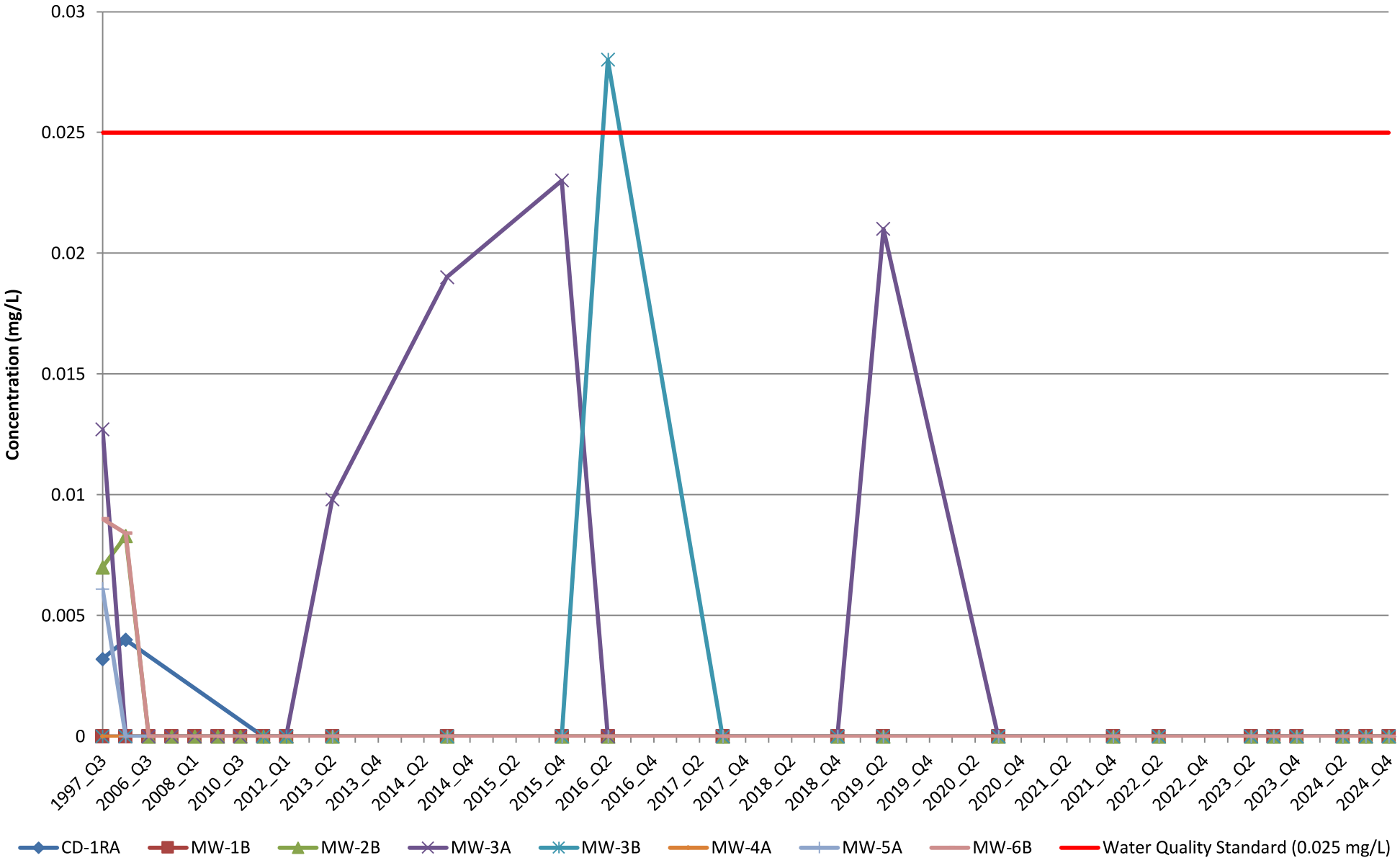


Figure 19

Trend Analysis – Chromium in Bedrock Wells

Figure 19 - Trend Analysis - Chromium in Bedrock Wells

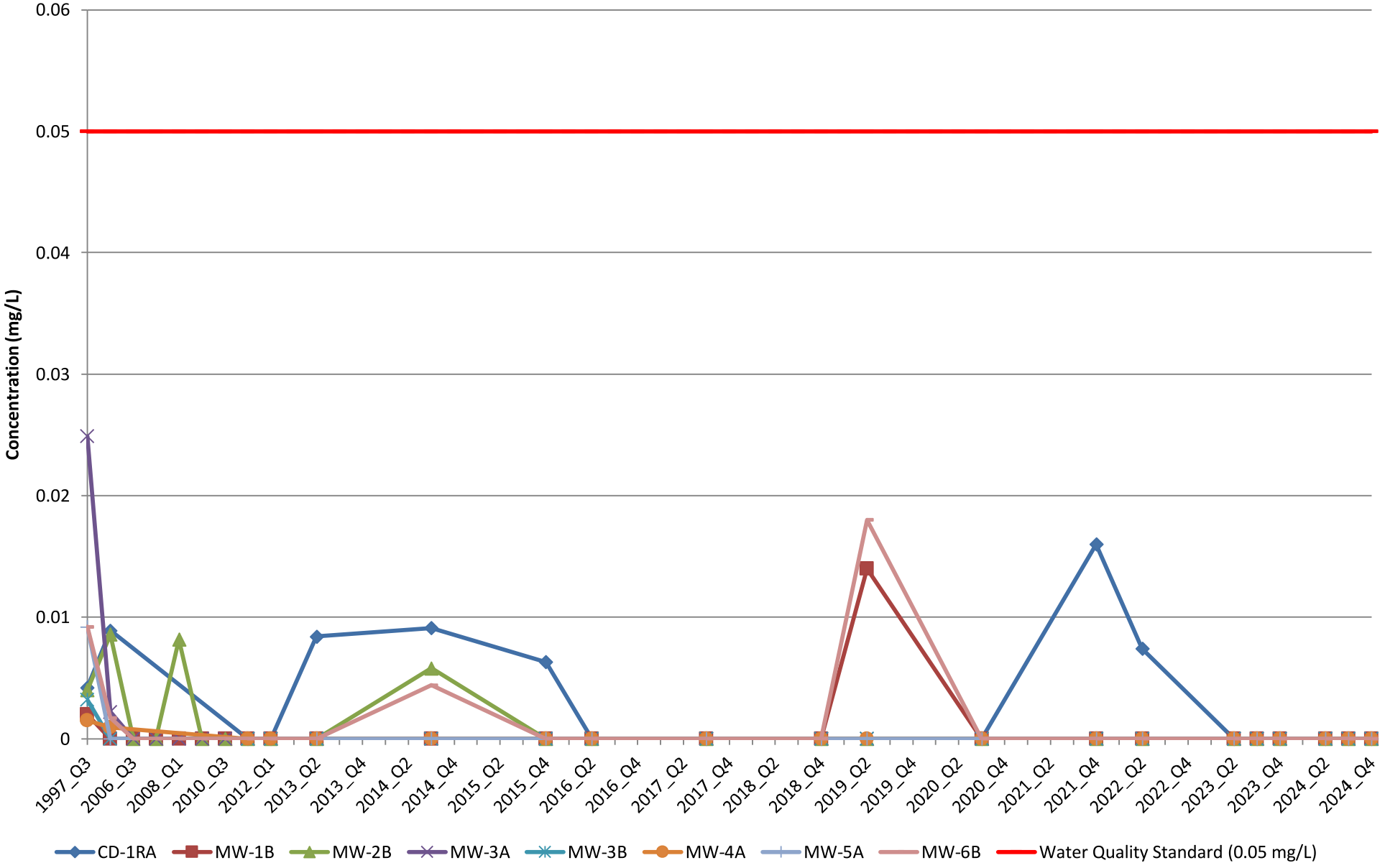


Figure 20

Trend Analysis – Copper in Bedrock Wells

Figure 20 - Trend Analysis - Copper in Bedrock Wells

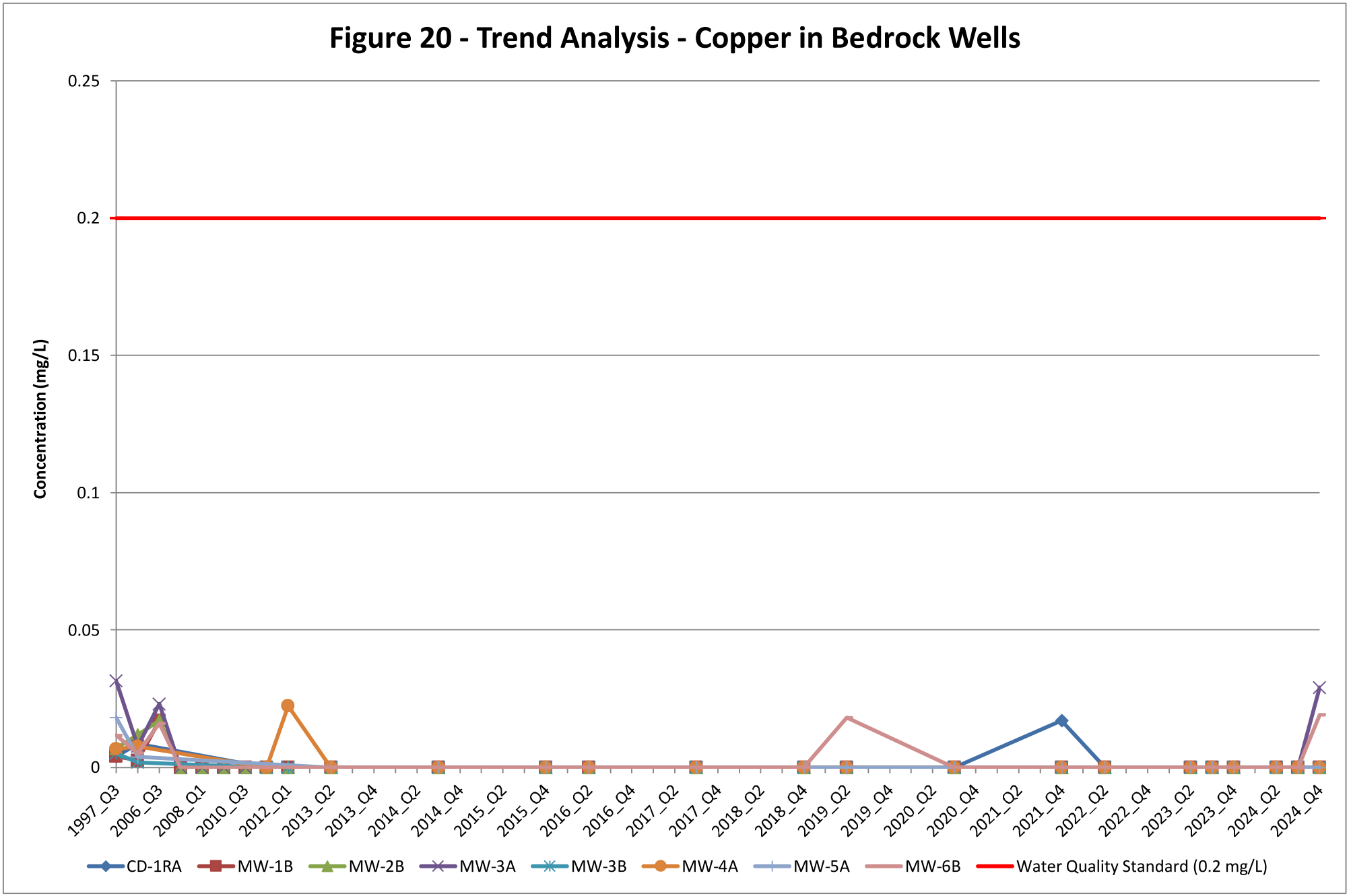


Figure 21

Trend Analysis – Lead in Bedrock Wells

Figure 21 - Trend Analysis - Lead in Bedrock Wells

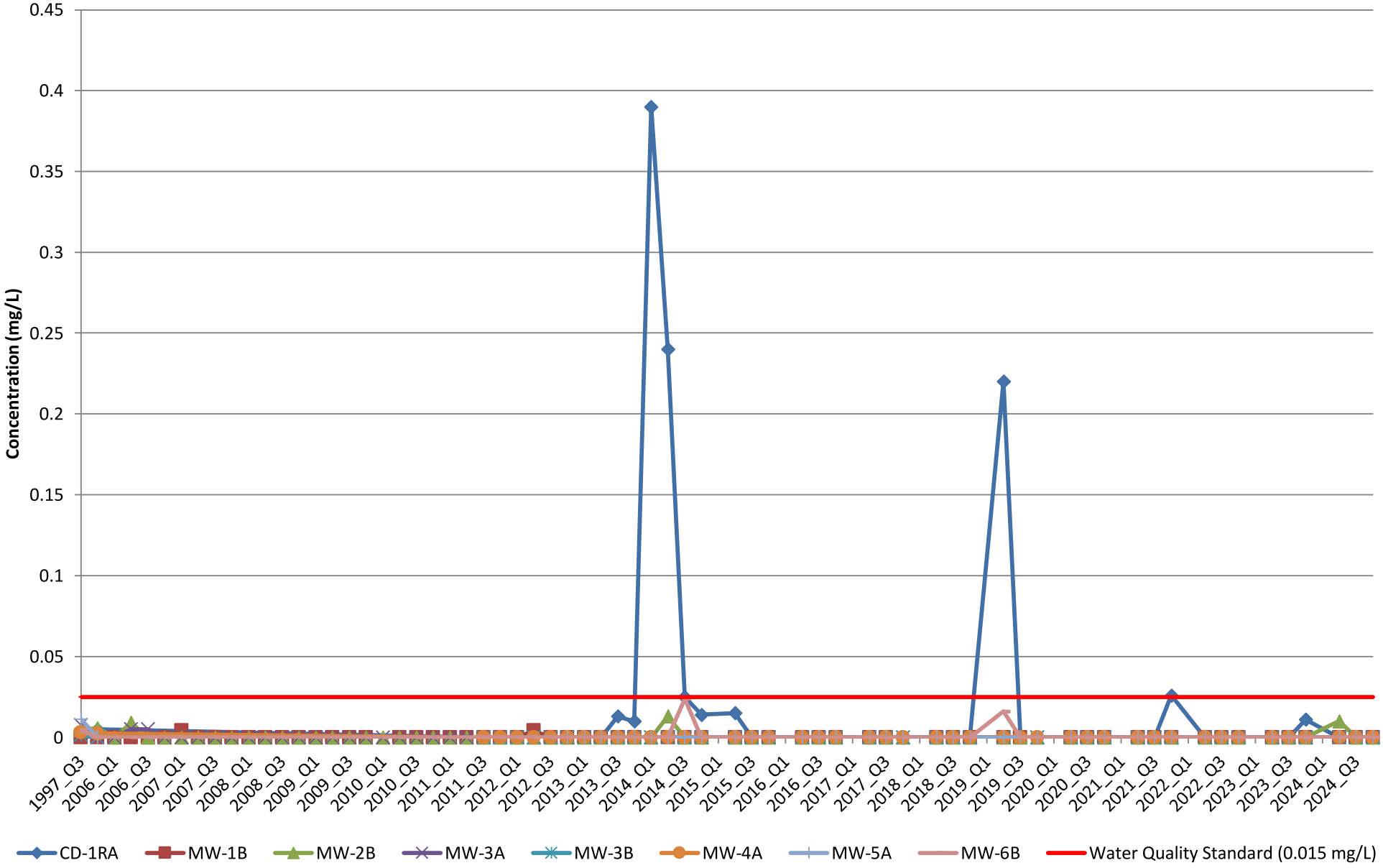


Figure 22

Trend Analysis – Manganese in Bedrock Wells

Figure 22 - Trend Analysis - Manganese in Bedrock Wells

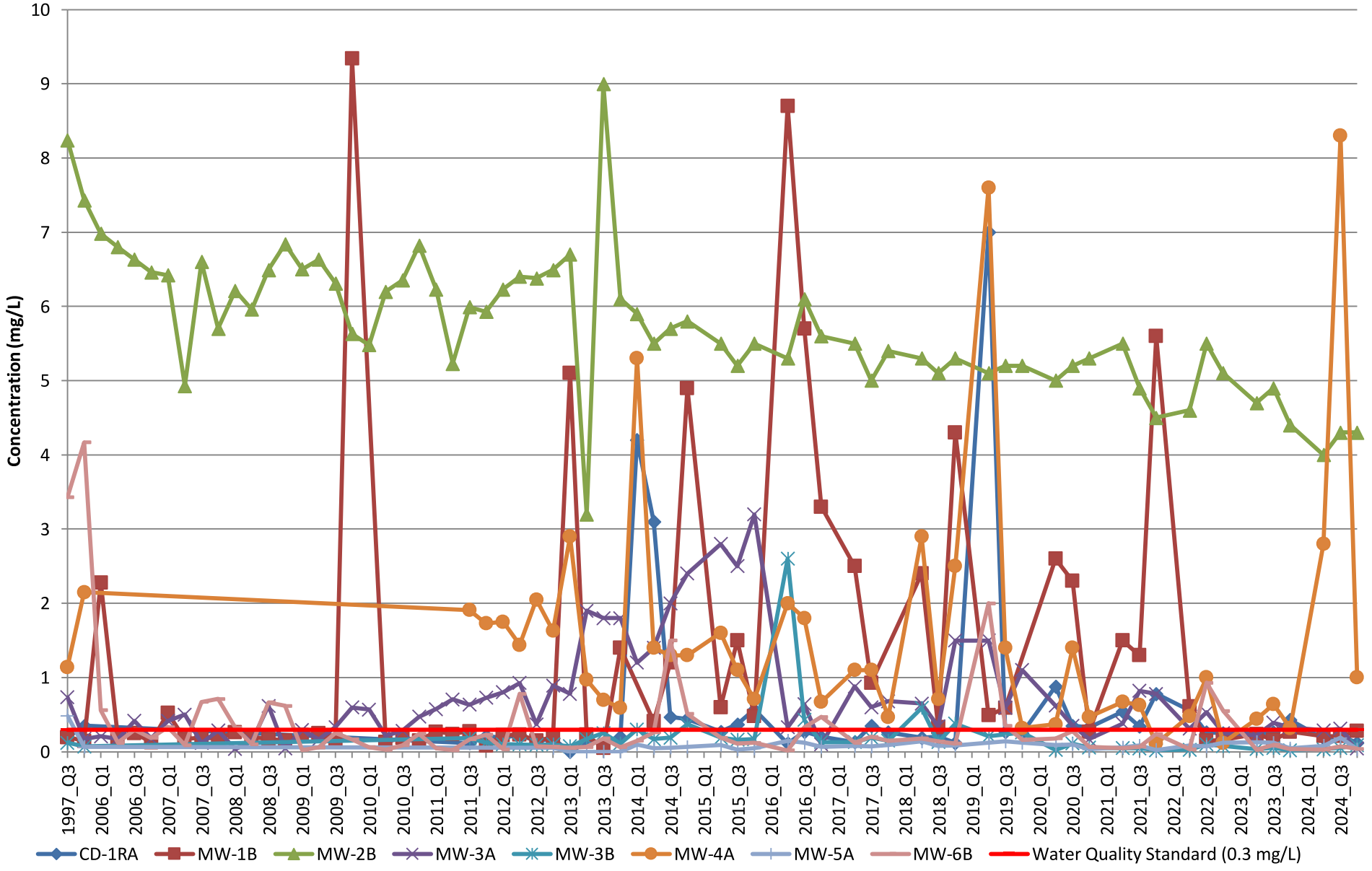


Figure 23

Trend Analysis – Zinc in Bedrock Wells

Figure 23 - Trend Analysis - Zinc in Bedrock Wells

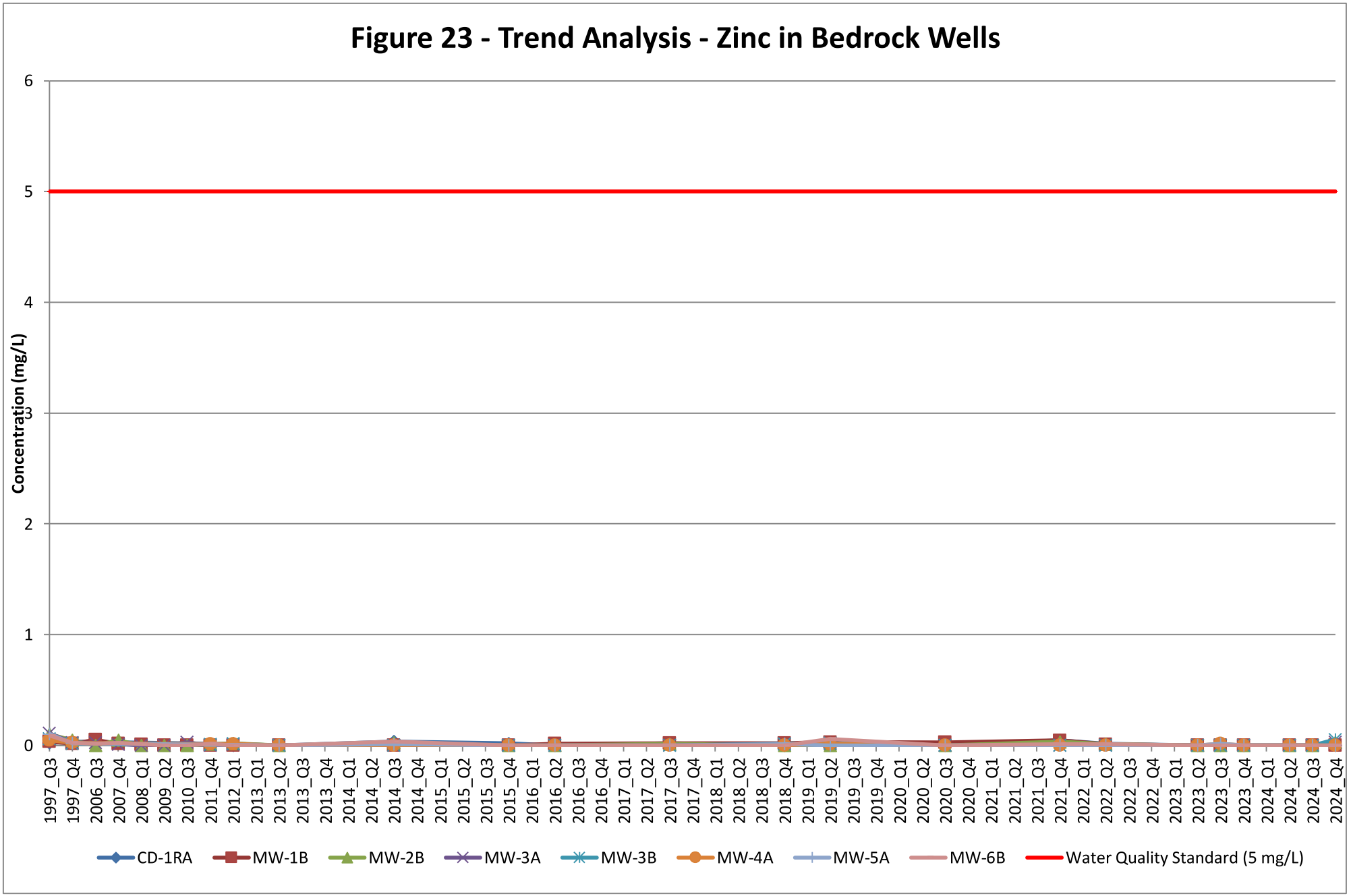


Figure 24

Trend Analysis – Phenol in Bedrock Wells

Figure 24 - Trend Analysis - Phenol in Bedrock Wells

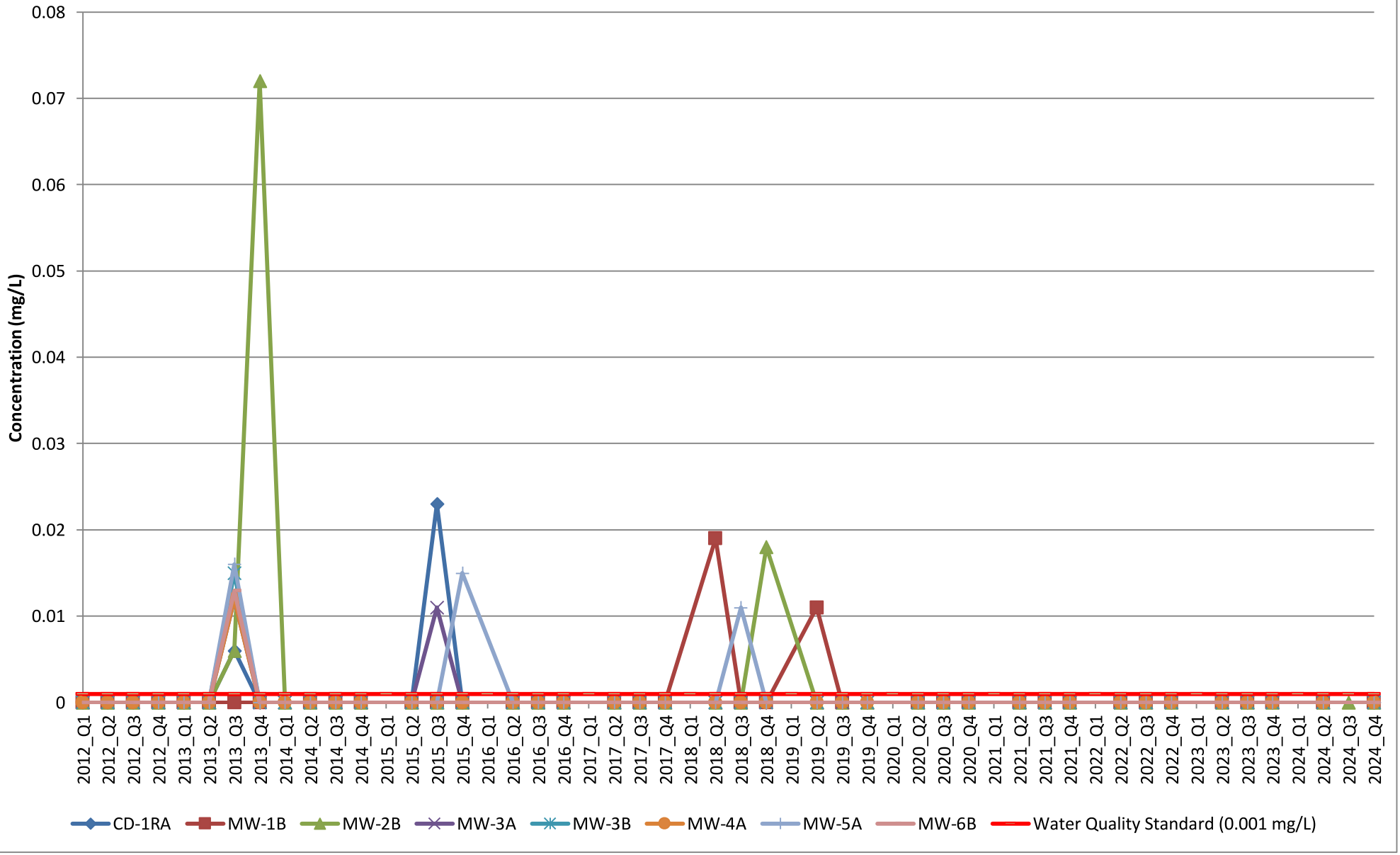


Figure 25

Trend Analysis – cis-1,2-Dichloroethene in Contingency Wells

Figure 25 - Trend Analysis - cis-1,2-Dichloroethene in Contingency Wells

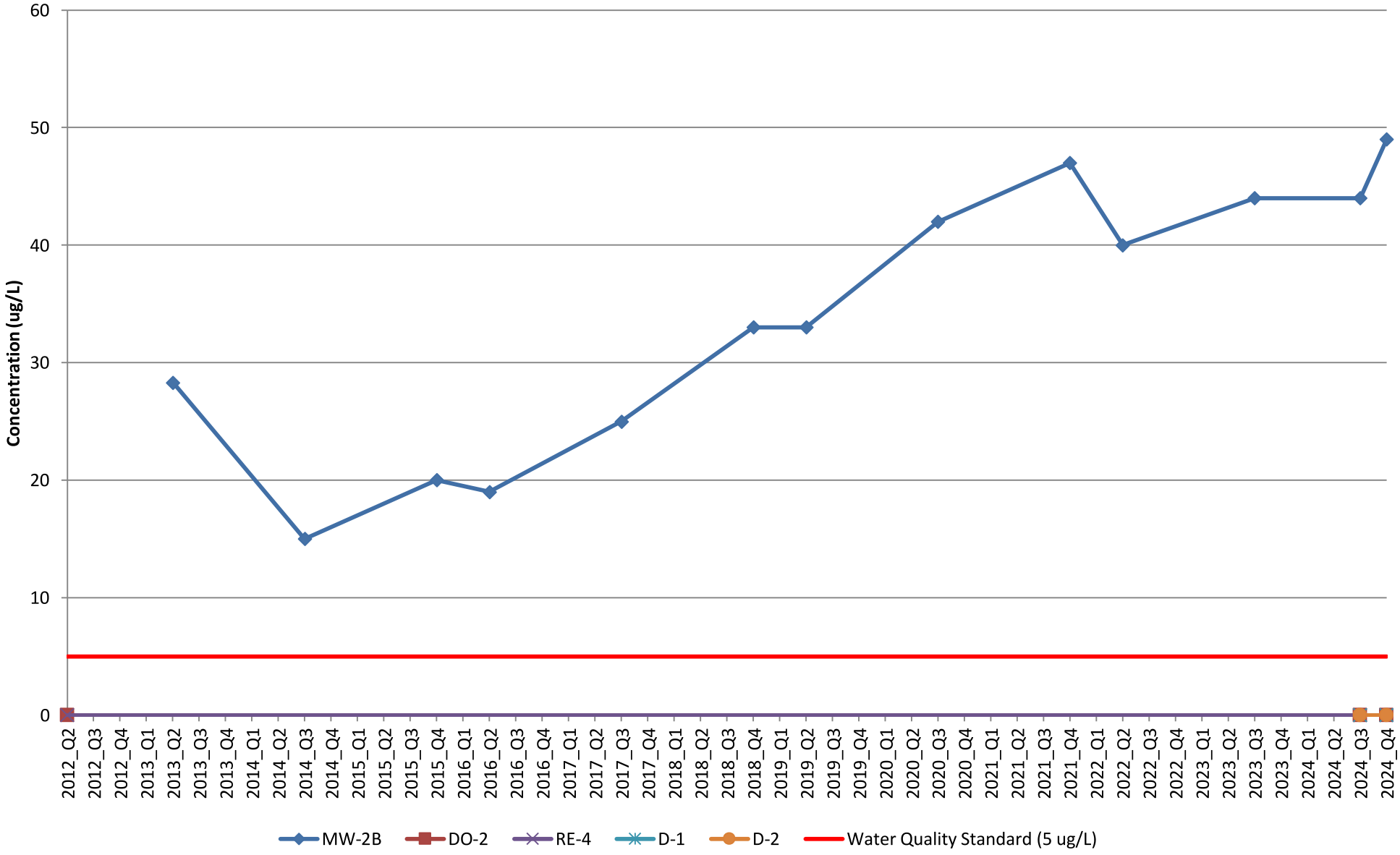


Figure 26

Trend Analysis – Chloroethane in Contingency Wells

Figure 26 - Trend Analysis - Chloroethane in Contingency Wells

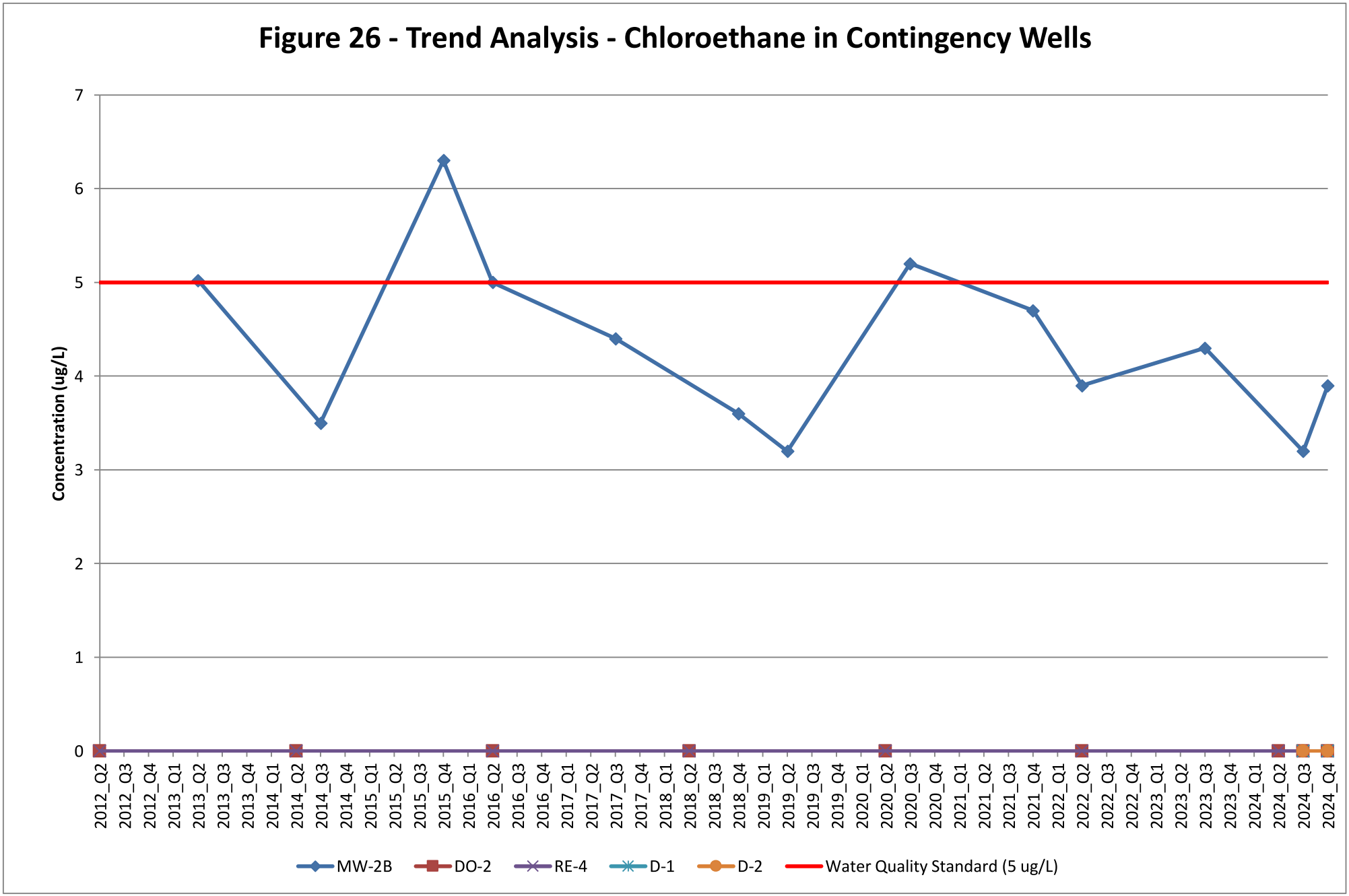


Figure 27

Trend Analysis – Vinyl Chloride in Contingency Wells

Figure 27 - Trend Analysis - Vinyl Chloride in Contingency Wells

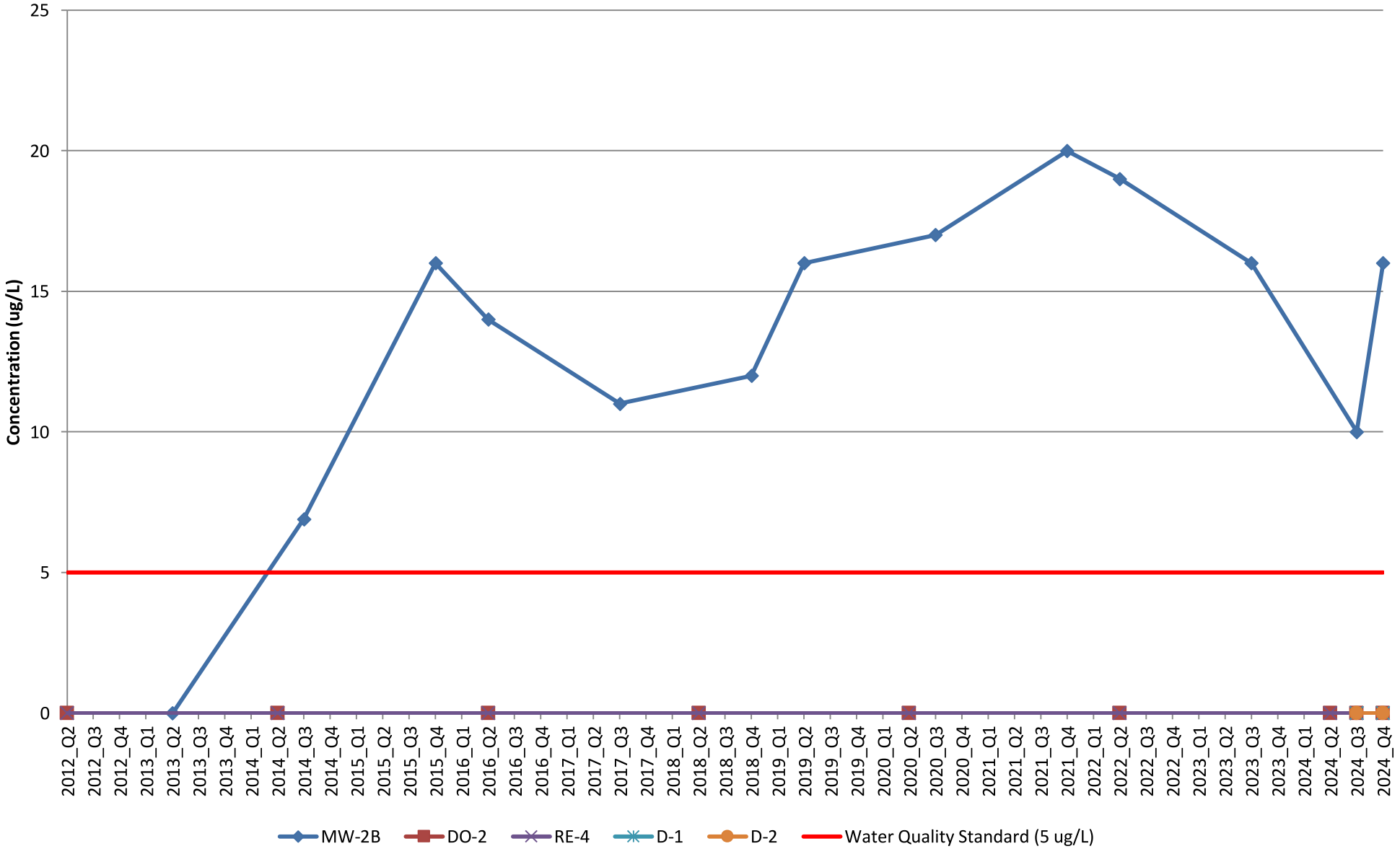
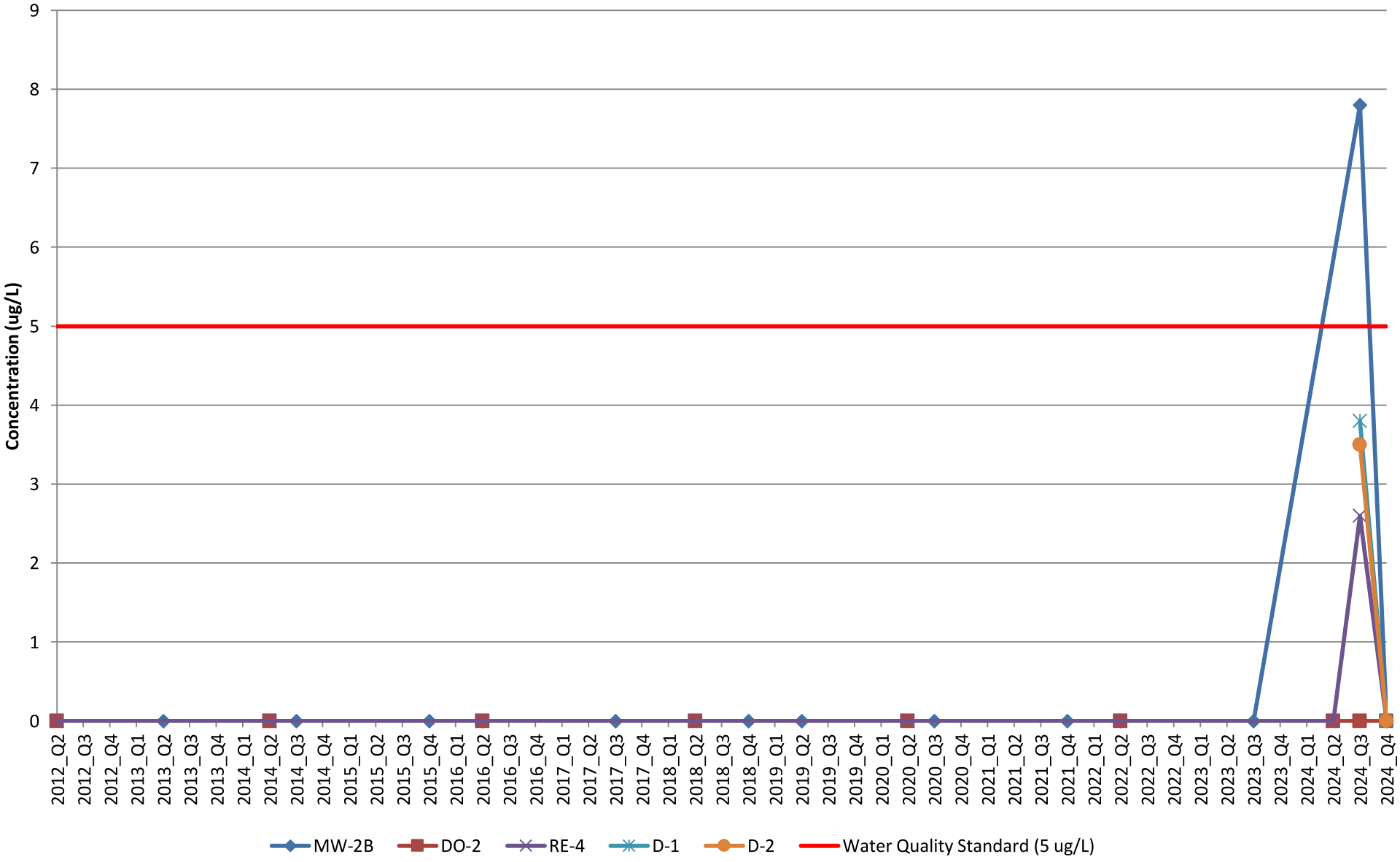


Figure 28

Trend Analysis – Methylene Chloride in Contingency Wells

Figure 28 - Trend Analysis - Methylene Chloride in Contingency Wells



Attachments

Attachment A

Landfill Inspection Form

Towslee Landfill Routine Inspection

Inspection Date 12/11/2024 **Quarter** 4 **Reported by** P. Reidy

A formal inspection was not conducted at Towslee Landfill during Q4 of 20024. The following are observations made during sampling of wells in Quarter 4.

Site Security - Access controlled? Perimeter fencing?

Towslee Landfill is part of a much larger County property. This property is not fully enclosed with a perimeter fence. It is, however, very isolated. The only access by road is access-restricted, with a lockable gate that is locked except during hours of operation. Entrance to the landfill is visually monitored by staff at the scalehouse.

Monitoring Wells - Wells identified? Wells locked? Surface sealed?

All wells, or at least one well of each well pair, is identified with a metal sign. All wells have caps. They are not usually locked. Wells are in generally good condition, and surface seals appear to be functioning properly.

Cap System - Cracking in cover soils?

Observations of the cap during sampling indicate the cover is in good condition, with a healthy, thick grass cover.

Settlement in cover soils?

No settlement was observed.

Erosion or loss of vegetation in the cover soils?

No erosion or loss of vegetation was observed.

Mowed biannually?

The entire landfill was mowed and no woody vegetation was observed. The current mowing schedule is once per year.

Drainage System - Is there any erosion of the ground surface in the area of the toe of slope where water discharges from the soil drainage layer?

There were no obvious signs of erosion at the toe of the slope.

Are all perimeter swales, downchutes and culverts performing properly?

The southern downchute and all swales and culverts appear to be functioning properly.

Gas Venting System - Is there any physical damage or plugging of the vents?

There were no obvious signs of damage to gas vents.

Has there been any settlement in the cap adjacent to the vents?

There were no obvious signs of settlement in the cap.

Vectors - Are there any vectors present on the site?

No vectors were observed.

Access Roads - Are there any signs of erosion or excessive wear?

Access roads were in generally good condition, and fully functional.

Management Recommendations

None at this time.

Date: 5/20/2025 By: Patrick Reidy Agency: Cortland Co SWCD

Attachment B

Environmental Monitoring Reports (Q2 2024, Q3 2024)

Cortland County Soil and Water Conservation District
100 Grange Place, Room 202, Cortland, NY 13045
Phone: (607) 756-5991 Fax: (607) 756-0029
www.cortlandswcd.org

SWCD...established to promote the conservation and wise use of our county's natural resources

May 20, 2025

Stephanie Fitzgerald
NYSDEC - Division of Environmental Remediation
615 Erie Blvd. West
Syracuse, NY 13204-2400

Dear Ms. Fitzgerald:

Enclosed is a REVISED 2024 Quarter 2 Environmental Monitoring Report for Cortland County's Towslee Landfill, also known as the Old Cortland County Landfill. We were advised by Barton & Loguidice that we inadvertently included laboratory reports from the Quarter 3 of 2023 monitoring in the original submittal. Our apologies for any confusion.

Please contact our office at (607) 756-5991 if you have any questions.

Sincerely,

Patrick Reidy
Water Quality Specialist

cc: Charles Sudbrink, Cortland County Highway Dept.
Amanda Barber, SWCD/File

REVISED Environmental Monitoring Report
Towslee Landfill, Cortland County, NY

Quarter 2 of 2024

Revised to include the correct laboratory analytical report in Appendix B

Prepared for

Cortland County Highway Department

By

Cortland County Soil and Water Conservation District

May 20, 2025

TABLE OF CONTENTS

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1. Introduction....1
2. Site History....1
3. Methods....2
4. Groundwater Monitoring Results and Trends....3
5. Landfill Gas Testing....4
6. Quality Control....4

Figures

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Tables

1. Contraventions of Groundwater Quality Standards – Field/Inorganic Parameters
2. Contraventions of Groundwater Quality Standards – Metals

Appendices

A. Field Data Sheets
B. Laboratory Analytical Reports

Section 1. Introduction

Towslee Landfill is approximately 36 acres in size, and is part of a larger solid waste disposal site of 540 acres owned by Cortland County in the Towns of Cortlandville and Solon. The Towslee Landfill has previously been called the Old County Landfill and the Town Line Landfill.
DEC requires environmental monitoring at the landfill. The monitoring follows the Post-Closure Monitoring and Site Maintenance Plan prepared by Barton & Loguidice, D.P.C (B&L) in October, 2002 and revised in June, 2006. Towslee Landfill is required to be monitored during Quarters 2, 3 and 4. Of these three quarters, one quarter is monitored for Baseline parameters and two quarters are monitored for Routine parameters. The Baseline quarter rotates among the three quarters.

This report summarizes Quarter 2 of 2024 (Routine) monitoring activities at the Towslee Landfill, including identification of contraventions of water quality standards, and an evaluation of water quality trends.

Additionally, a Corrective Measures Work Plan (CMWP) has been prepared by Barton & Loguidice, D.P.C. (B&L). The first round of monitoring under this plan was conducted in Quarter 2 of 2024.

The CMWP is intended to evaluate levels of cis-1,2-dichloroethene and vinyl chloride that have been observed in exceedance of NYSDEC groundwater quality standards at Well MW-2B. This well is located directly south, and downgradient, of Towslee Landfill.

Four additional wells are being monitored under the CMWP: two bedrock wells (D-1 and D-2), and two overburden wells (DO-2 and RE-4). All four wells are downgradient of MW-2B. The overburden wells are currently included in monitoring for the closed Pine Tree Landfill.

NOTE: The results for the CMWP are <u>not</u> specifically reported on in this document. They are being evaluated and reported on separately by B&L.

Section 2. Site History

Placement of waste at Towslee began in the 1940s by a private disposal company. In the 1960s, the site was leased to the City of Cortland for waste disposal. In 1972, Cortland County purchased the site and began landfill operations at Towslee Landfill. Towslee Landfill was open for disposal of municipal solid waste until 1987 and for construction and demolition debris until 1992.

A Remedial Investigation/Feasibility Study (RI/FS) was conducted for Cortland County by B&L in response to NYSDEC Order of Consent #B7-0486-12-95, effective May 31, 1996. The Towslee Landfill was classified by NYSDEC as a Class 2 Inactive Hazardous Waste Site. The Remedial Investigation was completed in March, 1998 and the Feasibility Study was completed in July, 1998.

DEC issued a Record of Decision (ROD) in March, 1999. Remedial activities at the landfill, which included landfill capping, were substantially completed in December 2001 and the Towslee Landfill was reclassified as a Class 4 Inactive Hazardous Waste Site, assigned site number 7-12-001.

The B&L Remedial Investigation concluded in 1997 that there was mild landfill leachate contamination of groundwater in the vicinity of Wells MW-2A/B and MW-7A. In addition, low-level leachate contamination was detected in the vicinity of Well MW-1A. Groundwater contamination occurred primarily in the overburden and extended downgradient of the site about 450 feet.

Section 3. Methods

3.1 Schedule

Quarter	Analysis	Date Sampled
1	-- Sampling not required --	
2	Routine	June 7, 10, 13, 27 of 2024
3	Routine	Not yet conducted
4	Baseline	Not yet conducted

3.2 Monitoring Locations

Groundwater: Thirteen wells are regularly monitored at Towslee Landfill:

	Bedrock	Overburden
Upgradient	CD-1RA	CD-1
Downgradient	MW-1B	MW-1A
	MW-2B	MW-2A
	MW-3A	MW-6A
	MW-3B	MW-7A
	MW-4A	
	MW-5A	
	MW-6B	

Combustible Gas: Testing for the presence of combustible gas (methane) is conducted associated with landfill monitoring. All of the wells and the scale house basement (ambient air) are monitored during Quarters 2-4.

3.3 Sampling and Analysis**:**

Water quality analyses were conducted in accordance with 1998 Part 360 regulations. Cortland County Soil and Water Conservation District staff conducted combustible gas monitoring and collected water samples and field parameter data. Eurofins TestAmerica Laboratories, Inc. (TestAmerica) performed all laboratory analyses for this quarter:

Eurofins TestAmerica Laboratories, Buffalo (NYELAP # 10026)
10 Hazelwood Drive
Amherst, NY 14228-2223

In this quarter, Routine parameters were sampled at all locations.

The UDS Level 2 laboratory analytical report, gas data and field data sheets for this quarter can be found in Appendix A. The full Towslee data record is available from the Cortland County SWCD upon request.

Groundwater data are compared to NYS water quality/drinking water standards to assess current conditions. Tables 1 and 2 summarize results for groundwater monitoring wells. Contraventions of NYS standards are highlighted. Quarterly data are compared annually to historic data to evaluate trends.

Section 4. Groundwater Monitoring Results

4.1 Contraventions of Groundwater Quality Standards

Conventional and Field Parameters

pH - The pH water quality standard is contravened if below 6.5, or above 8.5. The pH standard was for all well during this quarter. We believe these low pH values may be due to instrument inaccuracy.

Turbidity - Turbidity exceeded the NYS standard of 5 NTU at both upgradient wells CD-1 (9.5 NTU) and CD-1RA (29.3 NTU), and 5 of the 11 downgradient wells (ranging from 9.5 to 13.2 NTU).

Total Dissolved Solids (TDS) - The TDS standard of 500 mg/L was exceeded at MW-7A (654 mg/L).

Ammonia - The ammonia standard of 2 mg/L was exceeded at MW-2A (4.4 mg/L), consistent with past findings at this well.

Phenolics – The phenolics standard of 0.001 mg/L was exceeded at upgradient well CD-1, at 0.02 mg/L.

No other conventional or field parameters contravened water quality standards during this quarter.

Metals

Iron - The NYS standard for total iron is 0.3 mg/L, and is an aesthetic standard. This standard was exceeded at both upgradient wells CD-1 (0.75 mg/L) and CD-1RA (4.3 mg/L). It was also exceeded at 4 of the 11 downgradient wells (ranging from 0.36 to 50.2 mg/L). Iron frequently exceeds the standard at the Towslee Landfill. The elevated iron levels are believed to be caused at least in part by particulate in the unfiltered samples.

Lead - The NYS standard for total iron is 0.015 mg/L. This was exceeded for Well MW-6A, at 0.02 mg/L.

Manganese - The NYS standard for total manganese is 0.3 mg/L and is an aesthetic standard. The manganese standard was exceeded for total manganese at upgradient well CD-1 (0.72 mg/L) and 4 of the 11 downgradient wells, ranging from 2.8 to 7.1 mg/L. The manganese standard has frequently been exceeded in past monitoring, which may be caused in part by particulate in unfiltered samples.

Sodium - The NYS sodium guidelines for people on severely and moderately restricted sodium diets are 20 mg/L and 270 mg/L, respectively. The more restrictive diet guideline was exceeded for total sodium at three downgradient wells, MW-2B (38.5 mg/L), MW-6B (41.0 mg/L) and MW-7A (47.2 mg/L).

No other metals contravened water quality standards during this quarter.

Volatile Organic Compounds (VOCs)

Volatile organic compounds (VOCs) were not analyzed this quarter.

4.2 Water Quality Trends

Tabulated trend data are reported annually, during Quarter 4 reporting. However, a review of the Quarter 2 water quality data suggest that overall, groundwater quality surrounding the Towslee Landfill is fairly stable over time.

Section 5. Landfill Gas Testing

Landfill gas was not detected at any of the sampling locations during this quarter.

Section 6. Quality Control

Independent data validation was not required during this quarter. Eurofins TestAmerica conducted standard internal QA/QC on the samples. We believe the analytical data are adequate to characterize Towslee Landfill groundwater quality for this quarter.

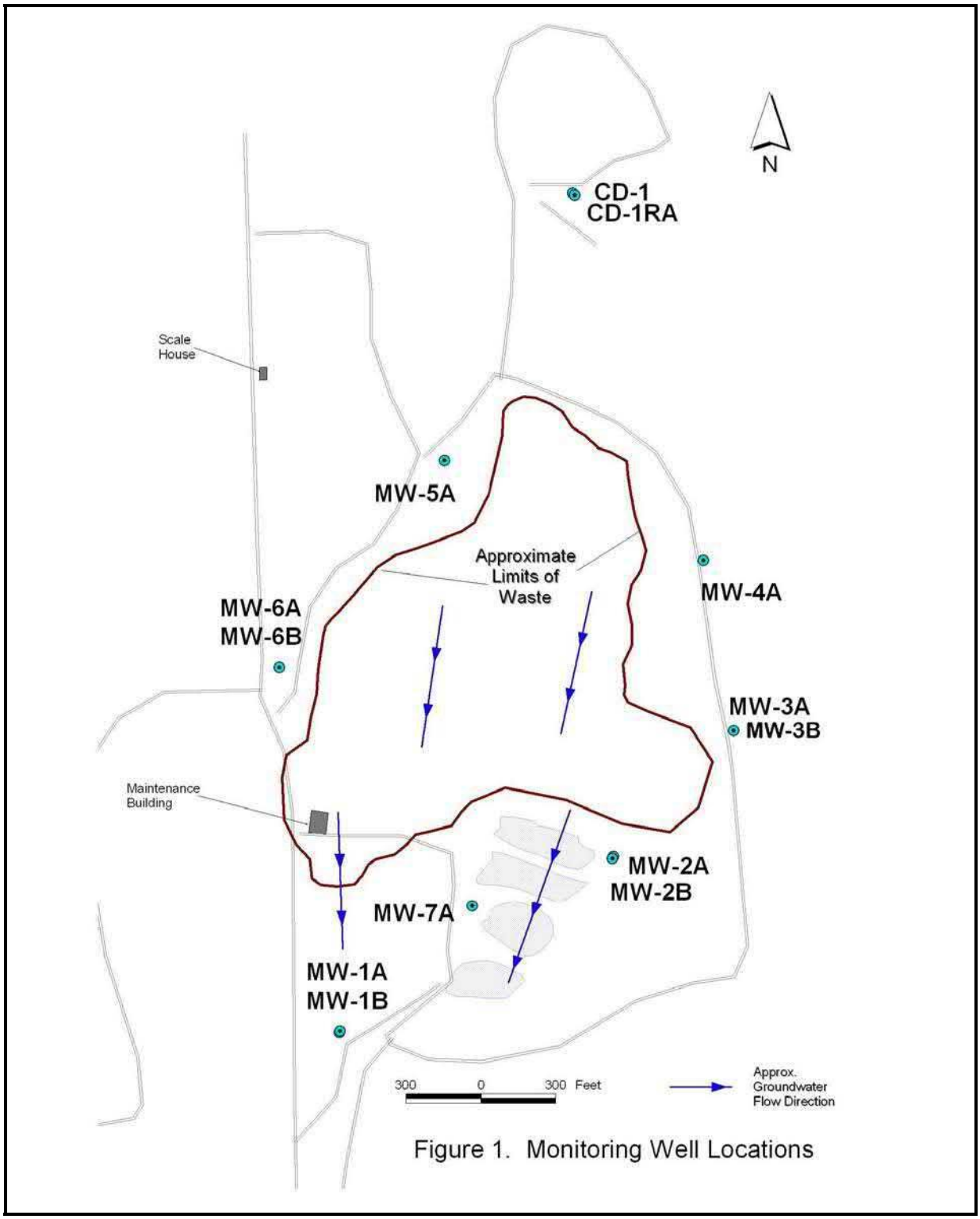

Figure 1. Monitoring Well Locations

Table1. Contraventions of NYS Water Quality Standards for Field and Inorganic Parameters

Towslee Landfill - Quarter 2 2024

Parameter	Units	NYS Water Quality Standard		Upgradient		Downgradient										
				OB	BR	OB	BR	OB	BR	BR	BR	BR	BR	OB	BR	OB
				CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Temperature	(°C)	--		6.01	6.92	4.26	6.79	3.73	3.33	5.84	10.4	3.64	6.09	7.02	6.25	6.91
Eh	(mV)	--		130	139	124	123	-22	11	139	127	163	133	99	75	116
pH	log	6.5 - 8.5	a	6.1	5.7	5.8	5.6	4.8	4.8	4.1	4.8	5.5	6	5.8	6.3	5.2
Specific Conduct.	(uS/cm)	--		199	229	294	157	413	849	250.5	257	566	233	299	460	364
Color	(Units)	15	a, b	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	(NTU)	5	a	9.5	29.3	2.8	1.3	4.2	3.3	3	4.1	9.5	12	10.1	11.5	13.2
Alkalinity (as CaCO3)	(mg/l)	--		118	143	103	83.4	271	487	151	132	427	160	230	119	403
Hardness (as CaCO3)	(mg/l)	--		134	162	166	92.6	199	562	164	164	418	146	239	190	303
Total Diss. Solids	(mg/l)	500	a	152	178	204	115	224	654	188	190	449	160	238	311	256
Chloride	(mg/l)	250	a, b	< 1	1.8	35.1	5.6	10.9	80.3	3.4	19.5	10.1	4.4	10.7	91.6	28.6
Sulfate	(mg/l)	250	a, b	10.8	13.1	13.4	6.2	< 5	< 5	8.2	9	9.2	11	< 5	12.2	10.5
Bromide	(mg/l)	2	a	< 0.2	< 0.2	0.2	< 0.2	< 0.4	0.81	< 0.2	0.25	< 0.4	< 0.2	< 0.2	< 0.2	< 0.4
NO_3	(mg/l)	10	a, b	< 0.05	< 0.05	< 0.05	< 0.05	0.097	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.28	0.089	0.47
NH_3	(mg/l)	2	a	0.19	0.052	0.02	0.066	4.4	0.58	0.024	0.14	0.04	< 0.02	0.13	0.064	0.02
TKN	(mg/l)	--		0.22	< 0.2	< 0.2	< 0.2	3.9	0.67	< 0.2	< 0.2	0.2	< 0.2	2.2	0.23	0.54
COD	(mg/l)	--		< 10	< 10	< 10	< 10	11.3	11.5	< 10	< 10	< 10	< 10	41.9	< 10	15
BOD	(mg/l)	--		< 2	< 2	< 2	< 2	2	< 3	< 2	< 2	< 2	< 2	2.6	< 2	< 3
TOC	(mg/l)	--		< 1	< 1	< 1	< 1	3.6	2	1.2	< 1	1.6	< 1	4.8	< 1	4.4
Phenolics, Total	(mg/l)	0.001	a	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--	--	--	--	--	--	--	--

a - Part 703 Water Quality Standard (Class GA waters)

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

OB = overburden well

BR = Bedrock well

Table 2. Contraventions of NYS Water Quality Standards for Metals (mg/l)

Towslee Landfill - Quarter 2 2024

Parameter	NYS Water Quality Standard		Total Metals												
			Upgradient		Downgradient										
			OB	BR	OB	BR	OB	BR	BR	BR	BR	BR	OB	BR	OB
			CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Aluminum	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.003	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	0.025	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	1	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	0.004	b	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	1	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.005	a, b	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Calcium	--		39.7	46.6	49.2	27.2	60.4	168	49.4	45.1	125	40.6	71.8	56	89.5
Chromium	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrom, Hex	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	0.2	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	0.3	a, b	0.75	4.3	0.091	< 0.05	6.4	0.25	0.18	0.16	0.13	0.23	50.2	0.36	0.48
Lead	0.015	b	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	< 0.01	< 0.01
Magnesium	--		8.5	11	10.4	6	11.6	34.7	9.9	12.6	25.7	10.8	14.5	12.2	19.3
Manganese	0.3	a, b	0.72	0.18	0.13	0.21	7.1	4.0	0.29	0.033	2.8	0.081	4.4	0.029	0.22
Mercury	0.0007	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	0.1	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--		1.4	1.6	1.1	0.59	7.3	1.9	1.2	1.1	1.4	0.92	8.3	1.3	1.8
Sodium	20	a, b	3.6	5.3	12.7	6.7	11.2	38.5	6	7.8	17.1	8.7	5.4	41	47.2
Selenium	0.01	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.002	b	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	5	b	--	--	--	--	--	--	--	--	--	--	--	--	--

a - Part 703 Water Quality Standard (assumes Class GA)

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

OB = overburden well

BR = Bedrock well

Appendix A

Field Data Sheets

Sample Log / Field Observations

Landfill Name: Towslee **Field Personnel:** Chad Hill **Agency Name:** Cortland SWCD

Date: 6/6/2024 **Weather:** **Sample Quarter:** 2Q24 **Sampling Method:** Dedicated Bailer

DTW = Depth to water, **DTB** = Well depth to bottom, **BTOC** = Below top of casing, **SW** = Surface water, **UD** = Underdrain water, **F or S** = Floaters or sinkers (LNAPL or DNAPL) present?, **GW** = Groundwater, **LC** = Leachate, **NA** = No data available

Sample ID	Well Diameter (inches)	Sample Matrix	DTW (ft) BTOC	DTB (ft) BTOC	Water Column Thickness (ft)	Purge Volume Goal (gal)	Total Volume Purged (gal)	Sample Time	Turbidity (NTU)	Temperature (°C)	DO (mg/L)	Conductivity (µmhos/cm)	pH (standard units)	ORP (mV)	F or S y/n?	Comments
CD-1	2	GW	9.00	24.30	15.3	7.7	8.0	12:05 PM	9.5	6.01	6.01	199	6.1	130	N	No prepurge, typically turbid
CD-1RA	2	GW	7.55	50.30	42.8	21.4	22.0	12:15 PM	29.3	6.92	6.92	229	5.7	139	N	Prepurge? PUMP! typically turbid
MW-1A	2	GW	0.00	33.50	33.5	16.8	1.0	2:30 PM	2.8	4.26	4.26	294	5.8	124	N	Artesian, typically turbid
MW-1B	2	GW	0.00	55.50	55.5	27.8	1.0	2:50 PM	1.3	6.79	6.79	157	5.6	123	N	Artesian, typically turbid
MW-2A	2	GW	7.46	12.50	5.0	2.5	5.0	11:40 AM	4.2	3.73	3.73	413	4.8	-22	N	Prepurge, highly turbid
MW-2B	2	GW	10.24	33.00	22.8	11.4	7 *	11:30 AM	3.3	3.33	3.33	849	4.8	11	N	Prepurge
MW-3A	2	GW	8.20	22.00	13.8	6.9	3 *	2:05 PM	3	5.84	5.84	250.5	4.1	139	N	Prepurge
MW-3B	2	GW	15.88	44.00	28.1	14.1	11 *	2:10 PM	4.1	10.4	6.15	257	4.8	127	N	Prepurge
MW-4A	2	GW	8.40	32.40	24.0	12.0	12.0	12:00 PM	9.5	3.64	3.64	566	5.5	163	N	Prepurge, blockage at 22.9'
MW-5A	2	GW	12.22	32.30	20.1	10.0	2.5 *	11:40 AM	12	6.09	6.09	233	6	133	N	Prepurge, blockage at 18.0'
MW-6A	2	GW	12.92	18.60	5.7	2.8	2 *	11:15 AM	10.1	7.02	7.02	299	5.8	99	N	Prepurge, highly turbid
MW-6B	2	GW	14.30	40.30	26.0	13.0	8 *	11:00 AM	11.5	6.25	6.25	460	6.3	75	N	Prepurge
MW-7A	2	GW	6.63	22.00	15.4	7.7	8.0	12:10 PM	13.2	6.91	6.91	364	5.2	116	N	Prepurge, typically turbid
DUPE	2	GW		22.00												

Comments / Observations: * purged dry

I certify that sampling procedures were in accordance with all applicable EPA, state and site-specific protocols.

Initials: _____ **Date:** _____

Appendix B

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hill
Cortland Cty Soil & Water Cons District
100 Grange Place
Rm 202
Cortland, New York 13045

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JOB DESCRIPTION

Towlsee Landfill - Routine Q2 2024
Towslee Landfill - Routine

JOB NUMBER

480-220635-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

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

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

Authorization

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

Job Narrative
480-220635-1

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

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

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

Receipt
The samples were received on 6/8/2024 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.6°C, 2.8°C and 3.1°C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-715291 recovered outside acceptance criteria, low biased, for Carbon disulfide and Chlorodibromomethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260C: The laboratory control sample (LCS) for analytical batch 480-715291 recovered outside control limits for the following analytes: Chloroethane and Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone and 2-Chloro-1,3-butadiene with Vinyl acetate in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 480-715291 . The following sample was affected : TRIP BLANK (480-220635-11).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-715291 recovered above the upper control limit for Vinyl chloride, Chloromethane and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TRIP BLANK (480-220635-11).

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

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

General Chemistry
Method 300.0_28D: The following sample was diluted due to the nature of the sample matrix: MW-4A (480-220635-7). Elevated reporting limits (RLs) are provided.

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

Detection Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: CD-1 — Lab Sample ID: 480-220635-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	39.7		0.50		mg/L	1		6010C	Total/NA
Iron	0.75		0.050		mg/L	1		6010C	Total/NA
Magnesium	8.5		0.20		mg/L	1		6010C	Total/NA
Manganese	0.72		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.4		0.50		mg/L	1		6010C	Total/NA
Sodium	3.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	134		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	118		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.19		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.22		0.20		mg/L	1		351.2	Total/NA
Phenolics, Total Recoverable	0.017		0.010		mg/L	1		420.4	Total/NA
Sulfate	10.8		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	152		10.0		mg/L	1		SM 2540C	Total/NA

Client Sample ID: CD-1RA — Lab Sample ID: 480-220635-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	46.6		0.50		mg/L	1		6010C	Total/NA
Iron	4.3		0.050		mg/L	1		6010C	Total/NA
Magnesium	11.0		0.20		mg/L	1		6010C	Total/NA
Manganese	0.18		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.6		0.50		mg/L	1		6010C	Total/NA
Sodium	5.3		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	162		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	143		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.052		0.020		mg/L	1		350.1	Total/NA
Sulfate	13.1		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	178		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	1.8		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-1A — Lab Sample ID: 480-220635-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	49.2		0.50		mg/L	1		6010C	Total/NA
Iron	0.091		0.050		mg/L	1		6010C	Total/NA
Magnesium	10.4		0.20		mg/L	1		6010C	Total/NA
Manganese	0.13		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.1		0.50		mg/L	1		6010C	Total/NA
Sodium	12.7		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	166		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.20		0.20		mg/L	1		300.0	Total/NA
Alkalinity, Total	103		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.050	F1	0.020		mg/L	1		350.1	Total/NA
Sulfate	13.4		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	204		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	35.1		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-1B — Lab Sample ID: 480-220635-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	27.2		0.50		mg/L	1		6010C	Total/NA
Magnesium	6.0		0.20		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-1B (Continued) — Lab Sample ID: 480-220635-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.21		0.0030		mg/L	1		6010C	Total/NA
Potassium	0.59		0.50		mg/L	1		6010C	Total/NA
Sodium	6.7		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	92.6		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	83.4		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.066		0.020		mg/L	1		350.1	Total/NA
Sulfate	6.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	115		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	5.6		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-3A — Lab Sample ID: 480-220635-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	49.4		0.50		mg/L	1		6010C	Total/NA
Iron	0.18		0.050		mg/L	1		6010C	Total/NA
Magnesium	9.9		0.20		mg/L	1		6010C	Total/NA
Manganese	0.29		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.2		0.50		mg/L	1		6010C	Total/NA
Sodium	6.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	164		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	151		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.024		0.020		mg/L	1		350.1	Total/NA
Sulfate	8.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	188		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	3.4		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
TOC Result 1	1.2		1.0		mg/L	1		SM 5310C	Total/NA
TOC Result 2	1.3		1.0		mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-3B — Lab Sample ID: 480-220635-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	45.1		0.50		mg/L	1		6010C	Total/NA
Iron	0.16		0.050		mg/L	1		6010C	Total/NA
Magnesium	12.6		0.20		mg/L	1		6010C	Total/NA
Manganese	0.033		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.1		0.50		mg/L	1		6010C	Total/NA
Sodium	7.8		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	164		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.25		0.20		mg/L	1		300.0	Total/NA
Alkalinity, Total	132		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.14		0.020		mg/L	1		350.1	Total/NA
Sulfate	9.0		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	190		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	19.5		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-4A — Lab Sample ID: 480-220635-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	125		0.50		mg/L	1		6010C	Total/NA
Iron	0.13		0.050		mg/L	1		6010C	Total/NA
Magnesium	25.7		0.20		mg/L	1		6010C	Total/NA
Manganese	2.8		0.0030		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4A (Continued)
Lab Sample ID: 480-220635-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1.4		0.50		mg/L	1		6010C	Total/NA
Sodium	17.1		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	418		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	427		230		mg/L	23		310.2	Total/NA
Ammonia	0.040		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.20		0.20		mg/L	1		351.2	Total/NA
Sulfate	9.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	449		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	10.1		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
TOC Result 1	1.6		1.0		mg/L	1		SM 5310C	Total/NA
TOC Result 2	1.5		1.0		mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-5A
Lab Sample ID: 480-220635-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	40.6		0.50		mg/L	1		6010C	Total/NA
Iron	0.23		0.050		mg/L	1		6010C	Total/NA
Magnesium	10.8		0.20		mg/L	1		6010C	Total/NA
Manganese	0.081		0.0030		mg/L	1		6010C	Total/NA
Potassium	0.92		0.50		mg/L	1		6010C	Total/NA
Sodium	8.7		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	146		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	160		50.0		mg/L	5		310.2	Total/NA
Sulfate	11.0		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	160		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	4.4		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-6A
Lab Sample ID: 480-220635-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	71.8		0.50		mg/L	1		6010C	Total/NA
Iron	50.2		0.050		mg/L	1		6010C	Total/NA
Lead	0.020		0.010		mg/L	1		6010C	Total/NA
Magnesium	14.5		0.20		mg/L	1		6010C	Total/NA
Manganese	4.4		0.0030		mg/L	1		6010C	Total/NA
Potassium	8.3		0.50		mg/L	1		6010C	Total/NA
Sodium	5.4		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	239		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	230		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.13		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	2.2		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.28		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	41.9		10.0		mg/L	1		410.4	Total/NA
Total Dissolved Solids	238		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	10.7		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.6		2.0		mg/L	1		SM 5210B	Total/NA
TOC Result 1	4.8		1.0		mg/L	1		SM 5310C	Total/NA
TOC Result 2	5.1		1.0		mg/L	1		SM 5310C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: MW-6B
Lab Sample ID: 480-220635-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	56.0		0.50		mg/L	1		6010C	Total/NA
Iron	0.36		0.050		mg/L	1		6010C	Total/NA
Magnesium	12.2		0.20		mg/L	1		6010C	Total/NA
Manganese	0.029		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.3		0.50		mg/L	1		6010C	Total/NA
Sodium	41.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	190		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	119		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.064		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.23		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.089		0.050		mg/L	1		353.2	Total/NA
Sulfate	12.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	311		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	91.6		5.0		mg/L	5		SM 4500 Cl- E	Total/NA
TOC Result 2	1.0		1.0		mg/L	1		SM 5310C	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220635-11

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: CD-1
Lab Sample ID: 480-220635-1
Date Collected: 06/07/24 12:05
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 17:48	1
Calcium	**39.7**		0.50		mg/L		06/11/24 12:34	06/11/24 17:48	1
Iron	**0.75**		0.050		mg/L		06/11/24 12:34	06/11/24 17:48	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 17:48	1
Magnesium	**8.5**		0.20		mg/L		06/11/24 12:34	06/11/24 17:48	1
Manganese	**0.72**		0.0030		mg/L		06/11/24 12:34	06/11/24 17:48	1
Potassium	**1.4**		0.50		mg/L		06/11/24 12:34	06/11/24 17:48	1
Sodium	**3.6**		1.0		mg/L		06/11/24 12:34	06/11/24 17:48	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**134**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			06/12/24 02:55	1
Alkalinity, Total (EPA 310.2)	**118**		50.0		mg/L			06/13/24 11:40	5
Ammonia (EPA 350.1)	**0.19**		0.020		mg/L			06/11/24 12:47	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.22**		0.20		mg/L		06/10/24 13:20	06/11/24 11:15	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			06/08/24 12:40	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			06/13/24 15:47	1
Phenolics, Total Recoverable (EPA 420.4)	**0.017**		0.010		mg/L			06/13/24 02:32	1
Sulfate (SW846 9038)	**10.8**		5.0		mg/L			06/11/24 12:53	1
Total Dissolved Solids (SM 2540C)	**152**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	ND		1.0		mg/L			06/11/24 10:13	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	ND		1.0		mg/L			06/11/24 22:33	1
TOC Result 2 (SM 5310C)	ND		1.0		mg/L			06/11/24 22:33	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: CD-1RA
Lab Sample ID: 480-220635-2
Date Collected: 06/07/24 12:15
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 18:03	1
Calcium	**46.6**		0.50		mg/L		06/11/24 12:34	06/11/24 18:03	1
Iron	**4.3**		0.050		mg/L		06/11/24 12:34	06/11/24 18:03	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 18:03	1
Magnesium	**11.0**		0.20		mg/L		06/11/24 12:34	06/11/24 18:03	1
Manganese	**0.18**		0.0030		mg/L		06/11/24 12:34	06/11/24 18:03	1
Potassium	**1.6**		0.50		mg/L		06/11/24 12:34	06/11/24 18:03	1
Sodium	**5.3**		1.0		mg/L		06/11/24 12:34	06/11/24 18:03	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**162**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			06/12/24 03:13	1
Alkalinity, Total (EPA 310.2)	**143**		50.0		mg/L			06/13/24 11:48	5
Ammonia (EPA 350.1)	**0.052**		0.020		mg/L			06/11/24 12:48	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		0.20		mg/L		06/10/24 13:20	06/11/24 11:16	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			06/08/24 12:44	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			06/13/24 15:50	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/13/24 02:36	1
Sulfate (SW846 9038)	**13.1**		5.0		mg/L			06/11/24 12:53	1
Total Dissolved Solids (SM 2540C)	**178**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**1.8**		1.0		mg/L			06/11/24 10:14	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	ND		1.0		mg/L			06/12/24 02:42	1
TOC Result 2 (SM 5310C)	ND		1.0		mg/L			06/12/24 02:42	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: MW-1A
Lab Sample ID: 480-220635-3
Date Collected: 06/07/24 14:30
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 18:05	1
Calcium	**49.2**		0.50		mg/L		06/11/24 12:34	06/11/24 18:05	1
Iron	**0.091**		0.050		mg/L		06/11/24 12:34	06/11/24 18:05	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 18:05	1
Magnesium	**10.4**		0.20		mg/L		06/11/24 12:34	06/11/24 18:05	1
Manganese	**0.13**		0.0030		mg/L		06/11/24 12:34	06/11/24 18:05	1
Potassium	**1.1**		0.50		mg/L		06/11/24 12:34	06/11/24 18:05	1
Sodium	**12.7**		1.0		mg/L		06/11/24 12:34	06/11/24 18:05	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**166**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**0.20**		0.20		mg/L			06/12/24 03:30	1
Alkalinity, Total (EPA 310.2)	**103**		50.0		mg/L			06/13/24 11:50	5
Ammonia (EPA 350.1)	**0.050**	**F1**	0.020		mg/L			06/11/24 12:53	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		0.20		mg/L		06/10/24 13:20	06/11/24 11:17	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			06/08/24 12:45	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			06/13/24 16:34	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/13/24 02:40	1
Sulfate (SW846 9038)	**13.4**		5.0		mg/L			06/11/24 12:53	1
Total Dissolved Solids (SM 2540C)	**204**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**35.1**		1.0		mg/L			06/11/24 10:14	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	ND		1.0		mg/L			06/12/24 03:10	1
TOC Result 2 (SM 5310C)	ND		1.0		mg/L			06/12/24 03:10	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: MW-1B
Lab Sample ID: 480-220635-4
Date Collected: 06/07/24 14:50
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 18:07	1
Calcium	**27.2**		0.50		mg/L		06/11/24 12:34	06/11/24 18:07	1
Iron	ND		0.050		mg/L		06/11/24 12:34	06/11/24 18:07	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 18:07	1
Magnesium	**6.0**		0.20		mg/L		06/11/24 12:34	06/11/24 18:07	1
Manganese	**0.21**		0.0030		mg/L		06/11/24 12:34	06/11/24 18:07	1
Potassium	**0.59**		0.50		mg/L		06/11/24 12:34	06/11/24 18:07	1
Sodium	**6.7**		1.0		mg/L		06/11/24 12:34	06/11/24 18:07	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**92.6**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			06/12/24 03:48	1
Alkalinity, Total (EPA 310.2)	**83.4**		50.0		mg/L			06/13/24 11:51	5
Ammonia (EPA 350.1)	**0.066**		0.020		mg/L			06/11/24 12:56	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND	F1	0.20		mg/L		06/10/24 13:20	06/11/24 11:19	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			06/08/24 12:47	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			06/13/24 16:39	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/13/24 02:43	1
Sulfate (SW846 9038)	**6.2**		5.0		mg/L			06/11/24 12:55	1
Total Dissolved Solids (SM 2540C)	**115**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**5.6**		1.0		mg/L			06/11/24 10:14	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	ND		1.0		mg/L			06/12/24 03:38	1
TOC Result 2 (SM 5310C)	ND		1.0		mg/L			06/12/24 03:38	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: MW-3A
Lab Sample ID: 480-220635-5
Date Collected: 06/07/24 14:05
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 18:09	1
Calcium	**49.4**		0.50		mg/L		06/11/24 12:34	06/11/24 18:09	1
Iron	**0.18**		0.050		mg/L		06/11/24 12:34	06/11/24 18:09	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 18:09	1
Magnesium	**9.9**		0.20		mg/L		06/11/24 12:34	06/11/24 18:09	1
Manganese	**0.29**		0.0030		mg/L		06/11/24 12:34	06/11/24 18:09	1
Potassium	**1.2**		0.50		mg/L		06/11/24 12:34	06/11/24 18:09	1
Sodium	**6.0**		1.0		mg/L		06/11/24 12:34	06/11/24 18:09	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**164**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			06/12/24 04:06	1
Alkalinity, Total (EPA 310.2)	**151**		50.0		mg/L			06/13/24 11:52	5
Ammonia (EPA 350.1)	**0.024**		0.020		mg/L			06/11/24 12:57	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		0.20		mg/L		06/10/24 13:20	06/11/24 11:22	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			06/08/24 12:48	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			06/13/24 16:25	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/13/24 02:47	1
Sulfate (SW846 9038)	**8.2**		5.0		mg/L			06/11/24 12:56	1
Total Dissolved Solids (SM 2540C)	**188**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**3.4**		1.0		mg/L			06/11/24 10:34	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	**1.2**		1.0		mg/L			06/12/24 04:06	1
TOC Result 2 (SM 5310C)	**1.3**		1.0		mg/L			06/12/24 04:06	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: MW-3B
Lab Sample ID: 480-220635-6
Date Collected: 06/07/24 14:10
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 18:11	1
Calcium	**45.1**		0.50		mg/L		06/11/24 12:34	06/11/24 18:11	1
Iron	**0.16**		0.050		mg/L		06/11/24 12:34	06/11/24 18:11	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 18:11	1
Magnesium	**12.6**		0.20		mg/L		06/11/24 12:34	06/11/24 18:11	1
Manganese	**0.033**		0.0030		mg/L		06/11/24 12:34	06/11/24 18:11	1
Potassium	**1.1**		0.50		mg/L		06/11/24 12:34	06/11/24 18:11	1
Sodium	**7.8**		1.0		mg/L		06/11/24 12:34	06/11/24 18:11	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**164**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**0.25**		0.20		mg/L			06/12/24 04:24	1
Alkalinity, Total (EPA 310.2)	**132**		50.0		mg/L			06/13/24 11:52	5
Ammonia (EPA 350.1)	**0.14**		0.020		mg/L			06/11/24 12:59	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		0.20		mg/L		06/10/24 13:20	06/11/24 11:26	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			06/08/24 12:50	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			06/13/24 16:22	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/13/24 02:51	1
Sulfate (SW846 9038)	**9.0**		5.0		mg/L			06/11/24 12:57	1
Total Dissolved Solids (SM 2540C)	**190**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**19.5**		1.0		mg/L			06/11/24 09:22	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	ND		1.0		mg/L			06/12/24 07:20	1
TOC Result 2 (SM 5310C)	ND		1.0		mg/L			06/12/24 07:20	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: MW-4A
Lab Sample ID: 480-220635-7
Date Collected: 06/07/24 12:00
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 18:13	1
Calcium	**125**		0.50		mg/L		06/11/24 12:34	06/11/24 18:13	1
Iron	**0.13**		0.050		mg/L		06/11/24 12:34	06/11/24 18:13	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 18:13	1
Magnesium	**25.7**		0.20		mg/L		06/11/24 12:34	06/11/24 18:13	1
Manganese	**2.8**		0.0030		mg/L		06/11/24 12:34	06/11/24 18:13	1
Potassium	**1.4**		0.50		mg/L		06/11/24 12:34	06/11/24 18:13	1
Sodium	**17.1**		1.0		mg/L		06/11/24 12:34	06/11/24 18:13	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**418**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.40		mg/L			06/12/24 04:42	2
Alkalinity, Total (EPA 310.2)	**427**		230		mg/L			06/13/24 14:15	23
Ammonia (EPA 350.1)	**0.040**		0.020		mg/L			06/11/24 13:00	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.20**		0.20		mg/L		06/10/24 13:20	06/11/24 11:27	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			06/08/24 12:54	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			06/13/24 16:19	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/13/24 02:54	1
Sulfate (SW846 9038)	**9.2**		5.0		mg/L			06/11/24 12:57	1
Total Dissolved Solids (SM 2540C)	**449**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**10.1**		1.0		mg/L			06/11/24 09:23	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	**1.6**		1.0		mg/L			06/12/24 07:48	1
TOC Result 2 (SM 5310C)	**1.5**		1.0		mg/L			06/12/24 07:48	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: MW-5A
Lab Sample ID: 480-220635-8
Date Collected: 06/07/24 11:40
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 18:14	1
Calcium	**40.6**		0.50		mg/L		06/11/24 12:34	06/11/24 18:14	1
Iron	**0.23**		0.050		mg/L		06/11/24 12:34	06/11/24 18:14	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 18:14	1
Magnesium	**10.8**		0.20		mg/L		06/11/24 12:34	06/11/24 18:14	1
Manganese	**0.081**		0.0030		mg/L		06/11/24 12:34	06/11/24 18:14	1
Potassium	**0.92**		0.50		mg/L		06/11/24 12:34	06/11/24 18:14	1
Sodium	**8.7**		1.0		mg/L		06/11/24 12:34	06/11/24 18:14	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**146**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			06/11/24 16:14	1
Alkalinity, Total (EPA 310.2)	**160**		50.0		mg/L			06/13/24 13:23	5
Ammonia (EPA 350.1)	ND		0.020		mg/L			06/11/24 13:01	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		0.20		mg/L		06/10/24 13:20	06/11/24 11:29	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			06/08/24 12:56	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			06/13/24 16:16	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/14/24 02:14	1
Sulfate (SW846 9038)	**11.0**		5.0		mg/L			06/11/24 12:58	1
Total Dissolved Solids (SM 2540C)	**160**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**4.4**		1.0		mg/L			06/11/24 09:23	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	ND		1.0		mg/L			06/12/24 08:16	1
TOC Result 2 (SM 5310C)	ND		1.0		mg/L			06/12/24 08:16	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: MW-6A
Lab Sample ID: 480-220635-9
Date Collected: 06/07/24 11:15
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 18:22	1
Calcium	**71.8**		0.50		mg/L		06/11/24 12:34	06/11/24 18:22	1
Iron	**50.2**		0.050		mg/L		06/11/24 12:34	06/11/24 18:22	1
Lead	**0.020**		0.010		mg/L		06/11/24 12:34	06/11/24 18:22	1
Magnesium	**14.5**		0.20		mg/L		06/11/24 12:34	06/11/24 18:22	1
Manganese	**4.4**		0.0030		mg/L		06/11/24 12:34	06/11/24 18:22	1
Potassium	**8.3**		0.50		mg/L		06/11/24 12:34	06/11/24 18:22	1
Sodium	**5.4**		1.0		mg/L		06/11/24 12:34	06/11/24 18:22	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**239**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			06/11/24 16:29	1
Alkalinity, Total (EPA 310.2)	**230**		50.0		mg/L			06/13/24 13:23	5
Ammonia (EPA 350.1)	**0.13**		0.020		mg/L			06/11/24 13:04	1
Total Kjeldahl Nitrogen (EPA 351.2	**2.2**		0.20		mg/L		06/10/24 13:20	06/11/24 11:30	1
Nitrate as N (EPA 353.2)	**0.28**		0.050		mg/L			06/08/24 12:58	1
Chemical Oxygen Demand (EPA 410.4)	**41.9**		10.0		mg/L			06/13/24 16:13	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/14/24 02:51	1
Sulfate (SW846 9038)	ND		5.0		mg/L			06/11/24 12:58	1
Total Dissolved Solids (SM 2540C)	**238**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**10.7**		1.0		mg/L			06/11/24 09:23	1
Biochemical Oxygen Demand (SM 5210B)	**2.6**		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	**4.8**		1.0		mg/L			06/12/24 08:44	1
TOC Result 2 (SM 5310C)	**5.1**		1.0		mg/L			06/12/24 08:44	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: MW-6B
Lab Sample ID: 480-220635-10
Date Collected: 06/07/24 11:00
Matrix: Water
Date Received: 06/08/24 10:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 18:24	1
Calcium	**56.0**		0.50		mg/L		06/11/24 12:34	06/11/24 18:24	1
Iron	**0.36**		0.050		mg/L		06/11/24 12:34	06/11/24 18:24	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 18:24	1
Magnesium	**12.2**		0.20		mg/L		06/11/24 12:34	06/11/24 18:24	1
Manganese	**0.029**		0.0030		mg/L		06/11/24 12:34	06/11/24 18:24	1
Potassium	**1.3**		0.50		mg/L		06/11/24 12:34	06/11/24 18:24	1
Sodium	**41.0**		1.0		mg/L		06/11/24 12:34	06/11/24 18:24	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**190**		0.50		mg/L			06/12/24 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			06/11/24 16:43	1
Alkalinity, Total (EPA 310.2)	**119**		50.0		mg/L			06/13/24 13:23	5
Ammonia (EPA 350.1)	**0.064**		0.020		mg/L			06/11/24 13:06	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.23**		0.20		mg/L		06/10/24 13:20	06/11/24 11:31	1
Nitrate as N (EPA 353.2)	**0.089**		0.050		mg/L			06/08/24 12:59	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			06/13/24 16:06	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/14/24 02:55	1
Sulfate (SW846 9038)	**12.2**		5.0		mg/L			06/11/24 13:10	1
Total Dissolved Solids (SM 2540C)	**311**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**91.6**		5.0		mg/L			06/11/24 10:43	5
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			06/08/24 12:51	1
TOC Result 1 (SM 5310C)	ND		1.0		mg/L			06/12/24 09:12	1
TOC Result 2 (SM 5310C)	**1.0**		1.0		mg/L			06/12/24 09:12	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220635-11

Date Collected: 06/07/24 00:00
Matrix: Water
Date Received: 06/08/24 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/12/24 14:38	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/12/24 14:38	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/12/24 14:38	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/12/24 14:38	1
1,1-Dichloroethane	ND		1.0		ug/L			06/12/24 14:38	1
1,1-Dichloroethene	ND		1.0		ug/L			06/12/24 14:38	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/12/24 14:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			06/12/24 14:38	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/12/24 14:38	1
1,2-Dichloroethane	ND		1.0		ug/L			06/12/24 14:38	1
1,2-Dichloropropane	ND		1.0		ug/L			06/12/24 14:38	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/12/24 14:38	1
2-Butanone (MEK)	ND	*+	10		ug/L			06/12/24 14:38	1
2-Hexanone	ND		5.0		ug/L			06/12/24 14:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			06/12/24 14:38	1
Acetone	ND		10		ug/L			06/12/24 14:38	1
Acrylonitrile	ND		5.0		ug/L			06/12/24 14:38	1
Benzene	ND		1.0		ug/L			06/12/24 14:38	1
Chlorobromomethane	ND		1.0		ug/L			06/12/24 14:38	1
Bromodichloromethane	ND		1.0		ug/L			06/12/24 14:38	1
Bromoform	ND		1.0		ug/L			06/12/24 14:38	1
Bromomethane	ND		1.0		ug/L			06/12/24 14:38	1
Carbon disulfide	ND		1.0		ug/L			06/12/24 14:38	1
Carbon tetrachloride	ND		1.0		ug/L			06/12/24 14:38	1
Chlorobenzene	ND		1.0		ug/L			06/12/24 14:38	1
Dibromochloromethane	ND		1.0		ug/L			06/12/24 14:38	1
Chloroethane	ND	*+	1.0		ug/L			06/12/24 14:38	1
Chloroform	ND		1.0		ug/L			06/12/24 14:38	1
Chloromethane	ND	*+	1.0		ug/L			06/12/24 14:38	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/12/24 14:38	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/12/24 14:38	1
Dibromomethane	ND		1.0		ug/L			06/12/24 14:38	1
Ethylbenzene	ND		1.0		ug/L			06/12/24 14:38	1
1,2-Dibromoethane	ND		1.0		ug/L			06/12/24 14:38	1
Iodomethane	ND		1.0		ug/L			06/12/24 14:38	1
Methylene Chloride	ND		1.0		ug/L			06/12/24 14:38	1
Styrene	ND		1.0		ug/L			06/12/24 14:38	1
Tetrachloroethene	ND		1.0		ug/L			06/12/24 14:38	1
Trichlorofluoromethane	ND		1.0		ug/L			06/12/24 14:38	1
Trichloroethene	ND		1.0		ug/L			06/12/24 14:38	1
Toluene	ND		1.0		ug/L			06/12/24 14:38	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/12/24 14:38	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/12/24 14:38	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			06/12/24 14:38	1
Vinyl acetate	ND	*+	5.0		ug/L			06/12/24 14:38	1
Vinyl chloride	ND		1.0		ug/L			06/12/24 14:38	1
Xylenes, Total	ND		2.0		ug/L			06/12/24 14:38	1
m,p-Xylene	ND		2.0		ug/L			06/12/24 14:38	1
o-Xylene	ND		1.0		ug/L			06/12/24 14:38	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220635-11
Date Collected: 06/07/24 00:00
Matrix: Water
Date Received: 06/08/24 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		06/12/24 14:38	1
Toluene-d8 (Surr)	97		80 - 120		06/12/24 14:38	1
4-Bromofluorobenzene (Surr)	100		73 - 120		06/12/24 14:38	1

Surrogate Summary

Client: Cortland Cty Soil & Water Cons District
Project/Site: Towlsee Landfill - Routine Q2 2024

Job ID: 480-220635-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	TOL	BFB
Lab Sample ID	Client Sample ID	(77-120)	(80-120)	(73-120)
480-220635-11	TRIP BLANK	104	97	100
LCS 480-715291/6	Lab Control Sample	105	102	102
MB 480-715291/8	Method Blank	103	98	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

Lab Sample ID: MB 480-715291/8
Matrix: Water
Analysis Batch: 715291

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/12/24 13:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/12/24 13:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/12/24 13:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/12/24 13:37	1
1,1-Dichloroethane	ND		1.0		ug/L			06/12/24 13:37	1
1,1-Dichloroethene	ND		1.0		ug/L			06/12/24 13:37	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/12/24 13:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			06/12/24 13:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/12/24 13:37	1
1,2-Dichloroethane	ND		1.0		ug/L			06/12/24 13:37	1
1,2-Dichloropropane	ND		1.0		ug/L			06/12/24 13:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/12/24 13:37	1
2-Butanone (MEK)	ND		10		ug/L			06/12/24 13:37	1
2-Hexanone	ND		5.0		ug/L			06/12/24 13:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			06/12/24 13:37	1
Acetone	ND		10		ug/L			06/12/24 13:37	1
Acrylonitrile	ND		5.0		ug/L			06/12/24 13:37	1
Benzene	ND		1.0		ug/L			06/12/24 13:37	1
Chlorobromomethane	ND		1.0		ug/L			06/12/24 13:37	1
Bromodichloromethane	ND		1.0		ug/L			06/12/24 13:37	1
Bromoform	ND		1.0		ug/L			06/12/24 13:37	1
Bromomethane	ND		1.0		ug/L			06/12/24 13:37	1
Carbon disulfide	ND		1.0		ug/L			06/12/24 13:37	1
Carbon tetrachloride	ND		1.0		ug/L			06/12/24 13:37	1
Chlorobenzene	ND		1.0		ug/L			06/12/24 13:37	1
Dibromochloromethane	ND		1.0		ug/L			06/12/24 13:37	1
Chloroethane	ND		1.0		ug/L			06/12/24 13:37	1
Chloroform	ND		1.0		ug/L			06/12/24 13:37	1
Chloromethane	ND		1.0		ug/L			06/12/24 13:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/12/24 13:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/12/24 13:37	1
Dibromomethane	ND		1.0		ug/L			06/12/24 13:37	1
Ethylbenzene	ND		1.0		ug/L			06/12/24 13:37	1
1,2-Dibromoethane	ND		1.0		ug/L			06/12/24 13:37	1
Iodomethane	ND		1.0		ug/L			06/12/24 13:37	1
Methylene Chloride	ND		1.0		ug/L			06/12/24 13:37	1
Styrene	ND		1.0		ug/L			06/12/24 13:37	1
Tetrachloroethene	ND		1.0		ug/L			06/12/24 13:37	1
Trichlorofluoromethane	ND		1.0		ug/L			06/12/24 13:37	1
Trichloroethene	ND		1.0		ug/L			06/12/24 13:37	1
Toluene	ND		1.0		ug/L			06/12/24 13:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/12/24 13:37	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/12/24 13:37	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			06/12/24 13:37	1
Vinyl acetate	ND		5.0		ug/L			06/12/24 13:37	1
Vinyl chloride	ND		1.0		ug/L			06/12/24 13:37	1
Xylenes, Total	ND		2.0		ug/L			06/12/24 13:37	1
m,p-Xylene	ND		2.0		ug/L			06/12/24 13:37	1

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

Lab Sample ID: MB 480-715291/8
Matrix: Water
Analysis Batch: 715291

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			06/12/24 13:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/12/24 13:37*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/12/24 13:37*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/12/24 13:37*	*1*

Lab Sample ID: LCS 480-715291/6
Matrix: Water
Analysis Batch: 715291

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L		105	80 - 120
1,1,1-Trichloroethane	25.0	28.8		ug/L		115	73 - 126
1,1,2,2-Tetrachloroethane	25.0	27.9		ug/L		111	76 - 120
1,1,2-Trichloroethane	25.0	26.2		ug/L		105	76 - 122
1,1-Dichloroethane	25.0	29.6		ug/L		119	77 - 120
1,1-Dichloroethene	25.0	29.7		ug/L		119	66 - 127
1,2,3-Trichloropropane	25.0	28.1		ug/L		112	68 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.7		ug/L		103	56 - 134
1,2-Dichlorobenzene	25.0	28.1		ug/L		113	80 - 124
1,2-Dichloroethane	25.0	27.4		ug/L		110	75 - 120
1,2-Dichloropropane	25.0	28.9		ug/L		116	76 - 120
1,4-Dichlorobenzene	25.0	28.0		ug/L		112	80 - 120
2-Butanone (MEK)	125	212	*+	ug/L		170	57 - 140
2-Hexanone	125	122		ug/L		98	65 - 127
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		98	71 - 125
Acetone	125	132		ug/L		105	56 - 142
Acrylonitrile	250	258		ug/L		103	63 - 125
Benzene	25.0	29.0		ug/L		116	71 - 124
Chlorobromomethane	25.0	28.6		ug/L		114	72 - 130
Bromodichloromethane	25.0	26.1		ug/L		104	80 - 122
Bromoform	25.0	21.3		ug/L		85	61 - 132
Bromomethane	25.0	30.9		ug/L		124	55 - 144
Carbon disulfide	25.0	24.7		ug/L		99	59 - 134
Carbon tetrachloride	25.0	27.6		ug/L		110	72 - 134
Chlorobenzene	25.0	27.2		ug/L		109	80 - 120
Dibromochloromethane	25.0	24.5		ug/L		98	75 - 125
Chloroethane	25.0	35.8	*+	ug/L		143	69 - 136
Chloroform	25.0	27.2		ug/L		109	73 - 127
Chloromethane	25.0	35.2	*+	ug/L		141	68 - 124
cis-1,2-Dichloroethene	25.0	29.2		ug/L		117	74 - 124
cis-1,3-Dichloropropene	25.0	29.5		ug/L		118	74 - 124
Dibromomethane	25.0	28.0		ug/L		112	76 - 127
Ethylbenzene	25.0	27.7		ug/L		111	77 - 123
1,2-Dibromoethane	25.0	26.5		ug/L		106	77 - 120
Iodomethane	25.0	29.5		ug/L		118	78 - 123
Methylene Chloride	25.0	29.0		ug/L		116	75 - 124

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

Lab Sample ID: LCS 480-715291/6
Matrix: Water
Analysis Batch: 715291

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Styrene	25.0	27.3		ug/L		109	80 - 120
Tetrachloroethene	25.0	30.5		ug/L		122	74 - 122
Trichlorofluoromethane	25.0	31.4		ug/L		126	62 - 150
Trichloroethene	25.0	30.7		ug/L		123	74 - 123
Toluene	25.0	27.5		ug/L		110	80 - 122
trans-1,2-Dichloroethene	25.0	29.4		ug/L		118	73 - 127
trans-1,3-Dichloropropene	25.0	26.8		ug/L		107	80 - 120
trans-1,4-Dichloro-2-butene	25.0	23.3		ug/L		93	41 - 131
Vinyl acetate	50.0	76.4	*+	ug/L		153	50 - 144
Vinyl chloride	25.0	32.3		ug/L		129	65 - 133
m,p-Xylene	25.0	27.8		ug/L		111	76 - 122
o-Xylene	25.0	27.4		ug/L		110	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-715078/1-A
Matrix: Water
Analysis Batch: 715274

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715078

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/11/24 12:34	06/11/24 17:44	1
Calcium	ND		0.50		mg/L		06/11/24 12:34	06/11/24 17:44	1
Iron	ND		0.050		mg/L		06/11/24 12:34	06/11/24 17:44	1
Lead	ND		0.010		mg/L		06/11/24 12:34	06/11/24 17:44	1
Magnesium	ND		0.20		mg/L		06/11/24 12:34	06/11/24 17:44	1
Manganese	ND		0.0030		mg/L		06/11/24 12:34	06/11/24 17:44	1
Potassium	ND		0.50		mg/L		06/11/24 12:34	06/11/24 17:44	1
Sodium	ND		1.0		mg/L		06/11/24 12:34	06/11/24 17:44	1

Lab Sample ID: LCS 480-715078/2-A
Matrix: Water
Analysis Batch: 715274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715078

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.500	0.505		mg/L		101	80 - 120
Calcium	25.0	25.98		mg/L		104	80 - 120
Iron	5.10	5.58		mg/L		109	80 - 120
Lead	0.500	0.522		mg/L		104	80 - 120
Magnesium	25.0	24.83		mg/L		99	80 - 120
Manganese	0.500	0.506		mg/L		101	80 - 120
Potassium	25.0	25.70		mg/L		103	80 - 120
Sodium	25.0	25.73		mg/L		103	80 - 120

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

Lab Sample ID: 480-220635-1 MS
Matrix: Water
Analysis Batch: 715274

Client Sample ID: CD-1
Prep Type: Total/NA
Prep Batch: 715078

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		0.500	0.514		mg/L		103	75 - 125
Calcium	39.7		25.0	65.41		mg/L		103	75 - 125
Iron	0.75		5.10	6.48		mg/L		112	75 - 125
Lead	ND		0.500	0.527		mg/L		105	75 - 125
Magnesium	8.5		25.0	33.79		mg/L		101	75 - 125
Manganese	0.72		0.500	1.29		mg/L		113	75 - 125
Potassium	1.4		25.0	27.03		mg/L		102	75 - 125
Sodium	3.6		25.0	29.49		mg/L		104	75 - 125

Lab Sample ID: 480-220635-1 MSD
Matrix: Water
Analysis Batch: 715274

Client Sample ID: CD-1
Prep Type: Total/NA
Prep Batch: 715078

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		0.500	0.511		mg/L		102	75 - 125	1	20
Calcium	39.7		25.0	65.09		mg/L		102	75 - 125	0	20
Iron	0.75		5.10	6.45		mg/L		112	75 - 125	1	20
Lead	ND		0.500	0.525		mg/L		104	75 - 125	1	20
Magnesium	8.5		25.0	33.56		mg/L		100	75 - 125	1	20
Manganese	0.72		0.500	1.30		mg/L		117	75 - 125	1	20
Potassium	1.4		25.0	26.83		mg/L		102	75 - 125	1	20
Sodium	3.6		25.0	29.37		mg/L		103	75 - 125	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-715205/28
Matrix: Water
Analysis Batch: 715205

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/11/24 22:43	1

Lab Sample ID: MB 480-715205/4
Matrix: Water
Analysis Batch: 715205

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/11/24 15:31	1

Lab Sample ID: LCS 480-715205/29
Matrix: Water
Analysis Batch: 715205

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	5.01	5.16		mg/L		103	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-715205/5
Matrix: Water
Analysis Batch: 715205

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide			5.01	5.11		mg/L		102	90 - 110		

Lab Sample ID: 480-220635-7 MS
Matrix: Water
Analysis Batch: 715205

Client Sample ID: MW-4A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide	ND		10.0	10.28		mg/L		99	80 - 120		

Lab Sample ID: MB 480-715209/4
Matrix: Water
Analysis Batch: 715209

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/11/24 15:44	1

Lab Sample ID: LCS 480-715209/5
Matrix: Water
Analysis Batch: 715209

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide			5.01	5.09		mg/L		102	90 - 110		

Method: 310.2 - Alkalinity

Lab Sample ID: MB 480-715524/129
Matrix: Water
Analysis Batch: 715524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/13/24 10:55	1

Lab Sample ID: MB 480-715524/136
Matrix: Water
Analysis Batch: 715524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/13/24 11:15	1

Lab Sample ID: MB 480-715524/144
Matrix: Water
Analysis Batch: 715524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/13/24 11:41	1

Method: 310.2 - Alkalinity (Continued)

Lab Sample ID: MB 480-715524/151
Matrix: Water
Analysis Batch: 715524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/13/24 11:49	1

Lab Sample ID: MB 480-715524/213
Matrix: Water
Analysis Batch: 715524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/13/24 13:10	1

Lab Sample ID: MB 480-715524/218
Matrix: Water
Analysis Batch: 715524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/13/24 13:14	1

Lab Sample ID: MB 480-715524/229
Matrix: Water
Analysis Batch: 715524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/13/24 13:26	1

Lab Sample ID: MB 480-715524/238
Matrix: Water
Analysis Batch: 715524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/13/24 14:14	1

Lab Sample ID: LCS 480-715524/135
Matrix: Water
Analysis Batch: 715524

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	50.06		mg/L		100	90 - 110

Lab Sample ID: LCS 480-715524/143
Matrix: Water
Analysis Batch: 715524

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	50.31		mg/L		101	90 - 110

Lab Sample ID: LCS 480-715524/150
Matrix: Water
Analysis Batch: 715524

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	50.38		mg/L		101	90 - 110

Method: 310.2 - Alkalinity

Lab Sample ID: LCS 480-715524/217
Matrix: Water
Analysis Batch: 715524

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity, Total			50.0	50.88		mg/L		102	90 - 110		

Lab Sample ID: LCS 480-715524/237
Matrix: Water
Analysis Batch: 715524

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity, Total			50.0	54.10		mg/L		108	90 - 110		

Lab Sample ID: 480-220635-2 MS
Matrix: Water
Analysis Batch: 715524

Client Sample ID: CD-1RA
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity, Total	143		20.0	183.7	4	mg/L		206	60 - 140		

Lab Sample ID: 480-220635-2 MSD
Matrix: Water
Analysis Batch: 715524

Client Sample ID: CD-1RA
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity, Total	143		20.0	176.6	4	mg/L		170	60 - 140	4	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-715198/51
Matrix: Water
Analysis Batch: 715198

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			06/11/24 12:24	1

Lab Sample ID: MB 480-715198/75
Matrix: Water
Analysis Batch: 715198

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			06/11/24 12:51	1

Lab Sample ID: LCS 480-715198/52
Matrix: Water
Analysis Batch: 715198

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia			1.00	1.03		mg/L		103	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 480-715198/76
Matrix: Water
Analysis Batch: 715198

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia			1.00	1.03		mg/L		103	90 - 110		

Lab Sample ID: 480-220635-3 MS
Matrix: Water
Analysis Batch: 715198

Client Sample ID: MW-1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia	0.050	F1	0.200	0.214	F1	mg/L		82	90 - 110		

Lab Sample ID: 480-220635-3 MSD
Matrix: Water
Analysis Batch: 715198

Client Sample ID: MW-1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	0.050	F1	0.200	0.218	F1	mg/L		84	90 - 110	2	20

Lab Sample ID: 480-220635-9 MS
Matrix: Water
Analysis Batch: 715198

Client Sample ID: MW-6A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia	0.13		0.200	0.332		mg/L		100	90 - 110		

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 480-715050/1-A
Matrix: Water
Analysis Batch: 715199

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20		mg/L		06/10/24 13:20	06/11/24 10:55	1

Lab Sample ID: LCS 480-715050/2-A
Matrix: Water
Analysis Batch: 715199

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715050

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Kjeldahl Nitrogen			2.50	2.33		mg/L		93	90 - 110		

Lab Sample ID: 480-220635-4 MS
Matrix: Water
Analysis Batch: 715199

Client Sample ID: MW-1B
Prep Type: Total/NA
Prep Batch: 715050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Kjeldahl Nitrogen	ND	F1	1.00	2.17	F1	mg/L		217	90 - 110		

Method: 410.4 - COD

Lab Sample ID: MB 480-715584/28
Matrix: Water
Analysis Batch: 715584

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			06/13/24 15:58	1

Lab Sample ID: MB 480-715584/4
Matrix: Water
Analysis Batch: 715584

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			06/13/24 14:52	1

Lab Sample ID: LCS 480-715584/29
Matrix: Water
Analysis Batch: 715584

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand			25.0	26.91		mg/L		108	90 - 110		

Lab Sample ID: LCS 480-715584/5
Matrix: Water
Analysis Batch: 715584

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand			25.0	24.79		mg/L		99	90 - 110		

Lab Sample ID: 480-220635-3 MS
Matrix: Water
Analysis Batch: 715584

Client Sample ID: MW-1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand	ND		50.0	50.56		mg/L		101	90 - 110		

Lab Sample ID: 480-220635-10 MS
Matrix: Water
Analysis Batch: 715584

Client Sample ID: MW-6B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand	ND		50.0	55.22		mg/L		110	90 - 110		

Lab Sample ID: 480-220635-10 DU
Matrix: Water
Analysis Batch: 715584

Client Sample ID: MW-6B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chemical Oxygen Demand	ND			ND		mg/L				NC	20

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-715525/131
Matrix: Water
Analysis Batch: 715525

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010		mg/L			06/12/24 23:46	1

Lab Sample ID: MB 480-715525/159
Matrix: Water
Analysis Batch: 715525

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010		mg/L			06/13/24 01:29	1

Lab Sample ID: LCS 480-715525/132
Matrix: Water
Analysis Batch: 715525

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.0957		mg/L		96	90 - 110

Lab Sample ID: LCS 480-715525/160
Matrix: Water
Analysis Batch: 715525

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.0941		mg/L		94	90 - 110

Lab Sample ID: MB 480-715680/47
Matrix: Water
Analysis Batch: 715680

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010		mg/L			06/14/24 01:42	1

Lab Sample ID: MB 480-715680/76
Matrix: Water
Analysis Batch: 715680

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010		mg/L			06/14/24 03:28	1

Lab Sample ID: LCS 480-715680/48
Matrix: Water
Analysis Batch: 715680

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.0984		mg/L		98	90 - 110

Lab Sample ID: LCS 480-715680/77
Matrix: Water
Analysis Batch: 715680

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.0979		mg/L		98	90 - 110

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 480-715306/103
Matrix: Water
Analysis Batch: 715306

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/11/24 13:06	1

Lab Sample ID: MB 480-715306/109
Matrix: Water
Analysis Batch: 715306

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/11/24 13:09	1

Lab Sample ID: MB 480-715306/53
Matrix: Water
Analysis Batch: 715306

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/11/24 12:49	1

Lab Sample ID: MB 480-715306/61
Matrix: Water
Analysis Batch: 715306

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/11/24 12:52	1

Lab Sample ID: MB 480-715306/69
Matrix: Water
Analysis Batch: 715306

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/11/24 12:54	1

Lab Sample ID: MB 480-715306/77
Matrix: Water
Analysis Batch: 715306

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/11/24 12:57	1

Lab Sample ID: LCS 480-715306/108
Matrix: Water
Analysis Batch: 715306

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate			30.0	31.84		mg/L		106	90 - 110		

Lab Sample ID: LCS 480-715306/60
Matrix: Water
Analysis Batch: 715306

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate			30.0	31.20		mg/L		104	90 - 110		

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: LCS 480-715306/68
Matrix: Water
Analysis Batch: 715306

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	31.61		mg/L		105	90 - 110

Lab Sample ID: LCS 480-715306/76
Matrix: Water
Analysis Batch: 715306

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	32.02		mg/L		107	90 - 110

Lab Sample ID: 480-220635-5 MS
Matrix: Water
Analysis Batch: 715306

Client Sample ID: MW-3A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	8.2		20.0	31.03		mg/L		114	60 - 128

Lab Sample ID: 480-220635-5 MSD
Matrix: Water
Analysis Batch: 715306

Client Sample ID: MW-3A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	8.2		20.0	32.37		mg/L		121	60 - 128	4	20

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

Lab Sample ID: MB 480-715323/1
Matrix: Water
Analysis Batch: 715323

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0		mg/L			06/12/24 11:20	1

Lab Sample ID: LCS 480-715323/2
Matrix: Water
Analysis Batch: 715323

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	501	498.0		mg/L		100	85 - 115

Lab Sample ID: 480-220635-1 DU
Matrix: Water
Analysis Batch: 715323

Client Sample ID: CD-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	152		152.0		mg/L		0	10

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 480-715304/105
Matrix: Water
Analysis Batch: 715304

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/11/24 10:37	1

Lab Sample ID: MB 480-715304/41
Matrix: Water
Analysis Batch: 715304

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/11/24 09:05	1

Lab Sample ID: MB 480-715304/56
Matrix: Water
Analysis Batch: 715304

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/11/24 09:17	1

Lab Sample ID: MB 480-715304/70
Matrix: Water
Analysis Batch: 715304

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/11/24 10:09	1

Lab Sample ID: MB 480-715304/82
Matrix: Water
Analysis Batch: 715304

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/11/24 10:12	1

Lab Sample ID: MB 480-715304/90
Matrix: Water
Analysis Batch: 715304

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/11/24 10:31	1

Lab Sample ID: MB 480-715304/99
Matrix: Water
Analysis Batch: 715304

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/11/24 10:36	1

Lab Sample ID: LCS 480-715304/104
Matrix: Water
Analysis Batch: 715304

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			25.0	27.16		mg/L		109	90 - 110		

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: LCS 480-715304/55
Matrix: Water
Analysis Batch: 715304

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.41		mg/L		110	90 - 110

Lab Sample ID: LCS 480-715304/81
Matrix: Water
Analysis Batch: 715304

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	26.85		mg/L		107	90 - 110

Lab Sample ID: LCS 480-715304/89
Matrix: Water
Analysis Batch: 715304

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.41		mg/L		110	90 - 110

Lab Sample ID: 480-220635-5 MS
Matrix: Water
Analysis Batch: 715304

Client Sample ID: MW-3A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	3.4		20.0	26.45		mg/L		115	74 - 131

Lab Sample ID: 480-220635-5 MSD
Matrix: Water
Analysis Batch: 715304

Client Sample ID: MW-3A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.4		20.0	26.84		mg/L		117	74 - 131	1	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-714941/1
Matrix: Water
Analysis Batch: 714941

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0		mg/L			06/08/24 09:05	1

Lab Sample ID: LCS 480-714941/2
Matrix: Water
Analysis Batch: 714941

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	193.6		mg/L		98	85 - 115

Method: SM 5310C - TOC

Lab Sample ID: MB 480-715307/28
Matrix: Water
Analysis Batch: 715307

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			06/11/24 23:56	1
TOC Result 2	ND		1.0		mg/L			06/11/24 23:56	1

Lab Sample ID: MB 480-715307/4
Matrix: Water
Analysis Batch: 715307

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			06/11/24 12:51	1
TOC Result 2	ND		1.0		mg/L			06/11/24 12:51	1

Lab Sample ID: LCS 480-715307/29
Matrix: Water
Analysis Batch: 715307

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TOC Result 1			60.0	59.33		mg/L		99	90 - 110		
TOC Result 2			60.0	64.35		mg/L		107	90 - 110		

Lab Sample ID: LCS 480-715307/5
Matrix: Water
Analysis Batch: 715307

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TOC Result 1			60.0	60.19		mg/L		100	90 - 110		
TOC Result 2			60.0	62.46		mg/L		104	90 - 110		

GC/MS VOA

Analysis Batch: 715291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-11	TRIP BLANK	Total/NA	Water	8260C	
MB 480-715291/8	Method Blank	Total/NA	Water	8260C	
LCS 480-715291/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 715078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	3005A	
480-220635-2	CD-1RA	Total/NA	Water	3005A	
480-220635-3	MW-1A	Total/NA	Water	3005A	
480-220635-4	MW-1B	Total/NA	Water	3005A	
480-220635-5	MW-3A	Total/NA	Water	3005A	
480-220635-6	MW-3B	Total/NA	Water	3005A	
480-220635-7	MW-4A	Total/NA	Water	3005A	
480-220635-8	MW-5A	Total/NA	Water	3005A	
480-220635-9	MW-6A	Total/NA	Water	3005A	
480-220635-10	MW-6B	Total/NA	Water	3005A	
MB 480-715078/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-715078/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-220635-1 MS	CD-1	Total/NA	Water	3005A	
480-220635-1 MSD	CD-1	Total/NA	Water	3005A	

Analysis Batch: 715274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	6010C	715078
480-220635-2	CD-1RA	Total/NA	Water	6010C	715078
480-220635-3	MW-1A	Total/NA	Water	6010C	715078
480-220635-4	MW-1B	Total/NA	Water	6010C	715078
480-220635-5	MW-3A	Total/NA	Water	6010C	715078
480-220635-6	MW-3B	Total/NA	Water	6010C	715078
480-220635-7	MW-4A	Total/NA	Water	6010C	715078
480-220635-8	MW-5A	Total/NA	Water	6010C	715078
480-220635-9	MW-6A	Total/NA	Water	6010C	715078
480-220635-10	MW-6B	Total/NA	Water	6010C	715078
MB 480-715078/1-A	Method Blank	Total/NA	Water	6010C	715078
LCS 480-715078/2-A	Lab Control Sample	Total/NA	Water	6010C	715078
480-220635-1 MS	CD-1	Total/NA	Water	6010C	715078
480-220635-1 MSD	CD-1	Total/NA	Water	6010C	715078

Analysis Batch: 715376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	SM 2340B	
480-220635-2	CD-1RA	Total/NA	Water	SM 2340B	
480-220635-3	MW-1A	Total/NA	Water	SM 2340B	
480-220635-4	MW-1B	Total/NA	Water	SM 2340B	
480-220635-5	MW-3A	Total/NA	Water	SM 2340B	
480-220635-6	MW-3B	Total/NA	Water	SM 2340B	
480-220635-7	MW-4A	Total/NA	Water	SM 2340B	
480-220635-8	MW-5A	Total/NA	Water	SM 2340B	
480-220635-9	MW-6A	Total/NA	Water	SM 2340B	

Metals (Continued)

Analysis Batch: 715376 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-10	MW-6B	Total/NA	Water	SM 2340B	

General Chemistry

Analysis Batch: 714941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	SM 5210B	
480-220635-2	CD-1RA	Total/NA	Water	SM 5210B	
480-220635-3	MW-1A	Total/NA	Water	SM 5210B	
480-220635-4	MW-1B	Total/NA	Water	SM 5210B	
480-220635-5	MW-3A	Total/NA	Water	SM 5210B	
480-220635-6	MW-3B	Total/NA	Water	SM 5210B	
480-220635-7	MW-4A	Total/NA	Water	SM 5210B	
480-220635-8	MW-5A	Total/NA	Water	SM 5210B	
480-220635-9	MW-6A	Total/NA	Water	SM 5210B	
480-220635-10	MW-6B	Total/NA	Water	SM 5210B	
USB 480-714941/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 480-714941/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 714956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	353.2	
480-220635-2	CD-1RA	Total/NA	Water	353.2	
480-220635-3	MW-1A	Total/NA	Water	353.2	
480-220635-4	MW-1B	Total/NA	Water	353.2	
480-220635-5	MW-3A	Total/NA	Water	353.2	
480-220635-6	MW-3B	Total/NA	Water	353.2	
480-220635-7	MW-4A	Total/NA	Water	353.2	
480-220635-8	MW-5A	Total/NA	Water	353.2	
480-220635-9	MW-6A	Total/NA	Water	353.2	
480-220635-10	MW-6B	Total/NA	Water	353.2	

Prep Batch: 715050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	351.2	
480-220635-2	CD-1RA	Total/NA	Water	351.2	
480-220635-3	MW-1A	Total/NA	Water	351.2	
480-220635-4	MW-1B	Total/NA	Water	351.2	
480-220635-5	MW-3A	Total/NA	Water	351.2	
480-220635-6	MW-3B	Total/NA	Water	351.2	
480-220635-7	MW-4A	Total/NA	Water	351.2	
480-220635-8	MW-5A	Total/NA	Water	351.2	
480-220635-9	MW-6A	Total/NA	Water	351.2	
480-220635-10	MW-6B	Total/NA	Water	351.2	
MB 480-715050/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-715050/2-A	Lab Control Sample	Total/NA	Water	351.2	
480-220635-4 MS	MW-1B	Total/NA	Water	351.2	

Analysis Batch: 715198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 715198 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-2	CD-1RA	Total/NA	Water	350.1	
480-220635-3	MW-1A	Total/NA	Water	350.1	
480-220635-4	MW-1B	Total/NA	Water	350.1	
480-220635-5	MW-3A	Total/NA	Water	350.1	
480-220635-6	MW-3B	Total/NA	Water	350.1	
480-220635-7	MW-4A	Total/NA	Water	350.1	
480-220635-8	MW-5A	Total/NA	Water	350.1	
480-220635-9	MW-6A	Total/NA	Water	350.1	
480-220635-10	MW-6B	Total/NA	Water	350.1	
MB 480-715198/51	Method Blank	Total/NA	Water	350.1	
MB 480-715198/75	Method Blank	Total/NA	Water	350.1	
LCS 480-715198/52	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-715198/76	Lab Control Sample	Total/NA	Water	350.1	
480-220635-3 MS	MW-1A	Total/NA	Water	350.1	
480-220635-3 MSD	MW-1A	Total/NA	Water	350.1	
480-220635-9 MS	MW-6A	Total/NA	Water	350.1	

Analysis Batch: 715199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	351.2	715050
480-220635-2	CD-1RA	Total/NA	Water	351.2	715050
480-220635-3	MW-1A	Total/NA	Water	351.2	715050
480-220635-4	MW-1B	Total/NA	Water	351.2	715050
480-220635-5	MW-3A	Total/NA	Water	351.2	715050
480-220635-6	MW-3B	Total/NA	Water	351.2	715050
480-220635-7	MW-4A	Total/NA	Water	351.2	715050
480-220635-8	MW-5A	Total/NA	Water	351.2	715050
480-220635-9	MW-6A	Total/NA	Water	351.2	715050
480-220635-10	MW-6B	Total/NA	Water	351.2	715050
MB 480-715050/1-A	Method Blank	Total/NA	Water	351.2	715050
LCS 480-715050/2-A	Lab Control Sample	Total/NA	Water	351.2	715050
480-220635-4 MS	MW-1B	Total/NA	Water	351.2	715050

Analysis Batch: 715205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	300.0	
480-220635-2	CD-1RA	Total/NA	Water	300.0	
480-220635-3	MW-1A	Total/NA	Water	300.0	
480-220635-4	MW-1B	Total/NA	Water	300.0	
480-220635-5	MW-3A	Total/NA	Water	300.0	
480-220635-6	MW-3B	Total/NA	Water	300.0	
480-220635-7	MW-4A	Total/NA	Water	300.0	
MB 480-715205/28	Method Blank	Total/NA	Water	300.0	
MB 480-715205/4	Method Blank	Total/NA	Water	300.0	
LCS 480-715205/29	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-715205/5	Lab Control Sample	Total/NA	Water	300.0	
480-220635-7 MS	MW-4A	Total/NA	Water	300.0	

Analysis Batch: 715209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-8	MW-5A	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 715209 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-9	MW-6A	Total/NA	Water	300.0	
480-220635-10	MW-6B	Total/NA	Water	300.0	
MB 480-715209/4	Method Blank	Total/NA	Water	300.0	
LCS 480-715209/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 715304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	SM 4500 Cl- E	
480-220635-2	CD-1RA	Total/NA	Water	SM 4500 Cl- E	
480-220635-3	MW-1A	Total/NA	Water	SM 4500 Cl- E	
480-220635-4	MW-1B	Total/NA	Water	SM 4500 Cl- E	
480-220635-5	MW-3A	Total/NA	Water	SM 4500 Cl- E	
480-220635-6	MW-3B	Total/NA	Water	SM 4500 Cl- E	
480-220635-7	MW-4A	Total/NA	Water	SM 4500 Cl- E	
480-220635-8	MW-5A	Total/NA	Water	SM 4500 Cl- E	
480-220635-9	MW-6A	Total/NA	Water	SM 4500 Cl- E	
480-220635-10	MW-6B	Total/NA	Water	SM 4500 Cl- E	
MB 480-715304/105	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-715304/41	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-715304/56	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-715304/70	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-715304/82	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-715304/90	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-715304/99	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 480-715304/104	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-715304/55	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-715304/81	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-715304/89	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
480-220635-5 MS	MW-3A	Total/NA	Water	SM 4500 Cl- E	
480-220635-5 MSD	MW-3A	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 715306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	9038	
480-220635-2	CD-1RA	Total/NA	Water	9038	
480-220635-3	MW-1A	Total/NA	Water	9038	
480-220635-4	MW-1B	Total/NA	Water	9038	
480-220635-5	MW-3A	Total/NA	Water	9038	
480-220635-6	MW-3B	Total/NA	Water	9038	
480-220635-7	MW-4A	Total/NA	Water	9038	
480-220635-8	MW-5A	Total/NA	Water	9038	
480-220635-9	MW-6A	Total/NA	Water	9038	
480-220635-10	MW-6B	Total/NA	Water	9038	
MB 480-715306/103	Method Blank	Total/NA	Water	9038	
MB 480-715306/109	Method Blank	Total/NA	Water	9038	
MB 480-715306/53	Method Blank	Total/NA	Water	9038	
MB 480-715306/61	Method Blank	Total/NA	Water	9038	
MB 480-715306/69	Method Blank	Total/NA	Water	9038	
MB 480-715306/77	Method Blank	Total/NA	Water	9038	
LCS 480-715306/108	Lab Control Sample	Total/NA	Water	9038	
LCS 480-715306/60	Lab Control Sample	Total/NA	Water	9038	

General Chemistry (Continued)

Analysis Batch: 715306 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-715306/68	Lab Control Sample	Total/NA	Water	9038	
LCS 480-715306/76	Lab Control Sample	Total/NA	Water	9038	
480-220635-5 MS	MW-3A	Total/NA	Water	9038	
480-220635-5 MSD	MW-3A	Total/NA	Water	9038	

Analysis Batch: 715307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	SM 5310C	
480-220635-2	CD-1RA	Total/NA	Water	SM 5310C	
480-220635-3	MW-1A	Total/NA	Water	SM 5310C	
480-220635-4	MW-1B	Total/NA	Water	SM 5310C	
480-220635-5	MW-3A	Total/NA	Water	SM 5310C	
480-220635-6	MW-3B	Total/NA	Water	SM 5310C	
480-220635-7	MW-4A	Total/NA	Water	SM 5310C	
480-220635-8	MW-5A	Total/NA	Water	SM 5310C	
480-220635-9	MW-6A	Total/NA	Water	SM 5310C	
480-220635-10	MW-6B	Total/NA	Water	SM 5310C	
MB 480-715307/28	Method Blank	Total/NA	Water	SM 5310C	
MB 480-715307/4	Method Blank	Total/NA	Water	SM 5310C	
LCS 480-715307/29	Lab Control Sample	Total/NA	Water	SM 5310C	
LCS 480-715307/5	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 715323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	SM 2540C	
480-220635-2	CD-1RA	Total/NA	Water	SM 2540C	
480-220635-3	MW-1A	Total/NA	Water	SM 2540C	
480-220635-4	MW-1B	Total/NA	Water	SM 2540C	
480-220635-5	MW-3A	Total/NA	Water	SM 2540C	
480-220635-6	MW-3B	Total/NA	Water	SM 2540C	
480-220635-7	MW-4A	Total/NA	Water	SM 2540C	
480-220635-8	MW-5A	Total/NA	Water	SM 2540C	
480-220635-9	MW-6A	Total/NA	Water	SM 2540C	
480-220635-10	MW-6B	Total/NA	Water	SM 2540C	
MB 480-715323/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 480-715323/2	Lab Control Sample	Total/NA	Water	SM 2540C	
480-220635-1 DU	CD-1	Total/NA	Water	SM 2540C	

Analysis Batch: 715524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	310.2	
480-220635-2	CD-1RA	Total/NA	Water	310.2	
480-220635-3	MW-1A	Total/NA	Water	310.2	
480-220635-4	MW-1B	Total/NA	Water	310.2	
480-220635-5	MW-3A	Total/NA	Water	310.2	
480-220635-6	MW-3B	Total/NA	Water	310.2	
480-220635-7	MW-4A	Total/NA	Water	310.2	
480-220635-8	MW-5A	Total/NA	Water	310.2	
480-220635-9	MW-6A	Total/NA	Water	310.2	
480-220635-10	MW-6B	Total/NA	Water	310.2	
MB 480-715524/129	Method Blank	Total/NA	Water	310.2	

General Chemistry (Continued)

Analysis Batch: 715524 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-715524/136	Method Blank	Total/NA	Water	310.2	
MB 480-715524/144	Method Blank	Total/NA	Water	310.2	
MB 480-715524/151	Method Blank	Total/NA	Water	310.2	
MB 480-715524/213	Method Blank	Total/NA	Water	310.2	
MB 480-715524/218	Method Blank	Total/NA	Water	310.2	
MB 480-715524/229	Method Blank	Total/NA	Water	310.2	
MB 480-715524/238	Method Blank	Total/NA	Water	310.2	
LCS 480-715524/135	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-715524/143	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-715524/150	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-715524/217	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-715524/237	Lab Control Sample	Total/NA	Water	310.2	
480-220635-2 MS	CD-1RA	Total/NA	Water	310.2	
480-220635-2 MSD	CD-1RA	Total/NA	Water	310.2	

Analysis Batch: 715525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	420.4	
480-220635-2	CD-1RA	Total/NA	Water	420.4	
480-220635-3	MW-1A	Total/NA	Water	420.4	
480-220635-4	MW-1B	Total/NA	Water	420.4	
480-220635-5	MW-3A	Total/NA	Water	420.4	
480-220635-6	MW-3B	Total/NA	Water	420.4	
480-220635-7	MW-4A	Total/NA	Water	420.4	
MB 480-715525/131	Method Blank	Total/NA	Water	420.4	
MB 480-715525/159	Method Blank	Total/NA	Water	420.4	
LCS 480-715525/132	Lab Control Sample	Total/NA	Water	420.4	
LCS 480-715525/160	Lab Control Sample	Total/NA	Water	420.4	

Analysis Batch: 715584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-1	CD-1	Total/NA	Water	410.4	
480-220635-2	CD-1RA	Total/NA	Water	410.4	
480-220635-3	MW-1A	Total/NA	Water	410.4	
480-220635-4	MW-1B	Total/NA	Water	410.4	
480-220635-5	MW-3A	Total/NA	Water	410.4	
480-220635-6	MW-3B	Total/NA	Water	410.4	
480-220635-7	MW-4A	Total/NA	Water	410.4	
480-220635-8	MW-5A	Total/NA	Water	410.4	
480-220635-9	MW-6A	Total/NA	Water	410.4	
480-220635-10	MW-6B	Total/NA	Water	410.4	
MB 480-715584/28	Method Blank	Total/NA	Water	410.4	
MB 480-715584/4	Method Blank	Total/NA	Water	410.4	
LCS 480-715584/29	Lab Control Sample	Total/NA	Water	410.4	
LCS 480-715584/5	Lab Control Sample	Total/NA	Water	410.4	
480-220635-3 MS	MW-1A	Total/NA	Water	410.4	
480-220635-10 MS	MW-6B	Total/NA	Water	410.4	
480-220635-10 DU	MW-6B	Total/NA	Water	410.4	

General Chemistry

Analysis Batch: 715680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220635-8	MW-5A	Total/NA	Water	420.4	
480-220635-9	MW-6A	Total/NA	Water	420.4	
480-220635-10	MW-6B	Total/NA	Water	420.4	
MB 480-715680/47	Method Blank	Total/NA	Water	420.4	
MB 480-715680/76	Method Blank	Total/NA	Water	420.4	
LCS 480-715680/48	Lab Control Sample	Total/NA	Water	420.4	
LCS 480-715680/77	Lab Control Sample	Total/NA	Water	420.4	

Client Sample ID: CD-1
Lab Sample ID: 480-220635-1

Date Collected: 06/07/24 12:05
Matrix: Water
Date Received: 06/08/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 17:48
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		1	715205	AF	EET BUF	06/12/24 02:55
Total/NA	Analysis	310.2		5	715524	CG	EET BUF	06/13/24 11:40
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 12:47
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:15
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:40
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 15:47
Total/NA	Analysis	420.4		1	715525	GW	EET BUF	06/13/24 02:32
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 12:53
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	715304	CG	EET BUF	06/11/24 10:13
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/11/24 22:33

Client Sample ID: CD-1RA
Lab Sample ID: 480-220635-2

Date Collected: 06/07/24 12:15
Matrix: Water
Date Received: 06/08/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 18:03
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		1	715205	AF	EET BUF	06/12/24 03:13
Total/NA	Analysis	310.2		5	715524	CG	EET BUF	06/13/24 11:48
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 12:48
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:16
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:44
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 15:50
Total/NA	Analysis	420.4		1	715525	GW	EET BUF	06/13/24 02:36
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 12:53
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	715304	CG	EET BUF	06/11/24 10:14
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/12/24 02:42

Client Sample ID: MW-1A
Lab Sample ID: 480-220635-3

Date Collected: 06/07/24 14:30
Matrix: Water
Date Received: 06/08/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 18:05
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		1	715205	AF	EET BUF	06/12/24 03:30
Total/NA	Analysis	310.2		5	715524	CG	EET BUF	06/13/24 11:50
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 12:53
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:17
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:45
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 16:34
Total/NA	Analysis	420.4		1	715525	GW	EET BUF	06/13/24 02:40
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 12:53
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	715304	CG	EET BUF	06/11/24 10:14
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/12/24 03:10

Client Sample ID: MW-1B
Lab Sample ID: 480-220635-4

Date Collected: 06/07/24 14:50
Matrix: Water
Date Received: 06/08/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 18:07
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		1	715205	AF	EET BUF	06/12/24 03:48
Total/NA	Analysis	310.2		5	715524	CG	EET BUF	06/13/24 11:51
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 12:56
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:19
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:47
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 16:39
Total/NA	Analysis	420.4		1	715525	GW	EET BUF	06/13/24 02:43
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 12:55
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	715304	CG	EET BUF	06/11/24 10:14
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/12/24 03:38

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Project/Site: Towlsee Landfill - Routine Q2 2024

Job ID: 480-220635-1

Client Sample ID: MW-3A

Date Collected: 06/07/24 14:05
Date Received: 06/08/24 10:00

Lab Sample ID: 480-220635-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 18:09
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		1	715205	AF	EET BUF	06/12/24 04:06
Total/NA	Analysis	310.2		5	715524	CG	EET BUF	06/13/24 11:52
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 12:57
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:22
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:48
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 16:25
Total/NA	Analysis	420.4		1	715525	GW	EET BUF	06/13/24 02:47
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 12:56
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	715304	CG	EET BUF	06/11/24 10:34
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/12/24 04:06

Client Sample ID: MW-3B

Date Collected: 06/07/24 14:10
Date Received: 06/08/24 10:00

Lab Sample ID: 480-220635-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 18:11
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		1	715205	AF	EET BUF	06/12/24 04:24
Total/NA	Analysis	310.2		5	715524	CG	EET BUF	06/13/24 11:52
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 12:59
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:26
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:50
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 16:22
Total/NA	Analysis	420.4		1	715525	GW	EET BUF	06/13/24 02:51
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 12:57
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	715304	CG	EET BUF	06/11/24 09:22
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/12/24 07:20

Client Sample ID: MW-4A
Lab Sample ID: 480-220635-7

Date Collected: 06/07/24 12:00
Matrix: Water
Date Received: 06/08/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 18:13
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		2	715205	AF	EET BUF	06/12/24 04:42
Total/NA	Analysis	310.2		23	715524	CG	EET BUF	06/13/24 14:15
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 13:00
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:27
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:54
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 16:19
Total/NA	Analysis	420.4		1	715525	GW	EET BUF	06/13/24 02:54
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 12:57
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	715304	CG	EET BUF	06/11/24 09:23
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/12/24 07:48

Client Sample ID: MW-5A
Lab Sample ID: 480-220635-8

Date Collected: 06/07/24 11:40
Matrix: Water
Date Received: 06/08/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 18:14
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		1	715209	AF	EET BUF	06/11/24 16:14
Total/NA	Analysis	310.2		5	715524	CG	EET BUF	06/13/24 13:23
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 13:01
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:29
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:56
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 16:16
Total/NA	Analysis	420.4		1	715680	GW	EET BUF	06/14/24 02:14
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 12:58
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	715304	CG	EET BUF	06/11/24 09:23
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/12/24 08:16

Client Sample ID: MW-6A
Lab Sample ID: 480-220635-9

Date Collected: 06/07/24 11:15
Matrix: Water
Date Received: 06/08/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 18:22
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		1	715209	AF	EET BUF	06/11/24 16:29
Total/NA	Analysis	310.2		5	715524	CG	EET BUF	06/13/24 13:23
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 13:04
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:30
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:58
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 16:13
Total/NA	Analysis	420.4		1	715680	GW	EET BUF	06/14/24 02:51
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 12:58
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	715304	CG	EET BUF	06/11/24 09:23
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/12/24 08:44

Client Sample ID: MW-6B
Lab Sample ID: 480-220635-10

Date Collected: 06/07/24 11:00
Matrix: Water
Date Received: 06/08/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715078	ET	EET BUF	06/11/24 12:34
Total/NA	Analysis	6010C		1	715274	NZG	EET BUF	06/11/24 18:24
Total/NA	Analysis	SM 2340B		1	715376	JJP	EET BUF	06/12/24 14:43
Total/NA	Analysis	300.0		1	715209	AF	EET BUF	06/11/24 16:43
Total/NA	Analysis	310.2		5	715524	CG	EET BUF	06/13/24 13:23
Total/NA	Analysis	350.1		1	715198	AM	EET BUF	06/11/24 13:06
Total/NA	Prep	351.2			715050	RMJ	EET BUF	06/10/24 13:20
Total/NA	Analysis	351.2		1	715199	AM	EET BUF	06/11/24 11:31
Total/NA	Analysis	353.2		1	714956	AM	EET BUF	06/08/24 12:59
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 16:06
Total/NA	Analysis	420.4		1	715680	GW	EET BUF	06/14/24 02:55
Total/NA	Analysis	9038		1	715306	CG	EET BUF	06/11/24 13:10
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		5	715304	CG	EET BUF	06/11/24 10:43
Total/NA	Analysis	SM 5210B		1	714941	KM	EET BUF	06/08/24 12:51
Total/NA	Analysis	SM 5310C		1	715307	AF	EET BUF	06/12/24 09:12

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220635-11
Date Collected: 06/07/24 00:00
Matrix: Water
Date Received: 06/08/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	715291	ERS	EET BUF	06/12/24 14:38

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9038		Water	Sulfate
SM 5310C		Water	TOC Result 1
SM 5310C		Water	TOC Result 2

Method Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET BUF
300.0	Anions, Ion Chromatography	EPA	EET BUF
310.2	Alkalinity	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET BUF
351.2	Nitrogen, Total Kjeldahl	EPA	EET BUF
353.2	Nitrate	EPA	EET BUF
410.4	COD	EPA	EET BUF
420.4	Phenolics, Total Recoverable	EPA	EET BUF
9038	Sulfate, Turbidimetric	SW846	EET BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET BUF
SM 4500 Cl- E	Chloride, Total	SM	EET BUF
SM 5210B	BOD, 5-Day	SM	EET BUF
SM 5310C	TOC	SM	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
351.2	Nitrogen, Total Kjeldahl	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220635-1
Project/Site: Towlsee Landfill - Routine Q2 2024

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-220635-1	CD-1	Water	06/07/24 12:05	06/08/24 10:00
480-220635-2	CD-1RA	Water	06/07/24 12:15	06/08/24 10:00
480-220635-3	MW-1A	Water	06/07/24 14:30	06/08/24 10:00
480-220635-4	MW-1B	Water	06/07/24 14:50	06/08/24 10:00
480-220635-5	MW-3A	Water	06/07/24 14:05	06/08/24 10:00
480-220635-6	MW-3B	Water	06/07/24 14:10	06/08/24 10:00
480-220635-7	MW-4A	Water	06/07/24 12:00	06/08/24 10:00
480-220635-8	MW-5A	Water	06/07/24 11:40	06/08/24 10:00
480-220635-9	MW-6A	Water	06/07/24 11:15	06/08/24 10:00
480-220635-10	MW-6B	Water	06/07/24 11:00	06/08/24 10:00
480-220635-11	TRIP BLANK	Water	06/07/24 00:00	06/08/24 10:00

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

Syracuse | eurofins Environment Testing

Client Information
Client Contact: ~~Ms. Kathleen McGrath~~ Chad Hill
Company: Cortland Cty Soil & Water Cons District
Address: 100 Grange Place Rm 202
City: Cortland
State, Zip: NY, 13045
Phone:
Email: chad.hill@cortlandcountyny.gov
kathleen.mcgrath@cortlandswcd.org
Project Name: Towslee Landfill - Routine Q2/24 Event Desc: Towslee Landfill -
Site: New York

Sampler: Chad Hill
Phone: 607-345-5688
PWSID:
Due Date Requested:
TAT Requested (days): Standard
Compliance Project: Δ Yes Δ No
PO #: Purchase Order not required
WO #:
Project #: 48009337
SSOW#:

Lab PM: Beninati, John
E-Mail: John.Beninati@et.eurofinsus.com
Carrier Tracking No(s): #225
State of Origin:

COC No: 480-197121-17547.1
Page: Page 1 of 2
Job #:

Analysis Requested

Preservation Codes:
N - None
D - HNO3
S - H2SO4
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D - Bromide	6010C, SM2340B	5210B - Biochemical Oxygen Demand	2540C_Calcd - Total Dissolved Solids	353.2, 353.2_Nitrite, 9038, Nitrate_Calc, SM4500_Cl_E	310.2 - Alkalinity, Total	5310C - TOC	350.1, 351.2, 410.4	420.4_NP - Phenolics	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	N	N	N	N	S	S	S	X	
CD-1	6/7/24	1205	G	Water	N	N	X	X	X	X	X	X	X	X	X		
CD-1RA		1215	G	Water	N	N											
MW-1A		1430	G	Water	N	N											
MW-1B		1450	G	Water													
~~MW-2A~~ MW-6B		1100	G	Water													
~~MW-2B~~ MW-6A		1115	G	Water													
MW-3A		1405	G	Water													
MW-3B		1410	G	Water													
MW-4A		1200	G	Water													
MW-5A		1140	G	Water													
~~MW-6A~~ Trip Blank				Water													

480-220635 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
Deliverable Requested: I, II, III, IV, Other (specify)

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:

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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Chad Hill	6/7/24 1540	CCSWCD		6/7/24 1540	ES-SK
Relinquished by: R. English	6.7.24, 1900		Lwallace	6/8/24 1000	TAS
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: #1 3.1, 2.8, 2.6

Ver: 04/02/2024

Login Sample Receipt Checklist

Client: Cortland Cty Soil & Water Cons District

Job Number: 480-220635-1

Login Number: 220635
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	CCSWCD
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hill
Cortland Cty Soil & Water Cons District
100 Grange Place
Rm 202
Cortland, New York 13045

Generated 6/24/2024 11:54:36 AM

JOB DESCRIPTION

Towslee Landfill - Routine Parameters
Towslee Landfill - Routine

JOB NUMBER

480-220684-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Job Notes

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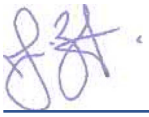
The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed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

Authorization



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Authorized for release by
John Beninati, Project Manager I
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(716)504-9874

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Definitions/Glossary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
b	Result Detected in the Unseeded Control blank (USB).
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

Job ID: 480-220684-1 — Eurofins Buffalo

Job Narrative
480-220684-1

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

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

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

Receipt
The samples were received on 6/11/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C.

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

General Chemistry
Method 300.0_28D: The following samples were diluted due to the nature of the sample matrix: MW-2A (480-220684-1), MW-2B (480-220684-2) and MW-7A (480-220684-3). Elevated reporting limits (RLs) are provided.

Method 5210B: The results increased with increasing dilutions for the following samples: MW-2A (480-220684-1), MW-2B (480-220684-2) and MW-7A (480-220684-3). This indicates a potentially toxic substance is being diluted out. The concentration may be biased low.

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

Detection Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

Client Sample ID: MW-2A
Lab Sample ID: 480-220684-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	60.4		0.50		mg/L	1		6010C	Total/NA
Iron	6.4		0.050		mg/L	1		6010C	Total/NA
Magnesium	11.6		0.20		mg/L	1		6010C	Total/NA
Manganese	7.1		0.0030		mg/L	1		6010C	Total/NA
Potassium	7.3		0.50		mg/L	1		6010C	Total/NA
Sodium	11.2		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	199		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	271		50.0		mg/L	5		310.2	Total/NA
Ammonia	4.4		0.20		mg/L	10		350.1	Total/NA
Total Kjeldahl Nitrogen	3.9		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.097		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	11.3		10.0		mg/L	1		410.4	Total/NA
Total Dissolved Solids	224		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	10.9		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.1	b	2.0		mg/L	1		SM 5210B	Total/NA
TOC Result 1	3.6		1.0		mg/L	1		SM 5310C	Total/NA
TOC Result 2	3.2		1.0		mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-2B
Lab Sample ID: 480-220684-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	168		0.50		mg/L	1		6010C	Total/NA
Iron	0.25		0.050		mg/L	1		6010C	Total/NA
Magnesium	34.7		0.20		mg/L	1		6010C	Total/NA
Manganese	4.0		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.9		0.50		mg/L	1		6010C	Total/NA
Sodium	38.5		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	562		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.81		0.40		mg/L	2		300.0	Total/NA
Alkalinity, Total	487		280		mg/L	28		310.2	Total/NA
Ammonia	0.58		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.67		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	11.5		10.0		mg/L	1		410.4	Total/NA
Total Dissolved Solids	654		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	80.3		5.0		mg/L	5		SM 4500 Cl- E	Total/NA
TOC Result 1	2.0		1.0		mg/L	1		SM 5310C	Total/NA
TOC Result 2	1.6		1.0		mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-7A
Lab Sample ID: 480-220684-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	89.5		0.50		mg/L	1		6010C	Total/NA
Iron	0.48		0.050		mg/L	1		6010C	Total/NA
Magnesium	19.3		0.20		mg/L	1		6010C	Total/NA
Manganese	0.22		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.8		0.50		mg/L	1		6010C	Total/NA
Sodium	47.2		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	303		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	403		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.12	F1	0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.54		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.47		0.050		mg/L	1		353.2	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-7A (Continued)

Lab Sample ID: 480-220684-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	15.0		10.0		mg/L	1		410.4	Total/NA
Sulfate	10.5		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	256		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	28.6		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
TOC Result 1	4.4		1.0		mg/L	1		SM 5310C	Total/NA
TOC Result 2	4.0		1.0		mg/L	1		SM 5310C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

Client Sample ID: MW-2A
Date Collected: 06/10/24 11:40
Date Received: 06/11/24 09:45

Lab Sample ID: 480-220684-1
Matrix: Water

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/12/24 08:52	06/12/24 14:51	1
Calcium	**60.4**		0.50		mg/L		06/12/24 08:52	06/12/24 14:51	1
Iron	**6.4**		0.050		mg/L		06/12/24 08:52	06/12/24 14:51	1
Lead	ND		0.010		mg/L		06/12/24 08:52	06/13/24 10:23	1
Magnesium	**11.6**		0.20		mg/L		06/12/24 08:52	06/12/24 14:51	1
Manganese	**7.1**		0.0030		mg/L		06/12/24 08:52	06/12/24 14:51	1
Potassium	**7.3**		0.50		mg/L		06/12/24 08:52	06/12/24 14:51	1
Sodium	**11.2**		1.0		mg/L		06/12/24 08:52	06/12/24 14:51	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**199**		0.50		mg/L			06/13/24 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.40		mg/L			06/13/24 17:27	2
Alkalinity, Total (EPA 310.2)	**271**		50.0		mg/L			06/14/24 11:18	5
Ammonia (EPA 350.1)	**4.4**		0.20		mg/L			06/14/24 14:13	10
Total Kjeldahl Nitrogen (EPA 351.2	**3.9**		0.20		mg/L		06/12/24 15:00	06/13/24 16:36	1
Nitrate as N (EPA 353.2)	**0.097**		0.050		mg/L			06/11/24 19:19	1
Chemical Oxygen Demand (EPA 410.4)	**11.3**		10.0		mg/L			06/13/24 16:42	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/17/24 22:35	1
Sulfate (SW846 9038)	ND		5.0		mg/L			06/18/24 15:57	1
Total Dissolved Solids (SM 2540C)	**224**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**10.9**		1.0		mg/L			06/18/24 09:25	1
Biochemical Oxygen Demand (SM 5210B)	**2.1**	**b**	2.0		mg/L			06/12/24 09:57	1
TOC Result 1 (SM 5310C)	**3.6**		1.0		mg/L			06/13/24 01:04	1
TOC Result 2 (SM 5310C)	**3.2**		1.0		mg/L			06/13/24 01:04	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

Client Sample ID: MW-2B
Date Collected: 06/10/24 11:30
Date Received: 06/11/24 09:45

Lab Sample ID: 480-220684-2
Matrix: Water

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/12/24 08:52	06/12/24 14:53	1
Calcium	**168**		0.50		mg/L		06/12/24 08:52	06/12/24 14:53	1
Iron	**0.25**		0.050		mg/L		06/12/24 08:52	06/12/24 14:53	1
Lead	ND		0.010		mg/L		06/12/24 08:52	06/13/24 10:25	1
Magnesium	**34.7**		0.20		mg/L		06/12/24 08:52	06/12/24 14:53	1
Manganese	**4.0**		0.0030		mg/L		06/12/24 08:52	06/12/24 14:53	1
Potassium	**1.9**		0.50		mg/L		06/12/24 08:52	06/12/24 14:53	1
Sodium	**38.5**		1.0		mg/L		06/12/24 08:52	06/12/24 14:53	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**562**		0.50		mg/L			06/13/24 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**0.81**		0.40		mg/L			06/13/24 18:41	2
Alkalinity, Total (EPA 310.2)	**487**		280		mg/L			06/14/24 11:18	28
Ammonia (EPA 350.1)	**0.58**		0.020		mg/L			06/14/24 14:14	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.67**		0.20		mg/L		06/12/24 15:00	06/13/24 16:37	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			06/11/24 19:19	1
Chemical Oxygen Demand (EPA 410.4)	**11.5**		10.0		mg/L			06/13/24 19:17	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/17/24 22:39	1
Sulfate (SW846 9038)	ND		5.0		mg/L			06/18/24 15:57	1
Total Dissolved Solids (SM 2540C)	**654**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**80.3**		5.0		mg/L			06/18/24 09:43	5
Biochemical Oxygen Demand (SM 5210B)	ND		3.0		mg/L			06/12/24 09:57	1
TOC Result 1 (SM 5310C)	**2.0**		1.0		mg/L			06/13/24 02:02	1
TOC Result 2 (SM 5310C)	**1.6**		1.0		mg/L			06/13/24 02:02	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

Client Sample ID: MW-7A
Lab Sample ID: 480-220684-3
Date Collected: 06/10/24 12:10
Matrix: Water
Date Received: 06/11/24 09:45

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/12/24 08:52	06/12/24 15:03	1
Calcium	**89.5**		0.50		mg/L		06/12/24 08:52	06/12/24 15:03	1
Iron	**0.48**		0.050		mg/L		06/12/24 08:52	06/12/24 15:03	1
Lead	ND		0.010		mg/L		06/12/24 08:52	06/13/24 10:40	1
Magnesium	**19.3**		0.20		mg/L		06/12/24 08:52	06/12/24 15:03	1
Manganese	**0.22**		0.0030		mg/L		06/12/24 08:52	06/12/24 15:03	1
Potassium	**1.8**		0.50		mg/L		06/12/24 08:52	06/12/24 15:03	1
Sodium	**47.2**		1.0		mg/L		06/12/24 08:52	06/12/24 15:03	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**303**		0.50		mg/L			06/13/24 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.40		mg/L			06/13/24 18:55	2
Alkalinity, Total (EPA 310.2)	**403**		50.0		mg/L			06/14/24 10:27	5
Ammonia (EPA 350.1)	**0.12**	**F1**	0.020		mg/L			06/14/24 14:17	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.54**		0.20		mg/L		06/12/24 15:00	06/13/24 16:38	1
Nitrate as N (EPA 353.2)	**0.47**		0.050		mg/L			06/11/24 19:20	1
Chemical Oxygen Demand (EPA 410.4)	**15.0**		10.0		mg/L			06/13/24 19:46	1
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			06/17/24 23:10	1
Sulfate (SW846 9038)	**10.5**		5.0		mg/L			06/18/24 16:02	1
Total Dissolved Solids (SM 2540C)	**256**		10.0		mg/L			06/12/24 11:20	1
Chloride (SM 4500 Cl- E)	**28.6**		1.0		mg/L			06/18/24 09:28	1
Biochemical Oxygen Demand (SM 5210B)	ND		3.0		mg/L			06/12/24 09:57	1
TOC Result 1 (SM 5310C)	**4.4**		1.0		mg/L			06/13/24 03:01	1
TOC Result 2 (SM 5310C)	**4.0**		1.0		mg/L			06/13/24 03:01	1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-715240/1-A
Matrix: Water
Analysis Batch: 715424

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/12/24 08:52	06/12/24 14:38	1
Calcium	ND		0.50		mg/L		06/12/24 08:52	06/12/24 14:38	1
Iron	ND		0.050		mg/L		06/12/24 08:52	06/12/24 14:38	1
Magnesium	ND		0.20		mg/L		06/12/24 08:52	06/12/24 14:38	1
Manganese	ND		0.0030		mg/L		06/12/24 08:52	06/12/24 14:38	1
Potassium	ND		0.50		mg/L		06/12/24 08:52	06/12/24 14:38	1
Sodium	ND		1.0		mg/L		06/12/24 08:52	06/12/24 14:38	1

Lab Sample ID: MB 480-715240/1-A
Matrix: Water
Analysis Batch: 715488

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.010		mg/L		06/12/24 08:52	06/13/24 10:19	1

Lab Sample ID: LCS 480-715240/2-A
Matrix: Water
Analysis Batch: 715424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.500	0.483		mg/L		97	80 - 120
Calcium	25.0	25.52		mg/L		102	80 - 120
Iron	5.10	5.35		mg/L		105	80 - 120
Magnesium	25.0	24.77		mg/L		99	80 - 120
Manganese	0.500	0.497		mg/L		99	80 - 120
Potassium	25.0	24.83		mg/L		99	80 - 120
Sodium	25.0	25.35		mg/L		101	80 - 120

Lab Sample ID: LCS 480-715240/2-A
Matrix: Water
Analysis Batch: 715488

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.500	0.511		mg/L		102	80 - 120

Lab Sample ID: 480-220684-2 MS
Matrix: Water
Analysis Batch: 715424

Client Sample ID: MW-2B
Prep Type: Total/NA
Prep Batch: 715240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		0.500	0.493		mg/L		99	75 - 125
Calcium	168		25.0	190.6	4	mg/L		91	75 - 125
Iron	0.25		5.10	5.60		mg/L		105	75 - 125
Magnesium	34.7		25.0	59.59		mg/L		100	75 - 125
Manganese	4.0		0.500	4.44	4	mg/L		81	75 - 125
Potassium	1.9		25.0	27.83		mg/L		104	75 - 125
Sodium	38.5		25.0	64.24		mg/L		103	75 - 125

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

Lab Sample ID: 480-220684-2 MS
Matrix: Water
Analysis Batch: 715488

Client Sample ID: MW-2B
Prep Type: Total/NA
Prep Batch: 715240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		0.500	0.523		mg/L		105	75 - 125

Lab Sample ID: 480-220684-2 MSD
Matrix: Water
Analysis Batch: 715424

Client Sample ID: MW-2B
Prep Type: Total/NA
Prep Batch: 715240

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		0.500	0.498		mg/L		100	75 - 125	1	20
Calcium	168		25.0	194.0	4	mg/L		104	75 - 125	2	20
Iron	0.25		5.10	5.65		mg/L		106	75 - 125	1	20
Magnesium	34.7		25.0	60.59		mg/L		104	75 - 125	2	20
Manganese	4.0		0.500	4.52	4	mg/L		97	75 - 125	2	20
Potassium	1.9		25.0	27.90		mg/L		104	75 - 125	0	20
Sodium	38.5		25.0	65.32		mg/L		107	75 - 125	2	20

Lab Sample ID: 480-220684-2 MSD
Matrix: Water
Analysis Batch: 715488

Client Sample ID: MW-2B
Prep Type: Total/NA
Prep Batch: 715240

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		0.500	0.531		mg/L		106	75 - 125	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-715516/4
Matrix: Water
Analysis Batch: 715516

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/13/24 15:44	1

Lab Sample ID: LCS 480-715516/5
Matrix: Water
Analysis Batch: 715516

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	5.01	5.09		mg/L		102	90 - 110

Lab Sample ID: 480-220684-1 MS
Matrix: Water
Analysis Batch: 715516

Client Sample ID: MW-2A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	ND		10.0	10.83		mg/L		106	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-220684-1 MSD
Matrix: Water
Analysis Batch: 715516

Client Sample ID: MW-2A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	ND		10.0	10.94		mg/L		107	80 - 120	1	15

Method: 310.2 - Alkalinity

Lab Sample ID: MB 480-715728/12
Matrix: Water
Analysis Batch: 715728

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/14/24 09:57	1

Lab Sample ID: MB 480-715728/122
Matrix: Water
Analysis Batch: 715728

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/14/24 11:53	1

Lab Sample ID: MB 480-715728/129
Matrix: Water
Analysis Batch: 715728

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/14/24 12:00	1

Lab Sample ID: MB 480-715728/19
Matrix: Water
Analysis Batch: 715728

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/14/24 10:19	1

Lab Sample ID: MB 480-715728/58
Matrix: Water
Analysis Batch: 715728

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/14/24 11:04	1

Lab Sample ID: MB 480-715728/72
Matrix: Water
Analysis Batch: 715728

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			06/14/24 11:17	1

Method: 310.2 - Alkalinity (Continued)

Lab Sample ID: LCS 480-715728/128
Matrix: Water
Analysis Batch: 715728

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	49.80		mg/L		100	90 - 110

Lab Sample ID: LCS 480-715728/18
Matrix: Water
Analysis Batch: 715728

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	49.50		mg/L		99	90 - 110

Lab Sample ID: LCS 480-715728/71
Matrix: Water
Analysis Batch: 715728

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	47.75		mg/L		95	90 - 110

Lab Sample ID: 480-220684-1 MS
Matrix: Water
Analysis Batch: 715728

Client Sample ID: MW-2A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	271		20.0	272.9	4	mg/L		10	60 - 140

Lab Sample ID: 480-220684-1 MSD
Matrix: Water
Analysis Batch: 715728

Client Sample ID: MW-2A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity, Total	271		20.0	279.7	4	mg/L		44	60 - 140	2	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-715711/3
Matrix: Water
Analysis Batch: 715711

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			06/14/24 14:04	1

Lab Sample ID: LCS 480-715711/4
Matrix: Water
Analysis Batch: 715711

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	1.00	1.05		mg/L		105	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 480-220684-3 MS
Matrix: Water
Analysis Batch: 715711

Client Sample ID: MW-7A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.12	F1	0.200	0.295	F1	mg/L		89	90 - 110

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 480-715378/1-A
Matrix: Water
Analysis Batch: 715623

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715378

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20		mg/L		06/12/24 15:00	06/13/24 16:26	1

Lab Sample ID: LCS 480-715378/2-A
Matrix: Water
Analysis Batch: 715623

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	2.50	2.32		mg/L		93	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-715584/28
Matrix: Water
Analysis Batch: 715584

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			06/13/24 15:58	1

Lab Sample ID: MB 480-715584/4
Matrix: Water
Analysis Batch: 715584

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			06/13/24 14:52	1

Lab Sample ID: LCS 480-715584/29
Matrix: Water
Analysis Batch: 715584

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	25.0	26.91		mg/L		108	90 - 110

Lab Sample ID: LCS 480-715584/5
Matrix: Water
Analysis Batch: 715584

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	25.0	24.79		mg/L		99	90 - 110

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-715985/16
Matrix: Water
Analysis Batch: 715985

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010		mg/L			06/17/24 22:05	1

Lab Sample ID: LCS 480-715985/17
Matrix: Water
Analysis Batch: 715985

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.0958		mg/L		96	90 - 110

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 480-716042/136
Matrix: Water
Analysis Batch: 716042

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/18/24 15:50	1

Lab Sample ID: MB 480-716042/143
Matrix: Water
Analysis Batch: 716042

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/18/24 15:53	1

Lab Sample ID: MB 480-716042/151
Matrix: Water
Analysis Batch: 716042

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/18/24 15:56	1

Lab Sample ID: MB 480-716042/158
Matrix: Water
Analysis Batch: 716042

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/18/24 15:59	1

Lab Sample ID: MB 480-716042/164
Matrix: Water
Analysis Batch: 716042

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/18/24 16:01	1

Method: 9038 - Sulfate, Turbidimetric (Continued)

Lab Sample ID: LCS 480-716042/142
Matrix: Water
Analysis Batch: 716042

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	31.61		mg/L		105	90 - 110

Lab Sample ID: LCS 480-716042/150
Matrix: Water
Analysis Batch: 716042

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	31.55		mg/L		105	90 - 110

Lab Sample ID: LCS 480-716042/163
Matrix: Water
Analysis Batch: 716042

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	31.12		mg/L		104	90 - 110

Lab Sample ID: 480-220684-2 MS
Matrix: Water
Analysis Batch: 716042

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	ND		20.0	26.24		mg/L		112	60 - 128

Lab Sample ID: 480-220684-2 MSD
Matrix: Water
Analysis Batch: 716042

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	ND		20.0	27.49		mg/L		118	60 - 128	5	20

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

Lab Sample ID: MB 480-715323/1
Matrix: Water
Analysis Batch: 715323

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0		mg/L			06/12/24 11:20	1

Lab Sample ID: LCS 480-715323/2
Matrix: Water
Analysis Batch: 715323

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	501	498.0		mg/L		100	85 - 115

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

Lab Sample ID: 480-220684-2 DU
Matrix: Water
Analysis Batch: 715323

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	654		665.0		mg/L		2	10

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 480-716041/13
Matrix: Water
Analysis Batch: 716041

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/18/24 09:24	1

Lab Sample ID: MB 480-716041/22
Matrix: Water
Analysis Batch: 716041

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/18/24 09:27	1

Lab Sample ID: MB 480-716041/34
Matrix: Water
Analysis Batch: 716041

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/18/24 09:31	1

Lab Sample ID: MB 480-716041/45
Matrix: Water
Analysis Batch: 716041

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			06/18/24 09:34	1

Lab Sample ID: LCS 480-716041/12
Matrix: Water
Analysis Batch: 716041

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.35		mg/L		109	90 - 110

Lab Sample ID: LCS 480-716041/21
Matrix: Water
Analysis Batch: 716041

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.15		mg/L		109	90 - 110

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 480-716041/44
Matrix: Water
Analysis Batch: 716041

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			25.0	27.45		mg/L		110	90 - 110		

Lab Sample ID: 480-220684-2 MS
Matrix: Water
Analysis Batch: 716041

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	80.3		20.0	105.6	4	mg/L		126	74 - 131		

Lab Sample ID: 480-220684-2 MSD
Matrix: Water
Analysis Batch: 716041

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	80.3		20.0	102.5	4	mg/L		111	74 - 131	3	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-715336/1
Matrix: Water
Analysis Batch: 715336

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0		mg/L			06/12/24 09:57	1

Lab Sample ID: LCS 480-715336/2
Matrix: Water
Analysis Batch: 715336

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			199	188.3		mg/L		94	85 - 115		

Method: SM 5310C - TOC

Lab Sample ID: MB 480-715600/28
Matrix: Water
Analysis Batch: 715600

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			06/13/24 00:06	1
TOC Result 2	ND		1.0		mg/L			06/13/24 00:06	1

Lab Sample ID: LCS 480-715600/29
Matrix: Water
Analysis Batch: 715600

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TOC Result 1			60.0	61.02		mg/L		102	90 - 110		
TOC Result 2			60.0	62.74		mg/L		105	90 - 110		

Method: SM 5310C - TOC (Continued)

Lab Sample ID: 480-220684-1 MS
Matrix: Water
Analysis Batch: 715600

Client Sample ID: MW-2A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
TOC Result 1	3.6		23.3	26.32		mg/L		98	54 - 131		
TOC Result 2	3.2		23.3	27.72		mg/L		105	54 - 131		

Lab Sample ID: 480-220684-2 DU
Matrix: Water
Analysis Batch: 715600

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
TOC Result 1	2.0			2.02		mg/L				0.6	20
TOC Result 2	1.6			1.66		mg/L				2	20

Metals

Prep Batch: 715240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	3005A	
480-220684-2	MW-2B	Total/NA	Water	3005A	
480-220684-3	MW-7A	Total/NA	Water	3005A	
MB 480-715240/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-715240/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-220684-2 MS	MW-2B	Total/NA	Water	3005A	
480-220684-2 MSD	MW-2B	Total/NA	Water	3005A	

Analysis Batch: 715424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	6010C	715240
480-220684-2	MW-2B	Total/NA	Water	6010C	715240
480-220684-3	MW-7A	Total/NA	Water	6010C	715240
MB 480-715240/1-A	Method Blank	Total/NA	Water	6010C	715240
LCS 480-715240/2-A	Lab Control Sample	Total/NA	Water	6010C	715240
480-220684-2 MS	MW-2B	Total/NA	Water	6010C	715240
480-220684-2 MSD	MW-2B	Total/NA	Water	6010C	715240

Analysis Batch: 715488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	6010C	715240
480-220684-2	MW-2B	Total/NA	Water	6010C	715240
480-220684-3	MW-7A	Total/NA	Water	6010C	715240
MB 480-715240/1-A	Method Blank	Total/NA	Water	6010C	715240
LCS 480-715240/2-A	Lab Control Sample	Total/NA	Water	6010C	715240
480-220684-2 MS	MW-2B	Total/NA	Water	6010C	715240
480-220684-2 MSD	MW-2B	Total/NA	Water	6010C	715240

Analysis Batch: 715513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	SM 2340B	
480-220684-2	MW-2B	Total/NA	Water	SM 2340B	
480-220684-3	MW-7A	Total/NA	Water	SM 2340B	

General Chemistry

Analysis Batch: 715323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	SM 2540C	
480-220684-2	MW-2B	Total/NA	Water	SM 2540C	
480-220684-3	MW-7A	Total/NA	Water	SM 2540C	
MB 480-715323/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 480-715323/2	Lab Control Sample	Total/NA	Water	SM 2540C	
480-220684-2 DU	MW-2B	Total/NA	Water	SM 2540C	

Analysis Batch: 715336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	SM 5210B	
480-220684-2	MW-2B	Total/NA	Water	SM 5210B	
480-220684-3	MW-7A	Total/NA	Water	SM 5210B	
USB 480-715336/1	Method Blank	Total/NA	Water	SM 5210B	

General Chemistry (Continued)

Analysis Batch: 715336 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-715336/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 715358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	353.2	
480-220684-2	MW-2B	Total/NA	Water	353.2	
480-220684-3	MW-7A	Total/NA	Water	353.2	

Prep Batch: 715378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	351.2	
480-220684-2	MW-2B	Total/NA	Water	351.2	
480-220684-3	MW-7A	Total/NA	Water	351.2	
MB 480-715378/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-715378/2-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 715516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	300.0	
480-220684-2	MW-2B	Total/NA	Water	300.0	
480-220684-3	MW-7A	Total/NA	Water	300.0	
MB 480-715516/4	Method Blank	Total/NA	Water	300.0	
LCS 480-715516/5	Lab Control Sample	Total/NA	Water	300.0	
480-220684-1 MS	MW-2A	Total/NA	Water	300.0	
480-220684-1 MSD	MW-2A	Total/NA	Water	300.0	

Analysis Batch: 715584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	410.4	
480-220684-2	MW-2B	Total/NA	Water	410.4	
480-220684-3	MW-7A	Total/NA	Water	410.4	
MB 480-715584/28	Method Blank	Total/NA	Water	410.4	
MB 480-715584/4	Method Blank	Total/NA	Water	410.4	
LCS 480-715584/29	Lab Control Sample	Total/NA	Water	410.4	
LCS 480-715584/5	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 715600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	SM 5310C	
480-220684-2	MW-2B	Total/NA	Water	SM 5310C	
480-220684-3	MW-7A	Total/NA	Water	SM 5310C	
MB 480-715600/28	Method Blank	Total/NA	Water	SM 5310C	
LCS 480-715600/29	Lab Control Sample	Total/NA	Water	SM 5310C	
480-220684-1 MS	MW-2A	Total/NA	Water	SM 5310C	
480-220684-2 DU	MW-2B	Total/NA	Water	SM 5310C	

Analysis Batch: 715623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	351.2	715378
480-220684-2	MW-2B	Total/NA	Water	351.2	715378
480-220684-3	MW-7A	Total/NA	Water	351.2	715378

General Chemistry (Continued)

Analysis Batch: 715623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-715378/1-A	Method Blank	Total/NA	Water	351.2	715378
LCS 480-715378/2-A	Lab Control Sample	Total/NA	Water	351.2	715378

Analysis Batch: 715711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	350.1	
480-220684-2	MW-2B	Total/NA	Water	350.1	
480-220684-3	MW-7A	Total/NA	Water	350.1	
MB 480-715711/3	Method Blank	Total/NA	Water	350.1	
LCS 480-715711/4	Lab Control Sample	Total/NA	Water	350.1	
480-220684-3 MS	MW-7A	Total/NA	Water	350.1	

Analysis Batch: 715728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	310.2	
480-220684-2	MW-2B	Total/NA	Water	310.2	
480-220684-3	MW-7A	Total/NA	Water	310.2	
MB 480-715728/12	Method Blank	Total/NA	Water	310.2	
MB 480-715728/122	Method Blank	Total/NA	Water	310.2	
MB 480-715728/129	Method Blank	Total/NA	Water	310.2	
MB 480-715728/19	Method Blank	Total/NA	Water	310.2	
MB 480-715728/58	Method Blank	Total/NA	Water	310.2	
MB 480-715728/72	Method Blank	Total/NA	Water	310.2	
LCS 480-715728/128	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-715728/18	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-715728/71	Lab Control Sample	Total/NA	Water	310.2	
480-220684-1 MS	MW-2A	Total/NA	Water	310.2	
480-220684-1 MSD	MW-2A	Total/NA	Water	310.2	

Analysis Batch: 715985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	420.4	
480-220684-2	MW-2B	Total/NA	Water	420.4	
480-220684-3	MW-7A	Total/NA	Water	420.4	
MB 480-715985/16	Method Blank	Total/NA	Water	420.4	
LCS 480-715985/17	Lab Control Sample	Total/NA	Water	420.4	

Analysis Batch: 716041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	SM 4500 Cl- E	
480-220684-2	MW-2B	Total/NA	Water	SM 4500 Cl- E	
480-220684-3	MW-7A	Total/NA	Water	SM 4500 Cl- E	
MB 480-716041/13	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-716041/22	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-716041/34	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-716041/45	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 480-716041/12	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-716041/21	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-716041/44	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
480-220684-2 MS	MW-2B	Total/NA	Water	SM 4500 Cl- E	
480-220684-2 MSD	MW-2B	Total/NA	Water	SM 4500 Cl- E	

QC Association Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

General Chemistry

Analysis Batch: 716042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220684-1	MW-2A	Total/NA	Water	9038	
480-220684-2	MW-2B	Total/NA	Water	9038	
480-220684-3	MW-7A	Total/NA	Water	9038	
MB 480-716042/136	Method Blank	Total/NA	Water	9038	
MB 480-716042/143	Method Blank	Total/NA	Water	9038	
MB 480-716042/151	Method Blank	Total/NA	Water	9038	
MB 480-716042/158	Method Blank	Total/NA	Water	9038	
MB 480-716042/164	Method Blank	Total/NA	Water	9038	
LCS 480-716042/142	Lab Control Sample	Total/NA	Water	9038	
LCS 480-716042/150	Lab Control Sample	Total/NA	Water	9038	
LCS 480-716042/163	Lab Control Sample	Total/NA	Water	9038	
480-220684-2 MS	MW-2B	Total/NA	Water	9038	
480-220684-2 MSD	MW-2B	Total/NA	Water	9038	

Client Sample ID: MW-2A
Lab Sample ID: 480-220684-1

Date Collected: 06/10/24 11:40
Matrix: Water
Date Received: 06/11/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715240	EMO	EET BUF	06/12/24 08:52
Total/NA	Analysis	6010C		1	715488	NZG	EET BUF	06/13/24 10:23
Total/NA	Prep	3005A			715240	EMO	EET BUF	06/12/24 08:52
Total/NA	Analysis	6010C		1	715424	NZG	EET BUF	06/12/24 14:51
Total/NA	Analysis	SM 2340B		1	715513	JJP	EET BUF	06/13/24 14:00
Total/NA	Analysis	300.0		2	715516	AF	EET BUF	06/13/24 17:27
Total/NA	Analysis	310.2		5	715728	CG	EET BUF	06/14/24 11:18
Total/NA	Analysis	350.1		10	715711	AM	EET BUF	06/14/24 14:13
Total/NA	Prep	351.2			715378	RMJ	EET BUF	06/12/24 15:00
Total/NA	Analysis	351.2		1	715623	AM	EET BUF	06/13/24 16:36
Total/NA	Analysis	353.2		1	715358	KB	EET BUF	06/11/24 19:19
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 16:42
Total/NA	Analysis	420.4		1	715985	GW	EET BUF	06/17/24 22:35
Total/NA	Analysis	9038		1	716042	CG	EET BUF	06/18/24 15:57
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	716041	CG	EET BUF	06/18/24 09:25
Total/NA	Analysis	SM 5210B		1	715336	CG	EET BUF	06/12/24 09:57
Total/NA	Analysis	SM 5310C		1	715600	AF	EET BUF	06/13/24 01:04

Client Sample ID: MW-2B
Lab Sample ID: 480-220684-2

Date Collected: 06/10/24 11:30
Matrix: Water
Date Received: 06/11/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715240	EMO	EET BUF	06/12/24 08:52
Total/NA	Analysis	6010C		1	715488	NZG	EET BUF	06/13/24 10:25
Total/NA	Prep	3005A			715240	EMO	EET BUF	06/12/24 08:52
Total/NA	Analysis	6010C		1	715424	NZG	EET BUF	06/12/24 14:53
Total/NA	Analysis	SM 2340B		1	715513	JJP	EET BUF	06/13/24 14:00
Total/NA	Analysis	300.0		2	715516	AF	EET BUF	06/13/24 18:41
Total/NA	Analysis	310.2		28	715728	CG	EET BUF	06/14/24 11:18
Total/NA	Analysis	350.1		1	715711	AM	EET BUF	06/14/24 14:14
Total/NA	Prep	351.2			715378	RMJ	EET BUF	06/12/24 15:00
Total/NA	Analysis	351.2		1	715623	AM	EET BUF	06/13/24 16:37
Total/NA	Analysis	353.2		1	715358	KB	EET BUF	06/11/24 19:19
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 19:17
Total/NA	Analysis	420.4		1	715985	GW	EET BUF	06/17/24 22:39
Total/NA	Analysis	9038		1	716042	CG	EET BUF	06/18/24 15:57
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		5	716041	CG	EET BUF	06/18/24 09:43
Total/NA	Analysis	SM 5210B		1	715336	CG	EET BUF	06/12/24 09:57
Total/NA	Analysis	SM 5310C		1	715600	AF	EET BUF	06/13/24 02:02

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

Client Sample ID: MW-7A
Lab Sample ID: 480-220684-3
Date Collected: 06/10/24 12:10
Matrix: Water
Date Received: 06/11/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			715240	EMO	EET BUF	06/12/24 08:52
Total/NA	Analysis	6010C		1	715488	NZG	EET BUF	06/13/24 10:40
Total/NA	Prep	3005A			715240	EMO	EET BUF	06/12/24 08:52
Total/NA	Analysis	6010C		1	715424	NZG	EET BUF	06/12/24 15:03
Total/NA	Analysis	SM 2340B		1	715513	JJP	EET BUF	06/13/24 14:00
Total/NA	Analysis	300.0		2	715516	AF	EET BUF	06/13/24 18:55
Total/NA	Analysis	310.2		5	715728	CG	EET BUF	06/14/24 10:27
Total/NA	Analysis	350.1		1	715711	AM	EET BUF	06/14/24 14:17
Total/NA	Prep	351.2			715378	RMJ	EET BUF	06/12/24 15:00
Total/NA	Analysis	351.2		1	715623	AM	EET BUF	06/13/24 16:38
Total/NA	Analysis	353.2		1	715358	KB	EET BUF	06/11/24 19:20
Total/NA	Analysis	410.4		1	715584	RMJ	EET BUF	06/13/24 19:46
Total/NA	Analysis	420.4		1	715985	GW	EET BUF	06/17/24 23:10
Total/NA	Analysis	9038		1	716042	CG	EET BUF	06/18/24 16:02
Total/NA	Analysis	SM 2540C		1	715323	AB	EET BUF	06/12/24 11:20
Total/NA	Analysis	SM 4500 Cl- E		1	716041	CG	EET BUF	06/18/24 09:28
Total/NA	Analysis	SM 5210B		1	715336	CG	EET BUF	06/12/24 09:57
Total/NA	Analysis	SM 5310C		1	715600	AF	EET BUF	06/13/24 03:01

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9038		Water	Sulfate
SM 5310C		Water	TOC Result 1
SM 5310C		Water	TOC Result 2

Method Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	EET BUF
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET BUF
300.0	Anions, Ion Chromatography	EPA	EET BUF
310.2	Alkalinity	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET BUF
351.2	Nitrogen, Total Kjeldahl	EPA	EET BUF
353.2	Nitrate	EPA	EET BUF
410.4	COD	EPA	EET BUF
420.4	Phenolics, Total Recoverable	EPA	EET BUF
9038	Sulfate, Turbidimetric	SW846	EET BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET BUF
SM 4500 Cl- E	Chloride, Total	SM	EET BUF
SM 5210B	BOD, 5-Day	SM	EET BUF
SM 5310C	TOC	SM	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
351.2	Nitrogen, Total Kjeldahl	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-220684-1
Project/Site: Towslee Landfill - Routine Parameters

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-220684-1	MW-2A	Water	06/10/24 11:40	06/11/24 09:45
480-220684-2	MW-2B	Water	06/10/24 11:30	06/11/24 09:45
480-220684-3	MW-7A	Water	06/10/24 12:10	06/11/24 09:45

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing

Client Information
Client Contact: ~~Ms. Kathleen McGrath~~ Chad Hill
Company: Cortland Cty Soil & Water Cons District
Address: 100 Grange Place Rm 202
City: Cortland
State, Zip: NY, 13045
Phone: 607-753-5991
Email: ~~kathleen.mcgrath@cortlandswcd.org~~
Project Name: Towslee Landfill - Routine Q2/24 Event Desc: Towslee Landfill - I
Site: New York

Sampler: Chad Hill
Phone: 607-345-5681
PWSID:
Due Date Requested:
TAT Requested (days): Standard
Compliance Project: Δ Yes Δ No
PO #: Purchase Order not required
WO #:
Project #: 48009337
SSOW#:

Lab PM: Beninati, John
E-Mail: John.Beninati@et.eurofinsus.com

Carrier Tracking No(s): Syracuse #225
State of Origin:

COC No: 480-197121-17547.2
Page: Page 1 of 1
Job #:

Preservation Codes:
N - None
D - HNO3
S - H2SO4
Other:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D - Bromide	6010C, SM2340B	5210B - Biochemical Oxygen Demand	2540C_Calcd - Total Dissolved Solids	353.2, 353.2_Nitrite, 9038, Nitrate_Calc, SM4500_Cl_E	310.2 - Alkalinity, Total	5310C - TOC	350.1, 351.2, 410.4	420.4_NP - Phenolics	Total Number of containers	Special Instructions/Note:
				Preservation Code:			N	D	N	N	N	N	S	S	S		
~~MW-6B~~ MW-2A	6/10/24	1140	G	Water	N	N	X	X	X	X	X	X	X	X	X		
~~MW-7A~~ MW-2B	↓	1130	G	Water	N	N	X	X	X	X	X	X	X	X	X		
MW-7A	↓	1210	G	Water	N	N	X	X	X	X	X	X	X	X	X		

4-10-24

480-220684 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
[signature]	6/10/24 1530	CCSWCD	[signature]	6/10/24 1530	ES-SYR
R English	6-10-24, 1900	[illegible]	[signature]	6/11/24 945	TA

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.4 # 1 ICE

Ver: 04/02/2024

Login Sample Receipt Checklist

Client: Cortland Cty Soil & Water Cons District

Job Number: 480-220684-1

Login Number: 220684
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Cortland County Soil and Water Conservation District
100 Grange Place, Room 202, Cortland, NY 13045
Phone: (607) 756-5991 Fax: (607) 756-0029
www.cortlandswcd.org

SWCD...established to promote the conservation and wise use of our county's natural resources

April 22, 2025

Stephanie Fitzgerald
NYSDEC - Division of Environmental Remediation
615 Erie Blvd. West
Syracuse, NY 13204-2400

Dear Ms. Fitzgerald:

Enclosed is the 2024 Quarter 3 Environmental Monitoring Report for Cortland County's Towslee Landfill, also known as the Old Cortland County Landfill. Please contact our office at (607) 756-5991 if you have any questions.

Please contact our office at (607) 756-5991 if you have any questions.

Sincerely,

Patrick Reidy
Water Quality Specialist

cc: Charles Sudbrink, Cortland County Highway Dept.
Amanda Barber, SWCD/File

Environmental Monitoring Report
Towslee Landfill, Cortland County, NY

Quarter 3 of 2024

Prepared for

Cortland County Highway Department

By

Cortland County Soil and Water Conservation District

April 22, 2025

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A. Field Data Sheets
B. Laboratory Analytical Reports

Section 1. Introduction

Towslee Landfill is approximately 36 acres in size, and is part of a larger solid waste disposal site of 540 acres owned by Cortland County in the Towns of Cortlandville and Solon. The Towslee Landfill has previously been called the Old County Landfill and the Town Line Landfill.
DEC requires environmental monitoring at the landfill. The monitoring follows the Post-Closure Monitoring and Site Maintenance Plan prepared by Barton & Loguidice, D.P.C (B&L) in October, 2002 and revised in June, 2006. Towslee Landfill is required to be monitored during Quarters 2, 3 and 4. Of these three quarters, one quarter is monitored for Baseline parameters and two quarters are monitored for Routine parameters. The Baseline quarter rotates among the three quarters.

This report summarizes Quarter 3 of 2024 (Routine) monitoring activities at the Towslee Landfill, including identification of contraventions of water quality standards, and an evaluation of water quality trends.

Additionally, a Corrective Measures Work Plan (CMWP) has been prepared by Barton & Loguidice, D.P.C. (B&L). The first round of monitoring under this plan was conducted in Quarter 2 of 2024.

The CMWP is intended to evaluate levels of cis-1,2-dichloroethene and vinyl chloride that have been observed in exceedance of NYSDEC groundwater quality standards at Well MW-2B. This well is located directly south, and downgradient, of Towslee Landfill.

Four additional wells are being monitored under the CMWP: two bedrock wells (D-1 and D-2), and two overburden wells (DO-2 and RE-4). All four wells are downgradient of MW-2B. The overburden wells are currently included in monitoring for the closed Pine Tree Landfill.

NOTE: The results for the CMWP are <u>not</u> specifically reported on in this document. They are being evaluated and reported on separately by B&L.

Section 2. Site History

Placement of waste at Towslee began in the 1940s by a private disposal company. In the 1960s, the site was leased to the City of Cortland for waste disposal. In 1972, Cortland County purchased the site and began landfill operations at Towslee Landfill. Towslee Landfill was open for disposal of municipal solid waste until 1987 and for construction and demolition debris until 1992.

A Remedial Investigation/Feasibility Study (RI/FS) was conducted for Cortland County by B&L in response to NYSDEC Order of Consent #B7-0486-12-95, effective May 31, 1996. The Towslee Landfill was classified by NYSDEC as a Class 2 Inactive Hazardous Waste Site. The Remedial Investigation was completed in March, 1998 and the Feasibility Study was completed in July, 1998.

DEC issued a Record of Decision (ROD) in March, 1999. Remedial activities at the landfill, which included landfill capping, were substantially completed in December 2001 and the Towslee Landfill was reclassified as a Class 4 Inactive Hazardous Waste Site, assigned site number 7-12-001.

The B&L Remedial Investigation concluded in 1997 that there was mild landfill leachate contamination of groundwater in the vicinity of Wells MW-2A/B and MW-7A. In addition, low-level leachate contamination was detected in the vicinity of Well MW-1A. Groundwater contamination occurred primarily in the overburden and extended downgradient of the site about 450 feet.

Section 3. Methods

3.1 Schedule

Quarter	Analysis	Date Sampled
1	-- Sampling not required --	
2	Routine	June 7, 10, 13, 27 of 2024
3	Routine	October 1, 2024
4	Baseline	Not yet conducted

3.2 Monitoring Locations

Groundwater: Thirteen wells are regularly monitored at Towslee Landfill:

	Bedrock	Overburden
Upgradient	CD-1RA	CD-1
Downgradient	MW-1B	MW-1A
	MW-2B	MW-2A
	MW-3A	MW-6A
	MW-3B	MW-7A
	MW-4A	
	MW-5A	
	MW-6B	

Combustible Gas: Testing for the presence of combustible gas (methane) is conducted associated with landfill monitoring. All of the wells and the scale house basement (ambient air) are monitored during Quarters 2-4.

3.3 Sampling and Analysis**:**

Water quality analyses were conducted in accordance with 1998 Part 360 regulations. Cortland County Soil and Water Conservation District staff conducted combustible gas monitoring and collected water samples and field parameter data. Eurofins TestAmerica Laboratories, Inc. (TestAmerica) performed all laboratory analyses for this quarter:

Eurofins TestAmerica Laboratories, Buffalo (NYELAP # 10026)
10 Hazelwood Drive
Amherst, NY 14228-2223

In this quarter, Routine parameters were sampled at all locations.

Field data sheets for this quarter can be found in Appendix A. The laboratory analytical reportis included in Appendix B.

Section 4. Groundwater Monitoring Results

4.1 Contraventions of Water Quality Standards

Groundwater data are compared to NYS water quality/drinking water standards to assess current conditions. Tables 1 and 2 summarize results for groundwater monitoring wells. Contraventions of NYS standards are highlighted. Table 3 lists the descriptions of Qualifiers reported in the laboratory reports.

pH - The pH water quality standard is contravened if below 6.5, or above 8.5. The pH standard was contravened for Wells MW-2A, MW-2B, MW-6A, MW-6B and MW-7A, (ranging from about 6.2 to 6.4).

Turbidity - Turbidity exceeded the NYS standard of 5 NTU at all wells, except MW-1B and MW-6B.

Total Dissolved Solids (TDS) - The TDS standard of 500 mg/L was exceeded at MW-2B (743 mg/L), MW-4A (503 mg/L) and MW-7A (524 mg/L).

Ammonia - The ammonia standard of 2 mg/L was exceeded at MW-2A (9.2 mg/L), consistent with past findings at this well.

Iron - The NYS standard for total iron is 0.3 mg/L, and is an aesthetic standard. This standard was exceeded at both upgradient wells CD-1 (3.3 mg/L) and CD-1RA (1.6 mg/L). It was also exceeded at 8 of the 11 downgradient wells (ranging from 0.33 to 51.5 mg/L). Iron frequently exceeds the standard at the Towslee Landfill. The elevated iron levels are believed to be caused at least in part by particulate in the unfiltered samples.

Manganese - The NYS standard for total manganese is 0.3 mg/L and is an aesthetic standard. The manganese standard was exceeded for total manganese at upgradient well CD-1 (1.9 mg/L) and

seven of the 11 downgradient wells, ranging from 1.5 to 11.2 mg/L. The manganese standard has frequently been exceeded in past monitoring, which may be caused in part by particulate in unfiltered samples.

Sodium - The NYS sodium guidelines for people on severely and moderately restricted sodium diets are 20 mg/L and 270 mg/L, respectively. The more restrictive diet guideline was exceeded for total sodium at four downgradient wells, MW-2B (40.6 mg/L), MW-6A (62.4 mg/L), MW-6B (41.0 mg/L) and MW-7A (62.7 mg/L).

Volatile organic compounds (VOCs) were not analyzed this quarter.

4.2 Water Quality Trends

Tabulated trend data are reported annually, during Quarter 4 reporting. However, a review of the Quarter 3 water quality data suggest that overall, groundwater quality surrounding the Towslee Landfill is fairly stable over time.

Section 5. Landfill Gas Testing

Landfill gas monitoring is conducted during Quarter 2 and Quarter 4, and was not conducted in this quarter.

Section 6. Quality Control

Independent data validation was not required during this quarter. Eurofins TestAmerica conducted standard internal QA/QC on the samples. We believe the analytical data are adequate to characterize Towslee Landfill groundwater quality for this quarter.

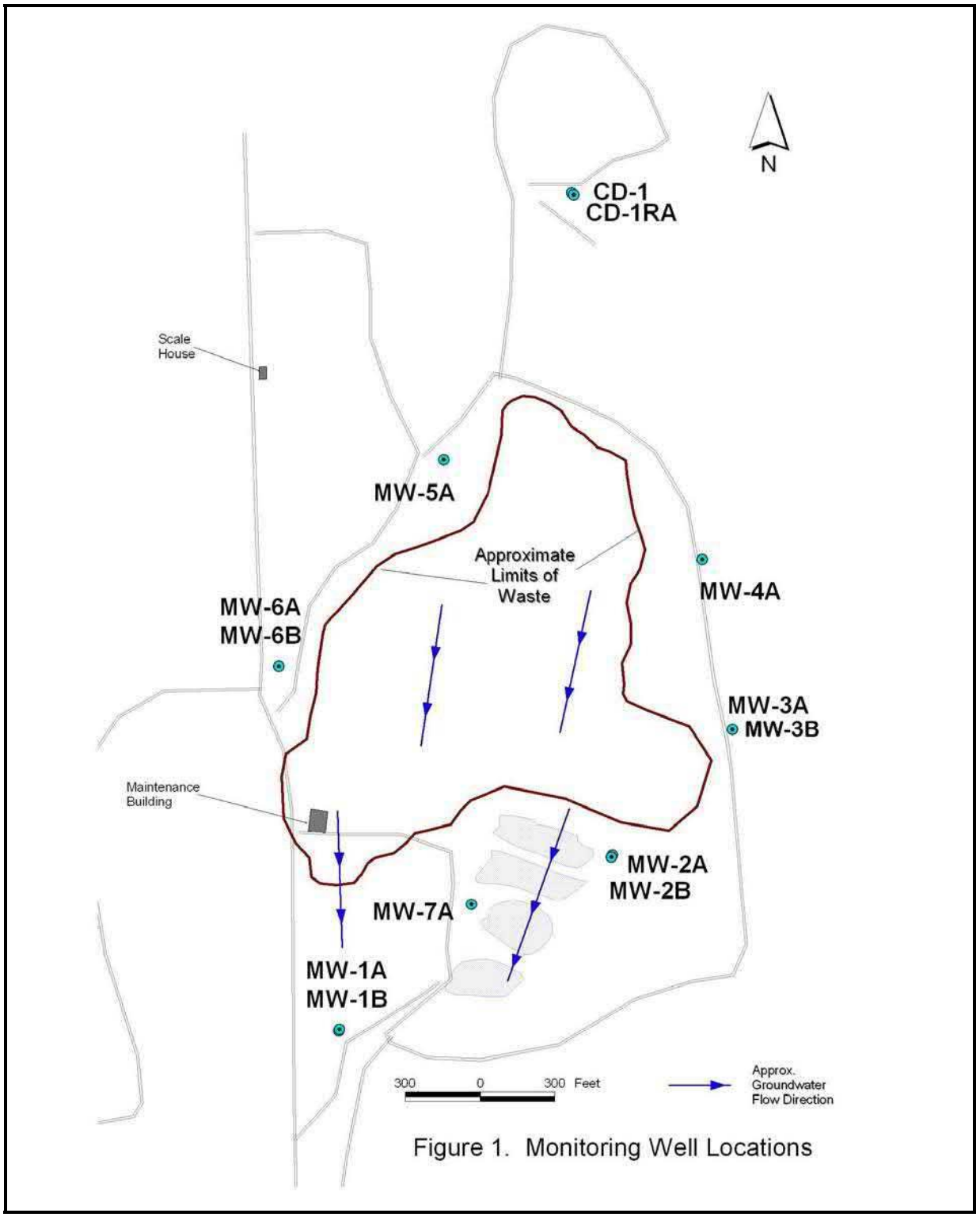

Figure 1. Monitoring Well Locations

Table1. Contraventions of NYS Water Quality Standards for Field and Inorganic Parameters

Towslee Landfill - Quarter 3 2024

Parameter	Units	NYS Water Quality Standard		Upgradient		Downgradient										
				OB	BR	OB	BR	OB	BR	BR	BR	BR	BR	OB	BR	OB
				CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Temperature	(°C)	--		12.6	13.4	15.7	14.7	14.2	13.8	12.7	11.9	12.4	14.2	12.6	11.6	15.2
Eh	(mV)	--		120	120	89.7	94.5	23.5	55.9	144	124	147	139	116.2	117.5	120.4
pH	log	6.5 - 8.5	a	6.77	6.83	6.83	6.82	6.3	6.2	6.66	6.67	6.62	6.8	6.19	6.23	6.38
Specific Conduct.	(uS/cm)	--		242	226	324.8	178.7	647	1027	271	272	700	255	584	403.6	744
Diss. Oxygen	(mg/l)	--		7.3	6	4.24	5.97	4.1	3.43	6	5.2	8	6.66	3.15	5.5	4.14
Color	(Units)	15	a, b	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	(NTU)	5	a	13.7	13.7	200	3.91	11.9	15.7	12.4	12.9	20.4	18.5	183	4.8	24.3
Alkalinity (as CaCO3)	(mg/l)	--		140	149	130	95.5	379	682	188	150	592	163	195	169	427
Hardness (as CaCO3)	(mg/l)	--		148	155	209	104	292	581	167	166	468	149	244	171	366
Total Diss. Solids	(mg/l)	500	a	161	179	225	135	388	743	195	196	503	180	404	290	524
Chloride	(mg/l)	250	a, b	4.7	< 1	34.1	6.3	23	87	2.7	19.6 F1	8.7	4.2	122	71.6	37.7
Sulfate	(mg/l)	250	a, b	11	14	13.4	6.6	< 5	< 5	8.2	8.6	< 5	11.3	11.2	12.3	15.8
Bromide	(mg/l)	2	a	< 0.2	< 0.2	< 0.2	< 0.2	< 0.4	0.9	< 0.2	0.26	< 0.4	< 0.2	< 0.2	< 0.2	0.48
NO_3	(mg/l)	10	a, b	0.071	0.11	0.14	< 0.05	2	< 0.05	< 0.05	< 0.05	< 0.05	0.071	0.34	0.15	0.076
NH_3	(mg/l)	2	a	0.084	0.066	0.1	0.13 F1	9.2	0.75	0.12	0.058	0.11	< 0.02 F1	0.18	0.13	0.15
TKN	(mg/l)	--		1.3	0.69 F1	1.1	0.59	8.8	0.99	0.56	0.35	1.5	0.31	2.1	0.23	0.69
COD	(mg/l)	--		< 10 F1	< 10	< 10	12.6	< 10	< 10	< 10	< 10	12.9	10.1	10.1	< 10	13.3
BOD	(mg/l)	--		< 2	< 2	< 2	< 2	9.4 b	2.1 b	< 2	< 2	2.7 b	< 2	2.5	< 2 b	5.1 b
TOC	(mg/l)	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Phenolics, Total	(mg/l)	0.001	a	--	--	--	--	--	< 0.01*+^+	--	--	--	--	--	--	--
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--	--	--	--	--	--	--	--

a - Part 703 Water Quality Standard (Class GA waters)

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

OB = overburden well

BR = Bedrock well

See Table 3 for Qualifier description

Table 2. Contraventions of NYS Water Quality Standards for Metals (mg/l)

Towslee Landfill - Quarter 3 2024

Parameter	NYS Water Quality Standard		Total Metals												
			Upgradient		Downgradient										
			OB	BR	OB	BR	OB	BR	BR	BR	BR	BR	OB	BR	OB
			CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Aluminum	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.003	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	0.025	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	1	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	0.004	b	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	1	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.005	a, b	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Calcium	--		44.1	45.8	57.4	30.8	86.6	175	50.2	45.6	139	41.2	70.1	50.3	108
Chromium	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrom, Hex	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	0.2	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	0.3	a, b	3.3	1.6	28.3	0.13	15.7	0.33	2.4	0.14	2.6	0.4	51.5	0.2	2.1
Lead	0.015	b	< 0.01	< 0.01	0.015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.015	< 0.01	< 0.01
Magnesium	--		9.3	9.9	15.9	6.7	18.4	35.2	10.1	12.6	29.2	11.1	16.8	11	23.4
Manganese	0.3	a, b	1.9	0.21	1.5	0.21	11.2	4.3	0.31	0.051	8.3	0.19	4.9	0.07	2.1
Mercury	0.0007	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	0.1	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--		1.8	1.2	9.3	0.53	13.4	2.2	2.4	1.1	2.2	0.97	12.7	1.2	2
Sodium	20	a, b	4	5.4	12.6	7.6	14.8	40.6	6.1	8	19	9.1	62.4	41	62.7
Selenium	0.01	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.002	b	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	5	b	--	--	--	--	--	--	--	--	--	--	--	--	--

a - Part 703 Water Quality Standard (assumes Class GA)

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

OB = overburden well

BR = Bedrock well

Table 3. Description of Laboratory Qualifiers

Towslee Landfill - Quarter 3 2024

*+ LCS and/or LCSD is outside acceptance limits, high biased.

^+ Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

b Result Detected in the Unseeded Control blank (USB).

F1 MS and/or MSD recovery exceeds control limits

Appendix A

Field Data Sheets

Sample Log / Field Observations

Landfill Name: Towslee - Monitoring Wells **Field Personnel:** P. Reidy **Agency Name:** Cortland SWCD

Date: 10/1/2024 **Weather:** Partly Sunny 70F **Sample Quarter:** Quarter 3 2024 **Sampling Method:** Dedicated Bailer

DTW = Depth to water, **DTB** = Well depth to bottom, **BTOC** = Below top of casing, **SW** = Surface water, **UD** = Underdrain water, **F or S** = Floaters or sinkers (LNAPL or DNAPL) present?, **GW** = Groundwater, **LC** = Leachate, **NA** = No data available

Sample ID	Well Diameter (inches)	Sample Matrix	DTW (ft) BTOC	DTB (ft) BTOC	Water Column Thickness (ft)	Purge Volume Goal (gal)	Total Volume Purged (gal)	Sample Time	Turbidity (NTU)	Temperature (°C)	DO (mg/L)	Conductivity (µmhos/cm)	pH (standard units)	ORP (mV)	F or S y/n?	Comments
CD-1	2	GW	12.5	24.3	11.8	6	6	10:25	13.7	12.6	7.3	242	6.77	120		
CD-1RA	2	GW	7.99	50.3	42.3	21	21	10:15	13.7	13.4	6	226	6.83	120		
MW-1A	2	GW	0.45	33.5	33.1	16.5	8*	11:50	200	15.7	4.24	324.8	6.83	89.7		Artesian, but below TOC
MW-1B	2	GW	0	55.5	55.5	27.8	27.8	12:00	3.91	14.7	5.97	178.7	6.82	94.5		Artesian
MW-2A	2	GW	8.52	12.5	4.0	2	2.2	11:20	11.9	14.2	4.1	647	6.3	23.5		
MW-2B	2	GW	11.46	33.0	21.5	10.8	6.5*	11:30	15.7	13.8	3.43	1027	6.2	55.9		
MW-3A	2	GW	11.15	22.0	10.9	5.5	2.6	10:40	12.4	12.7	6	271	6.66	144		
MW-3B	2	GW	16.65	44.0	27.4	11.7	5.2*	10:50	12.9	11.9	5.2	272	6.67	124		
MW-4A	2	GW	9.11	32.4	23.3	11.7	11.7	11:00	20.4	12.4	8	700	6.62	147		
MW-5A	2	GW	13.8	32.3	18.5	9.3	2.5*	10:00	18.5	14.2	6.66	255	6.8	139		
MW-6A	2	GW	15.2	18.6	3.4	1.7	1.7	9:40	183	12.6	3.15	584	6.19	116.2		
MW-6B	2	GW	14.45	40.3	25.9	12.9	8*	9:30	4.8	11.6	5.5	403.6	6.23	117.5		
MW-7A	2	GW	7.15	22.0	14.9	7.5	8	12:30	24.3	15.2	4.14	744	6.38	120.4		

Comments / Observations: *=purged dry

I certify that sampling procedures were in accordance with all applicable EPA, state and site-specific protocols.

Initials: _____ **Date:** _____

Appendix B

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Patrick Reidy
Cortland Cty Soil & Water Cons District
100 Grange Place
Rm 202
Cortland, New York 13045

Generated 10/9/2024 11:58:40 AM

JOB DESCRIPTION

Towslee Landfill - Routine Q3 2024
Towslee Landfill - Routine

JOB NUMBER

480-223887-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

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

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

Authorization

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Definitions/Glossary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
b	Result Detected in the Unseeded Control blank (USB).
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

Job Narrative
480-223887-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt
The samples were received on 10/2/2024 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.5°C, 2.8°C, 3.1°C and 3.4°C.

GC/MS VOA
Method 8260C: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-2B (480-223887-6).

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

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

General Chemistry
Method 300.0_28D: The following samples were diluted due to the nature of the sample matrix: MW-2A (480-223887-5), MW-2B (480-223887-6), MW-4A (480-223887-9) and MW-7A (480-223887-13). Elevated reporting limits (RLs) are provided.

Method 420.4_NP: The laboratory control sample (LCS) and continuous control verification (CCV) for analytical batch 480-727121 recovered outside control limits for the following analytes Total Recoverable Phenolics. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.MW-2B (480-223887-6)

Method 420.4_NP: The method requirement for no headspace was not met. The following sample was analyzed with headspace in the sample container(s): MW-2B (480-223887-6).

Method SM4500_Cl_E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 480-727181 were outside control limits: MW-3B (480-223887-8). The associated laboratory control sample (LCS) recovery met acceptance criteria.

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

Detection Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: CD-1 — Lab Sample ID: 480-223887-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	44.1		0.50		mg/L	1		6010C	Total/NA
Iron	3.3		0.050		mg/L	1		6010C	Total/NA
Magnesium	9.3		0.20		mg/L	1		6010C	Total/NA
Manganese	1.9		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.8		0.50		mg/L	1		6010C	Total/NA
Sodium	4.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	148		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	140		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.084		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	1.3		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.071		0.050		mg/L	1		353.2	Total/NA
Sulfate	11.0		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	161		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	4.7		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: CD-1RA — Lab Sample ID: 480-223887-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	45.8		0.50		mg/L	1		6010C	Total/NA
Iron	1.6		0.050		mg/L	1		6010C	Total/NA
Magnesium	9.9		0.20		mg/L	1		6010C	Total/NA
Manganese	0.21		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.2		0.50		mg/L	1		6010C	Total/NA
Sodium	5.4		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	155		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	149		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.066		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.69	F1	0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.11		0.050		mg/L	1		353.2	Total/NA
Sulfate	14.0		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	179		10.0		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-1A — Lab Sample ID: 480-223887-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	57.4		0.50		mg/L	1		6010C	Total/NA
Iron	28.3		0.050		mg/L	1		6010C	Total/NA
Lead	0.015		0.010		mg/L	1		6010C	Total/NA
Magnesium	15.9		0.20		mg/L	1		6010C	Total/NA
Manganese	1.5		0.0030		mg/L	1		6010C	Total/NA
Potassium	9.3		0.50		mg/L	1		6010C	Total/NA
Sodium	12.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	209		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	130		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.10		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	1.1		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.14		0.050		mg/L	1		353.2	Total/NA
Sulfate	13.4		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	225		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	34.1		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-1B
Lab Sample ID: 480-223887-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	30.8		0.50		mg/L	1		6010C	Total/NA
Iron	0.13		0.050		mg/L	1		6010C	Total/NA
Magnesium	6.7		0.20		mg/L	1		6010C	Total/NA
Manganese	0.21		0.0030		mg/L	1		6010C	Total/NA
Potassium	0.53		0.50		mg/L	1		6010C	Total/NA
Sodium	7.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	104		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	95.5		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.13	F1	0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.59		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	12.6		10.0		mg/L	1		410.4	Total/NA
Sulfate	6.6		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	135		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	6.3		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-2A
Lab Sample ID: 480-223887-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	86.6		0.50		mg/L	1		6010C	Total/NA
Iron	15.7		0.050		mg/L	1		6010C	Total/NA
Magnesium	18.4		0.20		mg/L	1		6010C	Total/NA
Manganese	11.2		0.0030		mg/L	1		6010C	Total/NA
Potassium	13.4		0.50		mg/L	1		6010C	Total/NA
Sodium	14.8		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	292		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	379		50.0		mg/L	5		310.2	Total/NA
Ammonia	9.2		0.10		mg/L	5		350.1	Total/NA
Total Kjeldahl Nitrogen	8.8		1.0		mg/L	5		351.2	Total/NA
Nitrate as N	2.0		0.050		mg/L	1		353.2	Total/NA
Total Dissolved Solids	388		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	23.0		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	9.4	b	2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-2B
Lab Sample ID: 480-223887-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	3.2		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	44		1.0		ug/L	1		8260C	Total/NA
Methylene Chloride	7.8		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	10		1.0		ug/L	1		8260C	Total/NA
Calcium	175		0.50		mg/L	1		6010C	Total/NA
Iron	0.33		0.050		mg/L	1		6010C	Total/NA
Magnesium	35.2		0.20		mg/L	1		6010C	Total/NA
Manganese	4.3		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.2		0.50		mg/L	1		6010C	Total/NA
Sodium	40.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	581		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.90		0.40		mg/L	2		300.0	Total/NA
Alkalinity, Total	682		100		mg/L	10		310.2	Total/NA
Ammonia	0.75		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.99		0.20		mg/L	1		351.2	Total/NA
Total Dissolved Solids	743		10.0		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-2B (Continued)
Lab Sample ID: 480-223887-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	87.0		5.0		mg/L	5		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.1	b	2.0		mg/L	1		SM 5210B	Total/NA
TOC Result 1	5.2		1.0		mg/L	1		SM 5310C	Total/NA
TOC Result 2	3.8		1.0		mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-3A
Lab Sample ID: 480-223887-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	50.2		0.50		mg/L	1		6010C	Total/NA
Iron	2.4		0.050		mg/L	1		6010C	Total/NA
Magnesium	10.1		0.20		mg/L	1		6010C	Total/NA
Manganese	0.31		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.4		0.50		mg/L	1		6010C	Total/NA
Sodium	6.1		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	167		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	188		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.12		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.56		0.20		mg/L	1		351.2	Total/NA
Sulfate	8.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	195		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	2.7		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-3B
Lab Sample ID: 480-223887-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	45.6		0.50		mg/L	1		6010C	Total/NA
Iron	0.14		0.050		mg/L	1		6010C	Total/NA
Magnesium	12.6		0.20		mg/L	1		6010C	Total/NA
Manganese	0.051		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.1		0.50		mg/L	1		6010C	Total/NA
Sodium	8.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	166		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.26		0.20		mg/L	1		300.0	Total/NA
Alkalinity, Total	150		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.058		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.35		0.20		mg/L	1		351.2	Total/NA
Sulfate	8.6		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	196		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	19.6	F1	1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-4A
Lab Sample ID: 480-223887-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	139		0.50		mg/L	1		6010C	Total/NA
Iron	2.6		0.050		mg/L	1		6010C	Total/NA
Magnesium	29.2		0.20		mg/L	1		6010C	Total/NA
Manganese	8.3		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.2		0.50		mg/L	1		6010C	Total/NA
Sodium	19.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	468		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	592		100		mg/L	10		310.2	Total/NA
Ammonia	0.11		0.020		mg/L	1		350.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4A (Continued)
Lab Sample ID: 480-223887-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Kjeldahl Nitrogen	1.5		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	12.9		10.0		mg/L	1		410.4	Total/NA
Total Dissolved Solids	503		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	8.7		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.7	b	2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-5A
Lab Sample ID: 480-223887-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	41.2		0.50		mg/L	1		6010C	Total/NA
Iron	0.40		0.050		mg/L	1		6010C	Total/NA
Magnesium	11.1		0.20		mg/L	1		6010C	Total/NA
Manganese	0.19		0.0030		mg/L	1		6010C	Total/NA
Potassium	0.97		0.50		mg/L	1		6010C	Total/NA
Sodium	9.1		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	149		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	163		50.0		mg/L	5		310.2	Total/NA
Total Kjeldahl Nitrogen	0.31		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.071		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	10.1		10.0		mg/L	1		410.4	Total/NA
Sulfate	11.3		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	180		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	4.2		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-6A
Lab Sample ID: 480-223887-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	70.1		0.50		mg/L	1		6010C	Total/NA
Iron	51.5		0.050		mg/L	1		6010C	Total/NA
Lead	0.015		0.010		mg/L	1		6010C	Total/NA
Magnesium	16.8		0.20		mg/L	1		6010C	Total/NA
Manganese	4.9		0.0030		mg/L	1		6010C	Total/NA
Potassium	12.7		0.50		mg/L	1		6010C	Total/NA
Sodium	62.4		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	244		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	195		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.18		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	2.1		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.34		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	10.1		10.0		mg/L	1		410.4	Total/NA
Sulfate	11.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	404		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	122		5.0		mg/L	5		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.5	b	2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-6B
Lab Sample ID: 480-223887-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	50.3		0.50		mg/L	1		6010C	Total/NA
Iron	0.20		0.050		mg/L	1		6010C	Total/NA
Magnesium	11.0		0.20		mg/L	1		6010C	Total/NA
Manganese	0.070		0.0030		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-6B (Continued)
Lab Sample ID: 480-223887-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1.2		0.50		mg/L	1		6010C	Total/NA
Sodium	41.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	171		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	169		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.13		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.23		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.15		0.050		mg/L	1		353.2	Total/NA
Sulfate	12.3		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	290		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	71.6		5.0		mg/L	5		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-7A
Lab Sample ID: 480-223887-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	108		0.50		mg/L	1		6010C	Total/NA
Iron	2.1		0.050		mg/L	1		6010C	Total/NA
Magnesium	23.4		0.20		mg/L	1		6010C	Total/NA
Manganese	2.1		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.0		0.50		mg/L	1		6010C	Total/NA
Sodium	62.7		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	366		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.48		0.40		mg/L	2		300.0	Total/NA
Alkalinity, Total	427		100		mg/L	10		310.2	Total/NA
Ammonia	0.15		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.69		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.076		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	13.3		10.0		mg/L	1		410.4	Total/NA
Sulfate	15.8		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	524		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	37.7		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	5.1	b	3.0		mg/L	1		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: CD-1
Lab Sample ID: 480-223887-1
Date Collected: 10/01/24 10:25
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:15	1
Calcium	**44.1**		0.50		mg/L		10/03/24 08:26	10/03/24 14:15	1
Iron	**3.3**		0.050		mg/L		10/03/24 08:26	10/03/24 14:15	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:15	1
Magnesium	**9.3**		0.20		mg/L		10/03/24 08:26	10/03/24 14:15	1
Manganese	**1.9**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:15	1
Potassium	**1.8**		0.50		mg/L		10/03/24 08:26	10/03/24 14:15	1
Sodium	**4.0**		1.0		mg/L		10/03/24 08:26	10/03/24 14:15	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**148**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/02/24 22:02	1
Alkalinity, Total (EPA 310.2)	**140**		50.0		mg/L			10/04/24 10:23	5
Ammonia (EPA 350.1)	**0.084**		0.020		mg/L			10/03/24 14:01	1
Total Kjeldahl Nitrogen (EPA 351.2	**1.3**		0.20		mg/L		10/04/24 10:13	10/05/24 10:28	1
Nitrate as N (EPA 353.2)	**0.071**		0.050		mg/L			10/02/24 18:48	1
Chemical Oxygen Demand (EPA 410.4)	ND	F1	10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**11.0**		5.0		mg/L			10/05/24 11:42	1
Total Dissolved Solids (SM 2540C)	**161**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**4.7**		1.0		mg/L			10/04/24 15:43	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: CD-1RA
Lab Sample ID: 480-223887-2
Date Collected: 10/01/24 10:15
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:17	1
Calcium	**45.8**		0.50		mg/L		10/03/24 08:26	10/03/24 14:17	1
Iron	**1.6**		0.050		mg/L		10/03/24 08:26	10/03/24 14:17	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:17	1
Magnesium	**9.9**		0.20		mg/L		10/03/24 08:26	10/03/24 14:17	1
Manganese	**0.21**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:17	1
Potassium	**1.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:17	1
Sodium	**5.4**		1.0		mg/L		10/03/24 08:26	10/03/24 14:17	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**155**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/02/24 22:16	1
Alkalinity, Total (EPA 310.2)	**149**		50.0		mg/L			10/04/24 10:25	5
Ammonia (EPA 350.1)	**0.066**		0.020		mg/L			10/03/24 14:01	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.69**	**F1**	0.20		mg/L		10/02/24 14:28	10/03/24 11:41	1
Nitrate as N (EPA 353.2)	**0.11**		0.050		mg/L			10/02/24 18:49	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**14.0**		5.0		mg/L			10/05/24 11:42	1
Total Dissolved Solids (SM 2540C)	**179**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	ND		1.0		mg/L			10/04/24 15:44	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-1A
Lab Sample ID: 480-223887-3
Date Collected: 10/01/24 11:50
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:27	1
Calcium	**57.4**		0.50		mg/L		10/03/24 08:26	10/03/24 14:27	1
Iron	**28.3**		0.050		mg/L		10/03/24 08:26	10/03/24 14:27	1
Lead	**0.015**		0.010		mg/L		10/03/24 08:26	10/03/24 14:27	1
Magnesium	**15.9**		0.20		mg/L		10/03/24 08:26	10/03/24 14:27	1
Manganese	**1.5**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:27	1
Potassium	**9.3**		0.50		mg/L		10/03/24 08:26	10/03/24 14:27	1
Sodium	**12.6**		1.0		mg/L		10/03/24 08:26	10/03/24 14:27	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**209**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/02/24 22:31	1
Alkalinity, Total (EPA 310.2)	**130**		50.0		mg/L			10/04/24 10:25	5
Ammonia (EPA 350.1)	**0.10**		0.020		mg/L			10/03/24 14:03	1
Total Kjeldahl Nitrogen (EPA 351.2	**1.1**		0.20		mg/L		10/02/24 14:28	10/03/24 12:17	1
Nitrate as N (EPA 353.2)	**0.14**		0.050		mg/L			10/02/24 18:51	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**13.4**		5.0		mg/L			10/05/24 11:42	1
Total Dissolved Solids (SM 2540C)	**225**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**34.1**		1.0		mg/L			10/04/24 15:44	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-1B
Lab Sample ID: 480-223887-4
Date Collected: 10/01/24 11:30
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:34	1
Calcium	**30.8**		0.50		mg/L		10/03/24 08:26	10/03/24 14:34	1
Iron	**0.13**		0.050		mg/L		10/03/24 08:26	10/03/24 14:34	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:34	1
Magnesium	**6.7**		0.20		mg/L		10/03/24 08:26	10/03/24 14:34	1
Manganese	**0.21**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:34	1
Potassium	**0.53**		0.50		mg/L		10/03/24 08:26	10/03/24 14:34	1
Sodium	**7.6**		1.0		mg/L		10/03/24 08:26	10/03/24 14:34	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**104**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/02/24 22:46	1
Alkalinity, Total (EPA 310.2)	**95.5**		50.0		mg/L			10/04/24 10:25	5
Ammonia (EPA 350.1)	**0.13**	**F1**	0.020		mg/L			10/03/24 14:05	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.59**		0.20		mg/L		10/02/24 14:28	10/03/24 12:18	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:52	1
Chemical Oxygen Demand (EPA 410.4)	**12.6**		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**6.6**		5.0		mg/L			10/05/24 11:44	1
Total Dissolved Solids (SM 2540C)	**135**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**6.3**		1.0		mg/L			10/04/24 15:44	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-2A
Lab Sample ID: 480-223887-5
Date Collected: 10/01/24 11:20
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:36	1
Calcium	**86.6**		0.50		mg/L		10/03/24 08:26	10/03/24 14:36	1
Iron	**15.7**		0.050		mg/L		10/03/24 08:26	10/03/24 14:36	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:36	1
Magnesium	**18.4**		0.20		mg/L		10/03/24 08:26	10/03/24 14:36	1
Manganese	**11.2**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:36	1
Potassium	**13.4**		0.50		mg/L		10/03/24 08:26	10/03/24 14:36	1
Sodium	**14.8**		1.0		mg/L		10/03/24 08:26	10/03/24 14:36	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**292**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.40		mg/L			10/02/24 23:01	2
Alkalinity, Total (EPA 310.2)	**379**		50.0		mg/L			10/04/24 10:26	5
Ammonia (EPA 350.1)	**9.2**		0.10		mg/L			10/03/24 14:06	5
Total Kjeldahl Nitrogen (EPA 351.2	**8.8**		1.0		mg/L		10/02/24 14:28	10/03/24 12:55	5
Nitrate as N (EPA 353.2)	**2.0**		0.050		mg/L			10/02/24 18:53	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	ND		5.0		mg/L			10/05/24 11:44	1
Total Dissolved Solids (SM 2540C)	**388**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**23.0**		1.0		mg/L			10/04/24 17:05	1
Biochemical Oxygen Demand (SM 5210B)	**9.4**	**b**	2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-2B
Lab Sample ID: 480-223887-6
Date Collected: 10/01/24 12:00
Matrix: Water
Date Received: 10/02/24 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1-Dichloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1-Dichloroethene	ND		1.0		ug/L			10/04/24 13:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dichloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dichloropropane	ND		1.0		ug/L			10/04/24 13:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/04/24 13:55	1
2-Butanone (MEK)	ND		10		ug/L			10/04/24 13:55	1
2-Hexanone	ND		5.0		ug/L			10/04/24 13:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			10/04/24 13:55	1
Acetone	ND		10		ug/L			10/04/24 13:55	1
Acrylonitrile	ND		5.0		ug/L			10/04/24 13:55	1
Benzene	ND		1.0		ug/L			10/04/24 13:55	1
Chlorobromomethane	ND		1.0		ug/L			10/04/24 13:55	1
Bromodichloromethane	ND		1.0		ug/L			10/04/24 13:55	1
Bromoform	ND		1.0		ug/L			10/04/24 13:55	1
Bromomethane	ND		1.0		ug/L			10/04/24 13:55	1
Carbon disulfide	ND		1.0		ug/L			10/04/24 13:55	1
Carbon tetrachloride	ND		1.0		ug/L			10/04/24 13:55	1
Chlorobenzene	ND		1.0		ug/L			10/04/24 13:55	1
Dibromochloromethane	ND		1.0		ug/L			10/04/24 13:55	1
Chloroethane	**3.2**		1.0		ug/L			10/04/24 13:55	1
Chloroform	ND		1.0		ug/L			10/04/24 13:55	1
Chloromethane	ND		1.0		ug/L			10/04/24 13:55	1
cis-1,2-Dichloroethene	**44**		1.0		ug/L			10/04/24 13:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			10/04/24 13:55	1
Dibromomethane	ND		1.0		ug/L			10/04/24 13:55	1
Ethylbenzene	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dibromoethane	ND		1.0		ug/L			10/04/24 13:55	1
Iodomethane	ND		1.0		ug/L			10/04/24 13:55	1
Methylene Chloride	**7.8**		1.0		ug/L			10/04/24 13:55	1
Styrene	ND		1.0		ug/L			10/04/24 13:55	1
Tetrachloroethene	ND		1.0		ug/L			10/04/24 13:55	1
Trichlorofluoromethane	ND		1.0		ug/L			10/04/24 13:55	1
Trichloroethene	ND		1.0		ug/L			10/04/24 13:55	1
Toluene	ND		1.0		ug/L			10/04/24 13:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/04/24 13:55	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/04/24 13:55	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			10/04/24 13:55	1
Vinyl acetate	ND		5.0		ug/L			10/04/24 13:55	1
Vinyl chloride	**10**		1.0		ug/L			10/04/24 13:55	1
Xylenes, Total	ND		2.0		ug/L			10/04/24 13:55	1
m,p-Xylene	ND		2.0		ug/L			10/04/24 13:55	1
o-Xylene	ND		1.0		ug/L			10/04/24 13:55	1

Client: Cortland Cty Soil & Water Cons District
Project/Site: Towslee Landfill - Routine Q3 2024

Job ID: 480-223887-1

Client Sample ID: MW-2B
Date Collected: 10/01/24 12:00
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-6
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*10/04/24 13:55*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/04/24 13:55*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*10/04/24 13:55*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:38	1
Calcium	**175**		0.50		mg/L		10/03/24 08:26	10/03/24 14:38	1
Iron	**0.33**		0.050		mg/L		10/03/24 08:26	10/03/24 14:38	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:38	1
Magnesium	**35.2**		0.20		mg/L		10/03/24 08:26	10/03/24 14:38	1
Manganese	**4.3**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:38	1
Potassium	**2.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:38	1
Sodium	**40.6**		1.0		mg/L		10/03/24 08:26	10/03/24 14:38	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**581**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**0.90**		0.40		mg/L			10/03/24 00:14	2
Alkalinity, Total (EPA 310.2)	**682**		100		mg/L			10/04/24 12:14	10
Ammonia (EPA 350.1)	**0.75**		0.020		mg/L			10/03/24 14:08	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.99**		0.20		mg/L		10/02/24 14:28	10/03/24 12:20	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:53	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Phenolics, Total Recoverable (EPA 420.4)	ND	*+ ^+	0.010		mg/L			10/04/24 11:28	1
Sulfate (SW846 9038)	ND		5.0		mg/L			10/05/24 11:44	1
Total Dissolved Solids (SM 2540C)	**743**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**87.0**		5.0		mg/L			10/04/24 15:46	5
Biochemical Oxygen Demand (SM 5210B)	**2.1**	**b**	2.0		mg/L			10/02/24 09:56	1
TOC Result 1 (SM 5310C)	**5.2**		1.0		mg/L			10/03/24 01:11	1
TOC Result 2 (SM 5310C)	**3.8**		1.0		mg/L			10/03/24 01:11	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-3A
Lab Sample ID: 480-223887-7
Date Collected: 10/01/24 10:40
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:40	1
Calcium	**50.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:40	1
Iron	**2.4**		0.050		mg/L		10/03/24 08:26	10/03/24 14:40	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:40	1
Magnesium	**10.1**		0.20		mg/L		10/03/24 08:26	10/03/24 14:40	1
Manganese	**0.31**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:40	1
Potassium	**2.4**		0.50		mg/L		10/03/24 08:26	10/03/24 14:40	1
Sodium	**6.1**		1.0		mg/L		10/03/24 08:26	10/03/24 14:40	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**167**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/03/24 00:29	1
Alkalinity, Total (EPA 310.2)	**188**		50.0		mg/L			10/04/24 10:26	5
Ammonia (EPA 350.1)	**0.12**		0.020		mg/L			10/03/24 14:08	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.56**		0.20		mg/L		10/02/24 14:28	10/03/24 12:20	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:54	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**8.2**		5.0		mg/L			10/05/24 11:45	1
Total Dissolved Solids (SM 2540C)	**195**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**2.7**		1.0		mg/L			10/04/24 17:05	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-3B
Lab Sample ID: 480-223887-8
Date Collected: 10/01/24 10:50
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:42	1
Calcium	**45.6**		0.50		mg/L		10/03/24 08:26	10/03/24 14:42	1
Iron	**0.14**		0.050		mg/L		10/03/24 08:26	10/03/24 14:42	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:42	1
Magnesium	**12.6**		0.20		mg/L		10/03/24 08:26	10/03/24 14:42	1
Manganese	**0.051**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:42	1
Potassium	**1.1**		0.50		mg/L		10/03/24 08:26	10/03/24 14:42	1
Sodium	**8.0**		1.0		mg/L		10/03/24 08:26	10/03/24 14:42	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**166**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**0.26**		0.20		mg/L			10/03/24 00:44	1
Alkalinity, Total (EPA 310.2)	**150**		50.0		mg/L			10/04/24 10:27	5
Ammonia (EPA 350.1)	**0.058**		0.020		mg/L			10/03/24 14:09	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.35**		0.20		mg/L		10/02/24 14:28	10/03/24 12:23	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:54	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/04/24 15:10	1
Sulfate (SW846 9038)	**8.6**		5.0		mg/L			10/05/24 11:50	1
Total Dissolved Solids (SM 2540C)	**196**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**19.6**	**F1**	1.0		mg/L			10/04/24 17:06	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-4A
Lab Sample ID: 480-223887-9
Date Collected: 10/01/24 11:00
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:44	1
Calcium	**139**		0.50		mg/L		10/03/24 08:26	10/03/24 14:44	1
Iron	**2.6**		0.050		mg/L		10/03/24 08:26	10/03/24 14:44	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:44	1
Magnesium	**29.2**		0.20		mg/L		10/03/24 08:26	10/03/24 14:44	1
Manganese	**8.3**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:44	1
Potassium	**2.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:44	1
Sodium	**19.0**		1.0		mg/L		10/03/24 08:26	10/03/24 14:44	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**468**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.40		mg/L			10/03/24 00:59	2
Alkalinity, Total (EPA 310.2)	**592**		100		mg/L			10/04/24 12:14	10
Ammonia (EPA 350.1)	**0.11**		0.020		mg/L			10/03/24 14:10	1
Total Kjeldahl Nitrogen (EPA 351.2	**1.5**		0.20		mg/L		10/02/24 14:28	10/03/24 12:24	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:55	1
Chemical Oxygen Demand (EPA 410.4)	**12.9**		10.0		mg/L			10/07/24 14:08	1
Sulfate (SW846 9038)	ND		5.0		mg/L			10/05/24 11:51	1
Total Dissolved Solids (SM 2540C)	**503**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**8.7**		1.0		mg/L			10/04/24 17:07	1
Biochemical Oxygen Demand (SM 5210B)	**2.7**	**b**	2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-5A
Lab Sample ID: 480-223887-10
Date Collected: 10/01/24 10:00
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:46	1
Calcium	**41.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:46	1
Iron	**0.40**		0.050		mg/L		10/03/24 08:26	10/03/24 14:46	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:46	1
Magnesium	**11.1**		0.20		mg/L		10/03/24 08:26	10/03/24 14:46	1
Manganese	**0.19**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:46	1
Potassium	**0.97**		0.50		mg/L		10/03/24 08:26	10/03/24 14:46	1
Sodium	**9.1**		1.0		mg/L		10/03/24 08:26	10/03/24 14:46	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**149**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/03/24 01:13	1
Alkalinity, Total (EPA 310.2)	**163**		50.0		mg/L			10/04/24 12:47	5
Ammonia (EPA 350.1)	ND	F1	0.020		mg/L			10/03/24 14:13	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.31**		0.20		mg/L		10/02/24 14:28	10/03/24 12:24	1
Nitrate as N (EPA 353.2)	**0.071**		0.050		mg/L			10/02/24 18:56	1
Chemical Oxygen Demand (EPA 410.4)	**10.1**		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**11.3**		5.0		mg/L			10/05/24 11:52	1
Total Dissolved Solids (SM 2540C)	**180**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**4.2**		1.0		mg/L			10/04/24 17:08	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-6A
Lab Sample ID: 480-223887-11
Date Collected: 10/01/24 09:40
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:47	1
Calcium	**70.1**		0.50		mg/L		10/03/24 08:26	10/03/24 14:47	1
Iron	**51.5**		0.050		mg/L		10/03/24 08:26	10/03/24 14:47	1
Lead	**0.015**		0.010		mg/L		10/03/24 08:26	10/03/24 14:47	1
Magnesium	**16.8**		0.20		mg/L		10/03/24 08:26	10/03/24 14:47	1
Manganese	**4.9**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:47	1
Potassium	**12.7**		0.50		mg/L		10/03/24 08:26	10/03/24 14:47	1
Sodium	**62.4**		1.0		mg/L		10/03/24 08:26	10/03/24 14:47	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**244**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/03/24 01:28	1
Alkalinity, Total (EPA 310.2)	**195**		50.0		mg/L			10/04/24 12:48	5
Ammonia (EPA 350.1)	**0.18**		0.020		mg/L			10/03/24 14:16	1
Total Kjeldahl Nitrogen (EPA 351.2	**2.1**		0.20		mg/L		10/02/24 14:28	10/03/24 12:25	1
Nitrate as N (EPA 353.2)	**0.34**		0.050		mg/L			10/02/24 18:56	1
Chemical Oxygen Demand (EPA 410.4)	**10.1**		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**11.2**		5.0		mg/L			10/05/24 11:52	1
Total Dissolved Solids (SM 2540C)	**404**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**122**		5.0		mg/L			10/04/24 15:54	5
Biochemical Oxygen Demand (SM 5210B)	**2.5**	**b**	2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-6B
Date Collected: 10/01/24 09:30
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-12
Matrix: Water

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:49	1
Calcium	**50.3**		0.50		mg/L		10/03/24 08:26	10/03/24 14:49	1
Iron	**0.20**		0.050		mg/L		10/03/24 08:26	10/03/24 14:49	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:49	1
Magnesium	**11.0**		0.20		mg/L		10/03/24 08:26	10/03/24 14:49	1
Manganese	**0.070**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:49	1
Potassium	**1.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:49	1
Sodium	**41.0**		1.0		mg/L		10/03/24 08:26	10/03/24 14:49	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**171**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/03/24 01:43	1
Alkalinity, Total (EPA 310.2)	**169**		50.0		mg/L			10/04/24 12:48	5
Ammonia (EPA 350.1)	**0.13**		0.020		mg/L			10/03/24 14:17	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.23**		0.20		mg/L		10/02/24 14:28	10/03/24 12:26	1
Nitrate as N (EPA 353.2)	**0.15**		0.050		mg/L			10/02/24 18:57	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**12.3**		5.0		mg/L			10/05/24 11:53	1
Total Dissolved Solids (SM 2540C)	**290**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**71.6**		5.0		mg/L			10/04/24 15:54	5
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-7A
Lab Sample ID: 480-223887-13
Date Collected: 10/01/24 12:30
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:57	1
Calcium	**108**		0.50		mg/L		10/03/24 08:26	10/03/24 14:57	1
Iron	**2.1**		0.050		mg/L		10/03/24 08:26	10/03/24 14:57	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:57	1
Magnesium	**23.4**		0.20		mg/L		10/03/24 08:26	10/03/24 14:57	1
Manganese	**2.1**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:57	1
Potassium	**2.0**		0.50		mg/L		10/03/24 08:26	10/03/24 14:57	1
Sodium	**62.7**		1.0		mg/L		10/03/24 08:26	10/03/24 14:57	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**366**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**0.48**		0.40		mg/L			10/03/24 01:58	2
Alkalinity, Total (EPA 310.2)	**427**		100		mg/L			10/04/24 12:48	10
Ammonia (EPA 350.1)	**0.15**		0.020		mg/L			10/03/24 14:18	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.69**		0.20		mg/L		10/02/24 14:28	10/03/24 12:27	1
Nitrate as N (EPA 353.2)	**0.076**		0.050		mg/L			10/02/24 18:57	1
Chemical Oxygen Demand (EPA 410.4)	**13.3**		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**15.8**		5.0		mg/L			10/05/24 11:53	1
Total Dissolved Solids (SM 2540C)	**524**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**37.7**		1.0		mg/L			10/04/24 17:08	1
Biochemical Oxygen Demand (SM 5210B)	**5.1**	**b**	3.0		mg/L			10/02/24 09:56	1

Surrogate Summary

Client: Cortland Cty Soil & Water Cons District
Project/Site: Towslee Landfill - Routine Q3 2024

Job ID: 480-223887-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	TOL	BFB
Lab Sample ID	Client Sample ID	(77-120)	(80-120)	(73-120)
480-223887-6	MW-2B	96	99	104
LCS 480-727065/6	Lab Control Sample	95	94	100
MB 480-727065/8	Method Blank	97	95	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

Lab Sample ID: MB 480-727065/8
Matrix: Water
Analysis Batch: 727065

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,1-Dichloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,1-Dichloroethene	ND		1.0		ug/L			10/04/24 10:56	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dichloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dichloropropane	ND		1.0		ug/L			10/04/24 10:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/04/24 10:56	1
2-Butanone (MEK)	ND		10		ug/L			10/04/24 10:56	1
2-Hexanone	ND		5.0		ug/L			10/04/24 10:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			10/04/24 10:56	1
Acetone	ND		10		ug/L			10/04/24 10:56	1
Acrylonitrile	ND		5.0		ug/L			10/04/24 10:56	1
Benzene	ND		1.0		ug/L			10/04/24 10:56	1
Chlorobromomethane	ND		1.0		ug/L			10/04/24 10:56	1
Bromodichloromethane	ND		1.0		ug/L			10/04/24 10:56	1
Bromoform	ND		1.0		ug/L			10/04/24 10:56	1
Bromomethane	ND		1.0		ug/L			10/04/24 10:56	1
Carbon disulfide	ND		1.0		ug/L			10/04/24 10:56	1
Carbon tetrachloride	ND		1.0		ug/L			10/04/24 10:56	1
Chlorobenzene	ND		1.0		ug/L			10/04/24 10:56	1
Dibromochloromethane	ND		1.0		ug/L			10/04/24 10:56	1
Chloroethane	ND		1.0		ug/L			10/04/24 10:56	1
Chloroform	ND		1.0		ug/L			10/04/24 10:56	1
Chloromethane	ND		1.0		ug/L			10/04/24 10:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/04/24 10:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			10/04/24 10:56	1
Dibromomethane	ND		1.0		ug/L			10/04/24 10:56	1
Ethylbenzene	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dibromoethane	ND		1.0		ug/L			10/04/24 10:56	1
Iodomethane	ND		1.0		ug/L			10/04/24 10:56	1
Methylene Chloride	ND		1.0		ug/L			10/04/24 10:56	1
Styrene	ND		1.0		ug/L			10/04/24 10:56	1
Tetrachloroethene	ND		1.0		ug/L			10/04/24 10:56	1
Trichlorofluoromethane	ND		1.0		ug/L			10/04/24 10:56	1
Trichloroethene	ND		1.0		ug/L			10/04/24 10:56	1
Toluene	ND		1.0		ug/L			10/04/24 10:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/04/24 10:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/04/24 10:56	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			10/04/24 10:56	1
Vinyl acetate	ND		5.0		ug/L			10/04/24 10:56	1
Vinyl chloride	ND		1.0		ug/L			10/04/24 10:56	1
Xylenes, Total	ND		2.0		ug/L			10/04/24 10:56	1
m,p-Xylene	ND		2.0		ug/L			10/04/24 10:56	1

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

Lab Sample ID: MB 480-727065/8
Matrix: Water
Analysis Batch: 727065

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			10/04/24 10:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*10/04/24 10:56*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/04/24 10:56*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*10/04/24 10:56*	*1*

Lab Sample ID: LCS 480-727065/6
Matrix: Water
Analysis Batch: 727065

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	28.4		ug/L		114	80 - 120
1,1,1-Trichloroethane	25.0	30.3		ug/L		121	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.6		ug/L		102	76 - 120
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	76 - 122
1,1-Dichloroethane	25.0	27.4		ug/L		109	77 - 120
1,1-Dichloroethene	25.0	29.3		ug/L		117	66 - 127
1,2,3-Trichloropropane	25.0	24.7		ug/L		99	68 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.1		ug/L		104	56 - 134
1,2-Dichlorobenzene	25.0	27.3		ug/L		109	80 - 124
1,2-Dichloroethane	25.0	26.0		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	27.2		ug/L		109	76 - 120
1,4-Dichlorobenzene	25.0	26.7		ug/L		107	80 - 120
2-Butanone (MEK)	125	126		ug/L		101	57 - 140
2-Hexanone	125	125		ug/L		100	65 - 127
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	71 - 125
Acetone	125	137		ug/L		109	56 - 142
Acrylonitrile	250	251		ug/L		100	63 - 125
Benzene	25.0	27.4		ug/L		109	71 - 124
Chlorobromomethane	25.0	26.8		ug/L		107	72 - 130
Bromodichloromethane	25.0	25.7		ug/L		103	80 - 122
Bromoform	25.0	24.3		ug/L		97	61 - 132
Bromomethane	25.0	25.7		ug/L		103	55 - 144
Carbon disulfide	25.0	29.7		ug/L		119	59 - 134
Carbon tetrachloride	25.0	30.6		ug/L		122	72 - 134
Chlorobenzene	25.0	26.5		ug/L		106	80 - 120
Dibromochloromethane	25.0	25.8		ug/L		103	75 - 125
Chloroethane	25.0	25.7		ug/L		103	69 - 136
Chloroform	25.0	24.7		ug/L		99	73 - 127
Chloromethane	25.0	25.0		ug/L		100	68 - 124
cis-1,2-Dichloroethene	25.0	29.3		ug/L		117	74 - 124
cis-1,3-Dichloropropene	25.0	25.4		ug/L		102	74 - 124
Dibromomethane	25.0	26.0		ug/L		104	76 - 127
Ethylbenzene	25.0	27.8		ug/L		111	77 - 123
1,2-Dibromoethane	25.0	26.7		ug/L		107	77 - 120
Iodomethane	25.0	28.9		ug/L		116	78 - 123
Methylene Chloride	25.0	27.2		ug/L		109	75 - 124

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

Lab Sample ID: LCS 480-727065/6
Matrix: Water
Analysis Batch: 727065

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Styrene	25.0	27.3		ug/L		109	80 - 120
Tetrachloroethene	25.0	28.6		ug/L		114	74 - 122
Trichlorofluoromethane	25.0	29.0		ug/L		116	62 - 150
Trichloroethene	25.0	27.1		ug/L		108	74 - 123
Toluene	25.0	26.8		ug/L		107	80 - 122
trans-1,2-Dichloroethene	25.0	29.0		ug/L		116	73 - 127
trans-1,3-Dichloropropene	25.0	26.1		ug/L		105	80 - 120
trans-1,4-Dichloro-2-butene	25.0	22.0		ug/L		88	41 - 131
Vinyl acetate	50.0	51.6		ug/L		103	50 - 144
Vinyl chloride	25.0	27.1		ug/L		108	65 - 133
m,p-Xylene	25.0	28.2		ug/L		113	76 - 122
o-Xylene	25.0	28.0		ug/L		112	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*
Toluene-d8 (Surr)	*94*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-726889/1-A
Matrix: Water
Analysis Batch: 727045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:11	1
Calcium	ND		0.50		mg/L		10/03/24 08:26	10/03/24 14:11	1
Iron	ND		0.050		mg/L		10/03/24 08:26	10/03/24 14:11	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:11	1
Magnesium	ND		0.20		mg/L		10/03/24 08:26	10/03/24 14:11	1
Potassium	ND		0.50		mg/L		10/03/24 08:26	10/03/24 14:11	1
Sodium	ND		1.0		mg/L		10/03/24 08:26	10/03/24 14:11	1

Lab Sample ID: MB 480-726889/1-A
Matrix: Water
Analysis Batch: 727116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.0030		mg/L		10/03/24 08:26	10/04/24 10:57	1

Lab Sample ID: LCS 480-726889/2-A
Matrix: Water
Analysis Batch: 727045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.500	0.504		mg/L		101	80 - 120
Calcium	25.0	25.66		mg/L		103	80 - 120
Iron	5.10	5.81		mg/L		114	80 - 120
Lead	0.500	0.520		mg/L		104	80 - 120

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

Lab Sample ID: LCS 480-726889/2-A
Matrix: Water
Analysis Batch: 727045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	25.0	24.55		mg/L		98	80 - 120
Manganese	0.500	0.513		mg/L		103	80 - 120
Potassium	25.0	25.43		mg/L		102	80 - 120
Sodium	25.0	25.79		mg/L		103	80 - 120

Lab Sample ID: 480-223887-2 MS
Matrix: Water
Analysis Batch: 727045

Client Sample ID: CD-1RA
Prep Type: Total/NA
Prep Batch: 726889

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		0.500	0.493		mg/L		99	75 - 125
Calcium	45.8		25.0	71.20		mg/L		102	75 - 125
Iron	1.6		5.10	7.22		mg/L		110	75 - 125
Lead	ND		0.500	0.508		mg/L		102	75 - 125
Magnesium	9.9		25.0	34.52		mg/L		98	75 - 125
Manganese	0.21		0.500	0.706		mg/L		99	75 - 125
Potassium	1.2		25.0	26.37		mg/L		101	75 - 125
Sodium	5.4		25.0	30.78		mg/L		102	75 - 125

Lab Sample ID: 480-223887-2 MSD
Matrix: Water
Analysis Batch: 727045

Client Sample ID: CD-1RA
Prep Type: Total/NA
Prep Batch: 726889

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		0.500	0.486		mg/L		97	75 - 125	1	20
Calcium	45.8		25.0	70.18		mg/L		98	75 - 125	1	20
Iron	1.6		5.10	7.06		mg/L		107	75 - 125	2	20
Lead	ND		0.500	0.500		mg/L		100	75 - 125	2	20
Magnesium	9.9		25.0	33.79		mg/L		96	75 - 125	2	20
Manganese	0.21		0.500	0.696		mg/L		97	75 - 125	1	20
Potassium	1.2		25.0	25.64		mg/L		98	75 - 125	3	20
Sodium	5.4		25.0	30.01		mg/L		99	75 - 125	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-726882/28
Matrix: Water
Analysis Batch: 726882

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			10/02/24 21:17	1

Lab Sample ID: LCS 480-726882/29
Matrix: Water
Analysis Batch: 726882

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	5.01	5.06		mg/L		101	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-223887-5 MS
Matrix: Water
Analysis Batch: 726882

Client Sample ID: MW-2A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	ND		10.0	10.18		mg/L		99	80 - 120

Lab Sample ID: 480-223887-5 MSD
Matrix: Water
Analysis Batch: 726882

Client Sample ID: MW-2A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	ND		10.0	9.88		mg/L		96	80 - 120	3	15

Method: 310.2 - Alkalinity

Lab Sample ID: MB 480-727180/12
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 10:15	1

Lab Sample ID: MB 480-727180/20
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 10:24	1

Lab Sample ID: MB 480-727180/70
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 11:39	1

Lab Sample ID: MB 480-727180/81
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 12:13	1

Lab Sample ID: MB 480-727180/89
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 12:47	1

Method: 310.2 - Alkalinity (Continued)

Lab Sample ID: LCS 480-727180/11
Matrix: Water
Analysis Batch: 727180

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	51.93		mg/L		104	90 - 110

Lab Sample ID: LCS 480-727180/19
Matrix: Water
Analysis Batch: 727180

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	50.61		mg/L		101	90 - 110

Lab Sample ID: LCS 480-727180/80
Matrix: Water
Analysis Batch: 727180

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	51.45		mg/L		103	90 - 110

Lab Sample ID: LCS 480-727180/88
Matrix: Water
Analysis Batch: 727180

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	52.35		mg/L		105	90 - 110

Lab Sample ID: 480-223887-8 MS
Matrix: Water
Analysis Batch: 727180

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	150		20.0	177.7	4	mg/L		141	60 - 140

Lab Sample ID: 480-223887-8 DU
Matrix: Water
Analysis Batch: 727180

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity, Total	150		136.5		mg/L		9	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-727018/26
Matrix: Water
Analysis Batch: 727018

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			10/03/24 14:13	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 480-727018/5
Matrix: Water
Analysis Batch: 727018

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			10/03/24 13:56	1

Lab Sample ID: LCS 480-727018/27
Matrix: Water
Analysis Batch: 727018

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia			1.00	1.03		mg/L		103	90 - 110		

Lab Sample ID: LCS 480-727018/6
Matrix: Water
Analysis Batch: 727018

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia			1.00	1.02		mg/L		102	90 - 110		

Lab Sample ID: 480-223887-4 MS
Matrix: Water
Analysis Batch: 727018

Client Sample ID: MW-1B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia	0.13	F1	0.0800	0.255	F1	mg/L		154	90 - 110		

Lab Sample ID: 480-223887-10 MS
Matrix: Water
Analysis Batch: 727018

Client Sample ID: MW-5A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia	ND	F1	0.0800	0.173	F1	mg/L		216	90 - 110		

Lab Sample ID: 480-223887-10 MSD
Matrix: Water
Analysis Batch: 727018

Client Sample ID: MW-5A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	ND	F1	0.0800	0.162	F1	mg/L		203	90 - 110	7	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 480-726903/1-A
Matrix: Water
Analysis Batch: 727013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726903

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20		mg/L		10/02/24 14:28	10/03/24 12:16	1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 480-726903/2-A
Matrix: Water
Analysis Batch: 727013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726903

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	2.50	2.61		mg/L		104	90 - 110

Lab Sample ID: 480-223887-2 MS
Matrix: Water
Analysis Batch: 727013

Client Sample ID: CD-1RA
Prep Type: Total/NA
Prep Batch: 726903

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	0.69	F1	1.00	1.06	F1	mg/L		36	90 - 110

Lab Sample ID: 480-223887-13 MS
Matrix: Water
Analysis Batch: 727013

Client Sample ID: MW-7A
Prep Type: Total/NA
Prep Batch: 726903

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	0.69		1.00	1.75		mg/L		106	90 - 110

Lab Sample ID: MB 480-727148/1-A
Matrix: Water
Analysis Batch: 727218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 727148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20		mg/L		10/04/24 10:13	10/05/24 10:18	1

Lab Sample ID: LCS 480-727148/2-A
Matrix: Water
Analysis Batch: 727218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 727148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	2.50	2.58		mg/L		103	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-727038/27
Matrix: Water
Analysis Batch: 727038

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/03/24 11:53	1

Lab Sample ID: MB 480-727038/3
Matrix: Water
Analysis Batch: 727038

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/03/24 11:53	1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 480-727038/28
Matrix: Water
Analysis Batch: 727038

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	25.0	25.41		mg/L		102	90 - 110

Lab Sample ID: LCS 480-727038/4
Matrix: Water
Analysis Batch: 727038

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	25.0	24.13		mg/L		97	90 - 110

Lab Sample ID: 480-223887-1 MS
Matrix: Water
Analysis Batch: 727038

Client Sample ID: CD-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	ND	F1	50.0	60.57	F1	mg/L		121	90 - 110

Lab Sample ID: 480-223887-3 MS
Matrix: Water
Analysis Batch: 727038

Client Sample ID: MW-1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	ND		50.0	54.18		mg/L		108	90 - 110

Lab Sample ID: 480-223887-1 DU
Matrix: Water
Analysis Batch: 727038

Client Sample ID: CD-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	ND	F1	ND		mg/L		NC	20

Lab Sample ID: MB 480-727228/4
Matrix: Water
Analysis Batch: 727228

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/04/24 14:46	1

Lab Sample ID: LCS 480-727228/5
Matrix: Water
Analysis Batch: 727228

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	25.0	25.78		mg/L		103	90 - 110

Lab Sample ID: MB 480-727370/3
Matrix: Water
Analysis Batch: 727370

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/07/24 14:08	1

Method: 410.4 - COD

Lab Sample ID: LCS 480-727370/4
Matrix: Water
Analysis Batch: 727370

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	25.0	24.45		mg/L		98	90 - 110

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-727121/46
Matrix: Water
Analysis Batch: 727121

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND	^+	0.010		mg/L			10/04/24 10:12	1

Lab Sample ID: LCS 480-727121/47
Matrix: Water
Analysis Batch: 727121

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.113	*+ ^+	mg/L		113	90 - 110

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 480-727202/13
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:39	1

Lab Sample ID: MB 480-727202/18
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:41	1

Lab Sample ID: MB 480-727202/25
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:43	1

Lab Sample ID: MB 480-727202/33
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:46	1

Method: 9038 - Sulfate, Turbidimetric (Continued)

Lab Sample ID: MB 480-727202/38
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:49	1

Lab Sample ID: MB 480-727202/46
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:52	1

Lab Sample ID: LCS 480-727202/17
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	31.98		mg/L		107	90 - 110

Lab Sample ID: LCS 480-727202/24
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	31.06		mg/L		104	90 - 110

Lab Sample ID: LCS 480-727202/32
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	30.68		mg/L		102	90 - 110

Lab Sample ID: LCS 480-727202/37
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	30.56		mg/L		102	90 - 110

Lab Sample ID: LCS 480-727202/45
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	30.44		mg/L		101	90 - 110

Lab Sample ID: 480-223887-8 MS
Matrix: Water
Analysis Batch: 727202

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	8.6		20.0	30.01		mg/L		107	60 - 128

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: 480-223887-8 MSD
Matrix: Water
Analysis Batch: 727202

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	8.6		20.0	30.00		mg/L		107	60 - 128	0	20

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

Lab Sample ID: MB 480-726847/1
Matrix: Water
Analysis Batch: 726847

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0		mg/L			10/02/24 10:14	1

Lab Sample ID: LCS 480-726847/2
Matrix: Water
Analysis Batch: 726847

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	500	484.0		mg/L		97	85 - 115

Lab Sample ID: 480-223887-12 DU
Matrix: Water
Analysis Batch: 726847

Client Sample ID: MW-6B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	290		290.0		mg/L		0	10

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 480-727181/13
Matrix: Water
Analysis Batch: 727181

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			10/04/24 15:27	1

Lab Sample ID: MB 480-727181/25
Matrix: Water
Analysis Batch: 727181

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			10/04/24 15:46	1

Lab Sample ID: MB 480-727181/36
Matrix: Water
Analysis Batch: 727181

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			10/04/24 16:10	1

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MB 480-727181/47
Matrix: Water
Analysis Batch: 727181

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			10/04/24 17:05	1

Lab Sample ID: MB 480-727181/57
Matrix: Water
Analysis Batch: 727181

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			10/04/24 17:08	1

Lab Sample ID: LCS 480-727181/12
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.29		mg/L		109	90 - 110

Lab Sample ID: LCS 480-727181/24
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.28		mg/L		109	90 - 110

Lab Sample ID: LCS 480-727181/35
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.26		mg/L		109	90 - 110

Lab Sample ID: LCS 480-727181/46
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	26.55		mg/L		106	90 - 110

Lab Sample ID: LCS 480-727181/56
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	26.70		mg/L		107	90 - 110

Lab Sample ID: 480-223887-8 MS
Matrix: Water
Analysis Batch: 727181

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	19.6	F1	20.0	19.43	F1	mg/L		-0.9	74 - 131

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: 480-223887-8 DU
Matrix: Water
Analysis Batch: 727181

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	19.6	F1		19.48		mg/L				0.7	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-726915/1
Matrix: Water
Analysis Batch: 726915

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0		mg/L			10/02/24 09:56	1

Lab Sample ID: LCS 480-726915/2
Matrix: Water
Analysis Batch: 726915

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			199	201.9		mg/L		101	85 - 115		

Method: SM 5310C - TOC

Lab Sample ID: MB 480-726935/4
Matrix: Water
Analysis Batch: 726935

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/02/24 15:31	1
TOC Result 2	ND		1.0		mg/L			10/02/24 15:31	1

Lab Sample ID: LCS 480-726935/5
Matrix: Water
Analysis Batch: 726935

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TOC Result 1			60.0	58.07		mg/L		97	90 - 110		
TOC Result 2			60.0	62.22		mg/L		104	90 - 110		

GC/MS VOA

Analysis Batch: 727065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-6	MW-2B	Total/NA	Water	8260C	
MB 480-727065/8	Method Blank	Total/NA	Water	8260C	
LCS 480-727065/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 726889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	3005A	
480-223887-2	CD-1RA	Total/NA	Water	3005A	
480-223887-3	MW-1A	Total/NA	Water	3005A	
480-223887-4	MW-1B	Total/NA	Water	3005A	
480-223887-5	MW-2A	Total/NA	Water	3005A	
480-223887-6	MW-2B	Total/NA	Water	3005A	
480-223887-7	MW-3A	Total/NA	Water	3005A	
480-223887-8	MW-3B	Total/NA	Water	3005A	
480-223887-9	MW-4A	Total/NA	Water	3005A	
480-223887-10	MW-5A	Total/NA	Water	3005A	
480-223887-11	MW-6A	Total/NA	Water	3005A	
480-223887-12	MW-6B	Total/NA	Water	3005A	
480-223887-13	MW-7A	Total/NA	Water	3005A	
MB 480-726889/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-726889/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-223887-2 MS	CD-1RA	Total/NA	Water	3005A	
480-223887-2 MSD	CD-1RA	Total/NA	Water	3005A	

Analysis Batch: 727045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	6010C	726889
480-223887-2	CD-1RA	Total/NA	Water	6010C	726889
480-223887-3	MW-1A	Total/NA	Water	6010C	726889
480-223887-4	MW-1B	Total/NA	Water	6010C	726889
480-223887-5	MW-2A	Total/NA	Water	6010C	726889
480-223887-6	MW-2B	Total/NA	Water	6010C	726889
480-223887-7	MW-3A	Total/NA	Water	6010C	726889
480-223887-8	MW-3B	Total/NA	Water	6010C	726889
480-223887-9	MW-4A	Total/NA	Water	6010C	726889
480-223887-10	MW-5A	Total/NA	Water	6010C	726889
480-223887-11	MW-6A	Total/NA	Water	6010C	726889
480-223887-12	MW-6B	Total/NA	Water	6010C	726889
480-223887-13	MW-7A	Total/NA	Water	6010C	726889
MB 480-726889/1-A	Method Blank	Total/NA	Water	6010C	726889
LCS 480-726889/2-A	Lab Control Sample	Total/NA	Water	6010C	726889
480-223887-2 MS	CD-1RA	Total/NA	Water	6010C	726889
480-223887-2 MSD	CD-1RA	Total/NA	Water	6010C	726889

Analysis Batch: 727116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-726889/1-A	Method Blank	Total/NA	Water	6010C	726889

Metals

Analysis Batch: 727150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	SM 2340B	
480-223887-2	CD-1RA	Total/NA	Water	SM 2340B	
480-223887-3	MW-1A	Total/NA	Water	SM 2340B	
480-223887-4	MW-1B	Total/NA	Water	SM 2340B	
480-223887-5	MW-2A	Total/NA	Water	SM 2340B	
480-223887-6	MW-2B	Total/NA	Water	SM 2340B	
480-223887-7	MW-3A	Total/NA	Water	SM 2340B	
480-223887-8	MW-3B	Total/NA	Water	SM 2340B	
480-223887-9	MW-4A	Total/NA	Water	SM 2340B	
480-223887-10	MW-5A	Total/NA	Water	SM 2340B	
480-223887-11	MW-6A	Total/NA	Water	SM 2340B	
480-223887-12	MW-6B	Total/NA	Water	SM 2340B	
480-223887-13	MW-7A	Total/NA	Water	SM 2340B	

General Chemistry

Analysis Batch: 726847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	SM 2540C	
480-223887-2	CD-1RA	Total/NA	Water	SM 2540C	
480-223887-3	MW-1A	Total/NA	Water	SM 2540C	
480-223887-4	MW-1B	Total/NA	Water	SM 2540C	
480-223887-5	MW-2A	Total/NA	Water	SM 2540C	
480-223887-6	MW-2B	Total/NA	Water	SM 2540C	
480-223887-7	MW-3A	Total/NA	Water	SM 2540C	
480-223887-8	MW-3B	Total/NA	Water	SM 2540C	
480-223887-9	MW-4A	Total/NA	Water	SM 2540C	
480-223887-10	MW-5A	Total/NA	Water	SM 2540C	
480-223887-11	MW-6A	Total/NA	Water	SM 2540C	
480-223887-12	MW-6B	Total/NA	Water	SM 2540C	
480-223887-13	MW-7A	Total/NA	Water	SM 2540C	
MB 480-726847/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 480-726847/2	Lab Control Sample	Total/NA	Water	SM 2540C	
480-223887-12 DU	MW-6B	Total/NA	Water	SM 2540C	

Analysis Batch: 726882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	300.0	
480-223887-2	CD-1RA	Total/NA	Water	300.0	
480-223887-3	MW-1A	Total/NA	Water	300.0	
480-223887-4	MW-1B	Total/NA	Water	300.0	
480-223887-5	MW-2A	Total/NA	Water	300.0	
480-223887-6	MW-2B	Total/NA	Water	300.0	
480-223887-7	MW-3A	Total/NA	Water	300.0	
480-223887-8	MW-3B	Total/NA	Water	300.0	
480-223887-9	MW-4A	Total/NA	Water	300.0	
480-223887-10	MW-5A	Total/NA	Water	300.0	
480-223887-11	MW-6A	Total/NA	Water	300.0	
480-223887-12	MW-6B	Total/NA	Water	300.0	
480-223887-13	MW-7A	Total/NA	Water	300.0	
MB 480-726882/28	Method Blank	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 726882 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-726882/29	Lab Control Sample	Total/NA	Water	300.0	
480-223887-5 MS	MW-2A	Total/NA	Water	300.0	
480-223887-5 MSD	MW-2A	Total/NA	Water	300.0	

Prep Batch: 726903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-2	CD-1RA	Total/NA	Water	351.2	
480-223887-3	MW-1A	Total/NA	Water	351.2	
480-223887-4	MW-1B	Total/NA	Water	351.2	
480-223887-5	MW-2A	Total/NA	Water	351.2	
480-223887-6	MW-2B	Total/NA	Water	351.2	
480-223887-7	MW-3A	Total/NA	Water	351.2	
480-223887-8	MW-3B	Total/NA	Water	351.2	
480-223887-9	MW-4A	Total/NA	Water	351.2	
480-223887-10	MW-5A	Total/NA	Water	351.2	
480-223887-11	MW-6A	Total/NA	Water	351.2	
480-223887-12	MW-6B	Total/NA	Water	351.2	
480-223887-13	MW-7A	Total/NA	Water	351.2	
MB 480-726903/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-726903/2-A	Lab Control Sample	Total/NA	Water	351.2	
480-223887-2 MS	CD-1RA	Total/NA	Water	351.2	
480-223887-13 MS	MW-7A	Total/NA	Water	351.2	

Analysis Batch: 726915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	SM 5210B	
480-223887-2	CD-1RA	Total/NA	Water	SM 5210B	
480-223887-3	MW-1A	Total/NA	Water	SM 5210B	
480-223887-4	MW-1B	Total/NA	Water	SM 5210B	
480-223887-5	MW-2A	Total/NA	Water	SM 5210B	
480-223887-6	MW-2B	Total/NA	Water	SM 5210B	
480-223887-7	MW-3A	Total/NA	Water	SM 5210B	
480-223887-8	MW-3B	Total/NA	Water	SM 5210B	
480-223887-9	MW-4A	Total/NA	Water	SM 5210B	
480-223887-10	MW-5A	Total/NA	Water	SM 5210B	
480-223887-11	MW-6A	Total/NA	Water	SM 5210B	
480-223887-12	MW-6B	Total/NA	Water	SM 5210B	
480-223887-13	MW-7A	Total/NA	Water	SM 5210B	
USB 480-726915/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 480-726915/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 726935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-6	MW-2B	Total/NA	Water	SM 5310C	
MB 480-726935/4	Method Blank	Total/NA	Water	SM 5310C	
LCS 480-726935/5	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 726998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	353.2	
480-223887-2	CD-1RA	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 726998 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-3	MW-1A	Total/NA	Water	353.2	
480-223887-4	MW-1B	Total/NA	Water	353.2	
480-223887-5	MW-2A	Total/NA	Water	353.2	
480-223887-6	MW-2B	Total/NA	Water	353.2	
480-223887-7	MW-3A	Total/NA	Water	353.2	
480-223887-8	MW-3B	Total/NA	Water	353.2	
480-223887-9	MW-4A	Total/NA	Water	353.2	
480-223887-10	MW-5A	Total/NA	Water	353.2	
480-223887-11	MW-6A	Total/NA	Water	353.2	
480-223887-12	MW-6B	Total/NA	Water	353.2	
480-223887-13	MW-7A	Total/NA	Water	353.2	

Analysis Batch: 727013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-2	CD-1RA	Total/NA	Water	351.2	726903
480-223887-3	MW-1A	Total/NA	Water	351.2	726903
480-223887-4	MW-1B	Total/NA	Water	351.2	726903
480-223887-5	MW-2A	Total/NA	Water	351.2	726903
480-223887-6	MW-2B	Total/NA	Water	351.2	726903
480-223887-7	MW-3A	Total/NA	Water	351.2	726903
480-223887-8	MW-3B	Total/NA	Water	351.2	726903
480-223887-9	MW-4A	Total/NA	Water	351.2	726903
480-223887-10	MW-5A	Total/NA	Water	351.2	726903
480-223887-11	MW-6A	Total/NA	Water	351.2	726903
480-223887-12	MW-6B	Total/NA	Water	351.2	726903
480-223887-13	MW-7A	Total/NA	Water	351.2	726903
MB 480-726903/1-A	Method Blank	Total/NA	Water	351.2	726903
LCS 480-726903/2-A	Lab Control Sample	Total/NA	Water	351.2	726903
480-223887-2 MS	CD-1RA	Total/NA	Water	351.2	726903
480-223887-13 MS	MW-7A	Total/NA	Water	351.2	726903

Analysis Batch: 727018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	350.1	
480-223887-2	CD-1RA	Total/NA	Water	350.1	
480-223887-3	MW-1A	Total/NA	Water	350.1	
480-223887-4	MW-1B	Total/NA	Water	350.1	
480-223887-5	MW-2A	Total/NA	Water	350.1	
480-223887-6	MW-2B	Total/NA	Water	350.1	
480-223887-7	MW-3A	Total/NA	Water	350.1	
480-223887-8	MW-3B	Total/NA	Water	350.1	
480-223887-9	MW-4A	Total/NA	Water	350.1	
480-223887-10	MW-5A	Total/NA	Water	350.1	
480-223887-11	MW-6A	Total/NA	Water	350.1	
480-223887-12	MW-6B	Total/NA	Water	350.1	
480-223887-13	MW-7A	Total/NA	Water	350.1	
MB 480-727018/26	Method Blank	Total/NA	Water	350.1	
MB 480-727018/5	Method Blank	Total/NA	Water	350.1	
LCS 480-727018/27	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-727018/6	Lab Control Sample	Total/NA	Water	350.1	
480-223887-4 MS	MW-1B	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 727018 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-10 MS	MW-5A	Total/NA	Water	350.1	
480-223887-10 MSD	MW-5A	Total/NA	Water	350.1	

Analysis Batch: 727038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	410.4	
480-223887-2	CD-1RA	Total/NA	Water	410.4	
480-223887-3	MW-1A	Total/NA	Water	410.4	
480-223887-4	MW-1B	Total/NA	Water	410.4	
480-223887-5	MW-2A	Total/NA	Water	410.4	
480-223887-6	MW-2B	Total/NA	Water	410.4	
480-223887-7	MW-3A	Total/NA	Water	410.4	
480-223887-10	MW-5A	Total/NA	Water	410.4	
480-223887-11	MW-6A	Total/NA	Water	410.4	
480-223887-12	MW-6B	Total/NA	Water	410.4	
480-223887-13	MW-7A	Total/NA	Water	410.4	
MB 480-727038/27	Method Blank	Total/NA	Water	410.4	
MB 480-727038/3	Method Blank	Total/NA	Water	410.4	
LCS 480-727038/28	Lab Control Sample	Total/NA	Water	410.4	
LCS 480-727038/4	Lab Control Sample	Total/NA	Water	410.4	
480-223887-1 MS	CD-1	Total/NA	Water	410.4	
480-223887-3 MS	MW-1A	Total/NA	Water	410.4	
480-223887-1 DU	CD-1	Total/NA	Water	410.4	

Analysis Batch: 727121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-6	MW-2B	Total/NA	Water	420.4	
MB 480-727121/46	Method Blank	Total/NA	Water	420.4	
LCS 480-727121/47	Lab Control Sample	Total/NA	Water	420.4	

Prep Batch: 727148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	351.2	
MB 480-727148/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-727148/2-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 727180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	310.2	
480-223887-2	CD-1RA	Total/NA	Water	310.2	
480-223887-3	MW-1A	Total/NA	Water	310.2	
480-223887-4	MW-1B	Total/NA	Water	310.2	
480-223887-5	MW-2A	Total/NA	Water	310.2	
480-223887-6	MW-2B	Total/NA	Water	310.2	
480-223887-7	MW-3A	Total/NA	Water	310.2	
480-223887-8	MW-3B	Total/NA	Water	310.2	
480-223887-9	MW-4A	Total/NA	Water	310.2	
480-223887-10	MW-5A	Total/NA	Water	310.2	
480-223887-11	MW-6A	Total/NA	Water	310.2	
480-223887-12	MW-6B	Total/NA	Water	310.2	
480-223887-13	MW-7A	Total/NA	Water	310.2	

General Chemistry (Continued)

Analysis Batch: 727180 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-727180/12	Method Blank	Total/NA	Water	310.2	
MB 480-727180/20	Method Blank	Total/NA	Water	310.2	
MB 480-727180/70	Method Blank	Total/NA	Water	310.2	
MB 480-727180/81	Method Blank	Total/NA	Water	310.2	
MB 480-727180/89	Method Blank	Total/NA	Water	310.2	
LCS 480-727180/11	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-727180/19	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-727180/80	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-727180/88	Lab Control Sample	Total/NA	Water	310.2	
480-223887-8 MS	MW-3B	Total/NA	Water	310.2	
480-223887-8 DU	MW-3B	Total/NA	Water	310.2	

Analysis Batch: 727181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	SM 4500 Cl- E	
480-223887-2	CD-1RA	Total/NA	Water	SM 4500 Cl- E	
480-223887-3	MW-1A	Total/NA	Water	SM 4500 Cl- E	
480-223887-4	MW-1B	Total/NA	Water	SM 4500 Cl- E	
480-223887-5	MW-2A	Total/NA	Water	SM 4500 Cl- E	
480-223887-6	MW-2B	Total/NA	Water	SM 4500 Cl- E	
480-223887-7	MW-3A	Total/NA	Water	SM 4500 Cl- E	
480-223887-8	MW-3B	Total/NA	Water	SM 4500 Cl- E	
480-223887-9	MW-4A	Total/NA	Water	SM 4500 Cl- E	
480-223887-10	MW-5A	Total/NA	Water	SM 4500 Cl- E	
480-223887-11	MW-6A	Total/NA	Water	SM 4500 Cl- E	
480-223887-12	MW-6B	Total/NA	Water	SM 4500 Cl- E	
480-223887-13	MW-7A	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/13	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/25	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/36	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/47	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/57	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/12	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/24	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/35	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/46	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/56	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
480-223887-8 MS	MW-3B	Total/NA	Water	SM 4500 Cl- E	
480-223887-8 DU	MW-3B	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 727202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	9038	
480-223887-2	CD-1RA	Total/NA	Water	9038	
480-223887-3	MW-1A	Total/NA	Water	9038	
480-223887-4	MW-1B	Total/NA	Water	9038	
480-223887-5	MW-2A	Total/NA	Water	9038	
480-223887-6	MW-2B	Total/NA	Water	9038	
480-223887-7	MW-3A	Total/NA	Water	9038	
480-223887-8	MW-3B	Total/NA	Water	9038	
480-223887-9	MW-4A	Total/NA	Water	9038	

General Chemistry (Continued)

Analysis Batch: 727202 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-10	MW-5A	Total/NA	Water	9038	
480-223887-11	MW-6A	Total/NA	Water	9038	
480-223887-12	MW-6B	Total/NA	Water	9038	
480-223887-13	MW-7A	Total/NA	Water	9038	
MB 480-727202/13	Method Blank	Total/NA	Water	9038	
MB 480-727202/18	Method Blank	Total/NA	Water	9038	
MB 480-727202/25	Method Blank	Total/NA	Water	9038	
MB 480-727202/33	Method Blank	Total/NA	Water	9038	
MB 480-727202/38	Method Blank	Total/NA	Water	9038	
MB 480-727202/46	Method Blank	Total/NA	Water	9038	
LCS 480-727202/17	Lab Control Sample	Total/NA	Water	9038	
LCS 480-727202/24	Lab Control Sample	Total/NA	Water	9038	
LCS 480-727202/32	Lab Control Sample	Total/NA	Water	9038	
LCS 480-727202/37	Lab Control Sample	Total/NA	Water	9038	
LCS 480-727202/45	Lab Control Sample	Total/NA	Water	9038	
480-223887-8 MS	MW-3B	Total/NA	Water	9038	
480-223887-8 MSD	MW-3B	Total/NA	Water	9038	

Analysis Batch: 727218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	351.2	727148
MB 480-727148/1-A	Method Blank	Total/NA	Water	351.2	727148
LCS 480-727148/2-A	Lab Control Sample	Total/NA	Water	351.2	727148

Analysis Batch: 727228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-8	MW-3B	Total/NA	Water	410.4	
MB 480-727228/4	Method Blank	Total/NA	Water	410.4	
LCS 480-727228/5	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 727370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-9	MW-4A	Total/NA	Water	410.4	
MB 480-727370/3	Method Blank	Total/NA	Water	410.4	
LCS 480-727370/4	Lab Control Sample	Total/NA	Water	410.4	

Client Sample ID: CD-1
Lab Sample ID: 480-223887-1
Date Collected: 10/01/24 10:25
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:15
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/02/24 22:02
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:23
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:01
Total/NA	Prep	351.2			727148	RMJ	EET BUF	10/04/24 10:13
Total/NA	Analysis	351.2		1	727218	AM	EET BUF	10/05/24 10:28
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:48
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:42
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 15:43
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: CD-1RA
Lab Sample ID: 480-223887-2
Date Collected: 10/01/24 10:15
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:17
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/02/24 22:16
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:25
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:01
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 11:41
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:49
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:42
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 15:44
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-1A
Lab Sample ID: 480-223887-3
Date Collected: 10/01/24 11:50
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:27
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16

Client Sample ID: MW-1A

Lab Sample ID: 480-223887-3

Date Collected: 10/01/24 11:50

Matrix: Water

Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/02/24 22:31
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:25
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:03
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:17
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:51
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:42
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 15:44
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-1B

Lab Sample ID: 480-223887-4

Date Collected: 10/01/24 11:30

Matrix: Water

Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:34
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/02/24 22:46
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:25
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:05
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:18
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:52
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:44
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 15:44
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-2A

Lab Sample ID: 480-223887-5

Date Collected: 10/01/24 11:20

Matrix: Water

Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:36
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		2	726882	AF	EET BUF	10/02/24 23:01
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:26

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-2A
Lab Sample ID: 480-223887-5
Date Collected: 10/01/24 11:20
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	350.1		5	727018	AM	EET BUF	10/03/24 14:06
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		5	727013	AM	EET BUF	10/03/24 12:55
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:53
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:44
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:05
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-2B
Lab Sample ID: 480-223887-6
Date Collected: 10/01/24 12:00
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	727065	ZN	EET BUF	10/04/24 13:55
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:38
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		2	726882	AF	EET BUF	10/03/24 00:14
Total/NA	Analysis	310.2		10	727180	CG	EET BUF	10/04/24 12:14
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:08
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:20
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:53
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	420.4		1	727121	CLT	EET BUF	10/04/24 11:28
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:44
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		5	727181	CG	EET BUF	10/04/24 15:46
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56
Total/NA	Analysis	SM 5310C		1	726935	AF	EET BUF	10/03/24 01:11

Client Sample ID: MW-3A
Lab Sample ID: 480-223887-7
Date Collected: 10/01/24 10:40
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:40
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 00:29

Client Sample ID: MW-3A
Lab Sample ID: 480-223887-7

Date Collected: 10/01/24 10:40
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:26
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:08
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:20
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:54
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:45
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:05
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-3B
Lab Sample ID: 480-223887-8

Date Collected: 10/01/24 10:50
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:42
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 00:44
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:27
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:09
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:23
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:54
Total/NA	Analysis	410.4		1	727228	RMJ	EET BUF	10/04/24 15:10
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:50
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:06
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-4A
Lab Sample ID: 480-223887-9

Date Collected: 10/01/24 11:00
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:44
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		2	726882	AF	EET BUF	10/03/24 00:59
Total/NA	Analysis	310.2		10	727180	CG	EET BUF	10/04/24 12:14
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:10

Client Sample ID: MW-4A
Lab Sample ID: 480-223887-9

Date Collected: 10/01/24 11:00
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:24
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:55
Total/NA	Analysis	410.4		1	727370	RMJ	EET BUF	10/07/24 14:08
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:51
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:07
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-5A
Lab Sample ID: 480-223887-10

Date Collected: 10/01/24 10:00
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:46
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 01:13
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 12:47
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:13
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:24
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:56
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:52
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:08
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-6A
Lab Sample ID: 480-223887-11

Date Collected: 10/01/24 09:40
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:47
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 01:28
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 12:48
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:16
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:25
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:56

Client Sample ID: MW-6A
Lab Sample ID: 480-223887-11
Date Collected: 10/01/24 09:40
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:52
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		5	727181	CG	EET BUF	10/04/24 15:54
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-6B
Lab Sample ID: 480-223887-12
Date Collected: 10/01/24 09:30
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:49
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 01:43
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 12:48
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:17
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:26
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:57
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:53
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		5	727181	CG	EET BUF	10/04/24 15:54
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-7A
Lab Sample ID: 480-223887-13
Date Collected: 10/01/24 12:30
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:57
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		2	726882	AF	EET BUF	10/03/24 01:58
Total/NA	Analysis	310.2		10	727180	CG	EET BUF	10/04/24 12:48
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:18
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:27
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:57
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:53

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-7A
Lab Sample ID: 480-223887-13

Date Collected: 10/01/24 12:30
Matrix: Water

Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:08
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9038		Water	Sulfate
SM 5310C		Water	TOC Result 1
SM 5310C		Water	TOC Result 2

Method Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET BUF
300.0	Anions, Ion Chromatography	EPA	EET BUF
310.2	Alkalinity	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET BUF
351.2	Nitrogen, Total Kjeldahl	EPA	EET BUF
353.2	Nitrate	EPA	EET BUF
410.4	COD	EPA	EET BUF
420.4	Phenolics, Total Recoverable	EPA	EET BUF
9038	Sulfate, Turbidimetric	SW846	EET BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET BUF
SM 4500 Cl- E	Chloride, Total	SM	EET BUF
SM 5210B	BOD, 5-Day	SM	EET BUF
SM 5310C	TOC	SM	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
351.2	Nitrogen, Total Kjeldahl	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-223887-1	CD-1	Water	10/01/24 10:25	10/02/24 11:00
480-223887-2	CD-1RA	Water	10/01/24 10:15	10/02/24 11:00
480-223887-3	MW-1A	Water	10/01/24 11:50	10/02/24 11:00
480-223887-4	MW-1B	Water	10/01/24 11:30	10/02/24 11:00
480-223887-5	MW-2A	Water	10/01/24 11:20	10/02/24 11:00
480-223887-6	MW-2B	Water	10/01/24 12:00	10/02/24 11:00
480-223887-7	MW-3A	Water	10/01/24 10:40	10/02/24 11:00
480-223887-8	MW-3B	Water	10/01/24 10:50	10/02/24 11:00
480-223887-9	MW-4A	Water	10/01/24 11:00	10/02/24 11:00
480-223887-10	MW-5A	Water	10/01/24 10:00	10/02/24 11:00
480-223887-11	MW-6A	Water	10/01/24 09:40	10/02/24 11:00
480-223887-12	MW-6B	Water	10/01/24 09:30	10/02/24 11:00
480-223887-13	MW-7A	Water	10/01/24 12:30	10/02/24 11:00

Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

Syracuse

eurofins | Environment Testing America

Client Information	Sampler: Pat Reidy	Lab PM: Beninati, John	Carrier Tracking No(s): #225	COC No:
Client Contact: Pat Reidy	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Cortland Cty Soil & Water Cons District	PWSID:			Job #:
Address: 100 Grange Place Rm 202	Due Date Requested:			
City: Cortland	TAT Requested (days): NORMAL			
State, Zip: NY, 13045	Compliance Project: Δ Yes Δ No			
Phone: 607-756-5991	PO #: Purchase Order not required			
Email: patrick.reidy@cortlandswcd.org	WO #:			
Project Name: Cortland Landfill: Towslee Landfill - Routine GW	Project #:			
Site: New York	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)	300.0_28D - Bromide	350.1, 351.2, 410.4	6010C, SM2340B	5210B - Biochemical Oxygen Demand	2540C_Calcd - Total Dissolved Solids	353.2, 353.2_Nitrite, 9038, Nitrate_Calc, SM4500_Cl_E	310.2 - Alkalinity, Total	5310C - Total Organic Carbon	420.4_NP - Total Phenolics	8260C - NY Part 360 Volatiles	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	D	N	N	N	N	A	S	A		
CD-1	10/1/24	1025	G	Water	N	N	X	X	X	X	X	X	X	X	X			
CD-1RA	10/1/24	1015	G	Water	N	N	X	X	X	X	X	X	X	X	X			
MW-1A	10/1/24	1150	G	Water	N	N	X	X	X	X	X	X	X	X	X			
MW-1B	10/1/24	1130	G	Water	N	N	X	X	X	X	X	X	X	X	X			
MW-2A	10/1/24	1120	G	Water	N	N	X	X	X	X	X	X	X	X	X			
MW-2B	10/1/24	1200	G	Water	N	N	X	X	X	X	X	X	X	X	X	X		report cis-1,2-DCE
MW-3A	10/1/24	1040	G	Water	N	N	X	X	X	X	X	X	X	X	X			
MW-3B	10/1/24	1050	G	Water	N	N	X	X	X	X	X	X	X	X	X			
MW-4A	10/1/24	1100	G	Water	N	N	X	X	X	X	X	X	X	X	X			
MW-5A	10/1/24	1000	G	Water	N	N	X	X	X	X	X	X	X	X	X			
——RE				Water														

480-223887 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: Patrick Reidy	Date/Time: 10/1/2024 14:30	Company	Received by: [signature]	Date/Time: 10/1/24 1430	Company: ES SVL
Relinquished by: RE [signature]	Date/Time: 10/1/24 1903	Company: [signature]	Received by: C Wallace	Date/Time: 10/2/24 1100	Company: TAB
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: 2.8, 2.5, 3.1, 3.4 IR #5C

Ver: 01/16/2019

Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

eurofins | Environment Testing America

Syracuse

#225

Client Information	Sampler: Pat Reidy	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No:
Client Contact: Pat Reidy	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Cortland Cty Soil & Water Cons District	PWSID:			Job #:
Address: 100 Grange Place Rm 202	Due Date Requested:			
City: Cortland	TAT Requested (days): NORMAL			
State, Zip: NY, 13045	Compliance Project: Δ Yes Δ No			
Phone: 607-756-5991	PO #: Purchase Order not required			
Email: patrick.reidy@cortlandswcd.org	WO #:			
Project Name: Cortland Landfill: Towslee Landfill - Routine GW	Project #:			
Site: New York	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)	300.0_28D - Bromide	350.1, 351.2, 410.4	6010C, SM2340B	5210B - Biochemical Oxygen Demand	2540C_Calcd - Total Dissolved Solids	353.2, 353.2_Nitrite, 9038, Nitrate_Calc, SM4500_Cl_E	310.2 - Alkalinity, Total	5310C - Total Organic Carbon	420.4_NP - Total Phenolics	8260C - NY Part 360 Volatiles				Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	S	D	N	N	N	N	A	S	A					
MW-6A	10/1/24	940	G	Water	N	N	X	X	X	X	X	X	X	X	X						
MW-6B	10/1/24	930	G	Water	N	N	X	X	X	X	X	X	X	X	X						
MW-7A	10/1/24	1230	G	Water	N	N	X	X	X	X	X	X	X	X	X						
Trip Blank				Water												X					
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	

RE 10.1.24

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: 10/1/2024 14:30	Company	Received by:	Date/Time: 10/1/24 1430	Company ES-SYR
Relinquished by:	Date/Time: 10.1.24, 1900	Company	Received by:	Date/Time: 10/2/24 1100	Company TAB
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

10/9/2024

Login Sample Receipt Checklist

Client: Cortland Cty Soil & Water Cons District

Job Number: 480-223887-1

Login Number: 223887
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	CCS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Attachment C

IC/EC 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. 712001

Site Name Cortland County Landfill

Site Address: Town Line Road Zip Code: 13045
City/Town: Solon
County: Cortland
Site Acreage: 36.000

Reporting Period: October 07, 2020 to February 21, 2025

	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. 712001 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
69.00-01-11.000	CORTLAND COUNTY OF	Ground Water Use Restriction Monitoring Plan Site Management Plan O&M Plan

- A part 360 cap
- Deed restriction to prevent future groundwater usage and sign postage to indicate a closed Inactive Hazardous Waste Disposal Site.
- Long-term monitoring

Box 4

Description of Engineering Controls

Parcel	Engineering Control
69.00-01-11.000	Cover System 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. 712001

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 Charles Sudbrink (print name) at 60 Central Ave, Cortland, New York 13045 (print business address),

am certifying as Superintendent of Highways (Owner) (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Charles Sudbrink
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

Date

EC CERTIFICATIONS

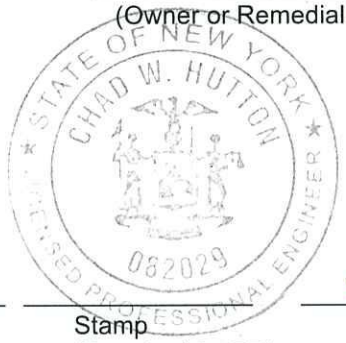
Box 7

Qualified Environmental Professional 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 Chad W. Hutton, P.E. (print name) at 443 Electronic Pkwy, Liverpool, New York 13088, (print business address)

am certifying as a Qualified Environmental Professional for the Owner (Cortland County) (Owner or Remedial Party)



Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

5.23.25
Date