



## 2025 Annual Groundwater Monitoring Report

**Monroe Power Plant Bottom Ash  
Impoundment  
Inactive Coal Combustion Residual  
Unit**

**3500 East Front Street  
Monroe, Michigan**

July 2025

### Prepared For:

DTE Electric Company

### Prepared By:

TRC  
1540 Eisenhower Pl.  
Ann Arbor, MI 48108

A blue ink signature of Vincent E. Buening, written in a cursive style, positioned above a horizontal line.

---

Vincent E. Buening, C.P.G.  
Senior Project Manager

A blue ink signature of David B. McKenzie, written in a cursive style, positioned above a horizontal line.

---

David B. McKenzie, P.E.  
Senior Project Engineer

A black ink signature of Sarah B. Holmstrom, written in a cursive style, positioned above a horizontal line.

---

Sarah B. Holmstrom, P.G.  
Senior Hydrogeologist

## TABLE OF CONTENTS

<b>Executive Summary .....</b>	<b>iii</b>
<b>1.0 Introduction.....</b>	<b>1</b>
1.1 Program Summary .....	1
1.2 Site Overview .....	1
1.3 Geology/Hydrogeology.....	2
<b>2.0 Groundwater Monitoring.....</b>	<b>3</b>
2.1 Monitoring Well Network .....	3
2.2 Semiannual Groundwater Monitoring.....	3
2.2.1 Data Summary.....	3
2.2.2 Data Quality Review .....	4
2.2.3 Groundwater Flow Rate and Direction .....	4
<b>3.0 Statistical Evaluation .....</b>	<b>5</b>
3.1 Establishing Background Limits .....	5
3.2 Data Comparison to Background Limits – First Semiannual Event (October 2024) ..	5
3.3 Verification Resampling – First Semiannual Event (December 2024) .....	6
3.4 Data Comparison to Background Limits – Second Semiannual Event (April 2025)...	6
3.5 Verification Resampling – Second Semiannual Event (May 2025) .....	7
<b>4.0 Conclusions and Recommendations .....</b>	<b>8</b>
<b>5.0 Groundwater Monitoring Report Certification .....</b>	<b>9</b>
<b>6.0 References .....</b>	<b>10</b>

## TABLES

Table 1	Groundwater Elevation Summary – October 2024 and April 2025
Table 2	Summary of Groundwater Field Parameters – October 2024 and April 2025
Table 3	Comparison of Appendix III Parameter Results to Background Limits – October 2024
Table 4	Comparison of Appendix III Parameter Results to Background Limits – April 2025

## FIGURES

Figure 1	Site Location Map
Figure 2	Inactive Bottom Ash Impoundment Well Location Map
Figure 3	Groundwater Contour Map – October 2024
Figure 4	Groundwater Contour Map – April 2025

## **APPENDICES**

Appendix A February 2025 Alternative Source Demonstration

Appendix B Laboratory Reports

Appendix C Data Quality Reviews

## Executive Summary

On April 17, 2015, the United States Environmental Protection Agency (USEPA) published the final rule for the regulation and management of Coal Combustion Residuals (CCR) under the Resource Conservation and Recovery Act (RCRA) (the CCR Rule). The CCR Rule, as amended, applies to the DTE Electric Company (DTE Electric) Monroe Power Plant (MONPP) Bottom Ash Impoundment (BAI) Inactive CCR unit. On August 5, 2016, the USEPA published the CCR Rule companion *Extension of Compliance Deadlines for Certain Inactive Surface Impoundments*, which established the compliance deadlines for certain inactive CCR surface impoundments. Pursuant to the CCR Rule, no later than August 1, 2019, and annually thereafter, the owner or operator of an inactive CCR unit must prepare an annual groundwater monitoring and corrective action report for the CCR unit documenting the status of groundwater monitoring and corrective action for the preceding year in accordance with §257.90(e).

DTE Electric remained in detection monitoring at the MONPP BAI CCR Unit in the 2025 monitoring period. The semiannual detection monitoring events for 2025 were completed in October 2024 and April 2025 and included sampling and analyzing groundwater within the groundwater monitoring system for the indicator parameters listed in Appendix III to the CCR Rule. As part of the statistical evaluation, the data collected during detection monitoring events are evaluated to identify statistically significant increases (SSIs) in detection monitoring parameters to determine if concentrations in groundwater exceed background levels. Detection monitoring data that has been collected and evaluated in the 2025 reporting period are presented in this report.

A SSI for boron was detected at MW-2S during the October 2024 monitoring event. The concentration was evaluated and determined to be from natural variation in groundwater quality at the location as detailed in the Alternate Source Demonstration (ASD) prepared to assess the SSI for the well-constituent pair. There were no SSIs detected during the April 2025 monitoring event.

## 1.0 Introduction

### 1.1 Program Summary

On April 17, 2015, the United States Environmental Protection Agency (USEPA) published the final rule for the regulation and management of Coal Combustion Residuals (CCR) under the Resource Conservation and Recovery Act (RCRA) (the CCR Rule). The CCR Rule, as amended, applies to the DTE Electric Company (DTE Electric) Monroe Power Plant (MONPP) Bottom Ash Impoundment (BAI) Inactive CCR unit. On August 5, 2016, the USEPA published the CCR Rule companion *Extension of Compliance Deadlines for Certain Inactive Surface Impoundments*, which established the compliance deadlines for certain inactive CCR surface impoundments. Pursuant to the CCR Rule, no later than August 1, 2019, and annually thereafter, the owner or operator of an inactive CCR unit must prepare an annual groundwater monitoring and corrective action report for the CCR unit documenting the status of groundwater monitoring and corrective action for the preceding year in accordance with §257.90(e).

There was no statistically significant increases (SSIs) associated with the MONPP BAI CCR unit occurred in the 2024 reporting period (July 2023 to June 2024); therefore, DTE Electric continued detection monitoring during the 2025 reporting period pursuant to §257.94 of the CCR Rule.

TRC prepared this 2025 Annual Groundwater Monitoring Report (2025 Annual Report) for the MONPP BAI CCR unit on behalf of DTE Electric for the reporting period that extends from July 1, 2024 through June 30, 2025 and presents the monitoring results and the statistical evaluation of the detection monitoring parameters for the October 2024 and April 2025 semiannual groundwater monitoring events for the MONPP BAI Inactive CCR unit.

Detection monitoring for these events continued to be performed in accordance with the *Groundwater Monitoring Work Plan Coal Combustion Residuals (CCR) Rule - Inactive Bottom Ash Basin DTE Monroe Power Plant* (Work Plan) (AECOM, September 2017) and the *Groundwater Monitoring and Quality Assurance Project Plan, DTE Electric Company Monroe Power Plant Bottom Ash Impoundment, 3500 East Front Street, Monroe, Michigan* (QAPP) (TRC, June 2020a). Results are statistically evaluated per the *Revised Groundwater Statistical Evaluation Plan, Inactive Bottom Ash Impoundment, DTE Monroe Plant, Monroe, Michigan* (Stats Plan) (AECOM, April 2019, revised April 2020). As part of the statistical evaluation, the data collected during detection monitoring events are evaluated to identify SSIs of detection monitoring parameters compared to background levels.

### 1.2 Site Overview

The MONPP is located in Section 16, Township 7 South, Range 9 East, at 7955 East Dunbar Road, Monroe in Monroe County, Michigan (Figure 1). The MONPP BAI Inactive CCR unit was operated from the mid-1970s through 2015 and is located within the southern portion of the MONPP parcel at latitude 41° 52' 30" North and longitude 83° 20' 70" West. The MONPP BAI Inactive CCR unit is bounded by the MONPP facility to the north and northeast, Lake Erie to the southeast and south, and Plum Creek / the discharge canal to the west (Figure 2). The

implementation of the BAI closure by CCR removal is substantially complete.

### 1.3 Geology/Hydrogeology

As presented in the Stats Plan, the bedrock in the site vicinity is overlain by approximately 40 to 50 feet of unconsolidated deposits of glacial origin. The deposits are comprised of two (2) distinct units: a hard glacial till immediately overlying bedrock and lacustrine (lakebed or lake shore) deposits which overlay the till unit. The till is comprised of highly compacted gray silty to sandy clay with some cobbles and boulders, and ranges from approximately 20 to 50 feet in thickness. The overlying lacustrine deposits are composed of 10 to 30 feet of fine-grained sand and silt with some soft clay except where there is a thin, discontinuous coarse sand unit at the base of the lacustrine sequence.

Under parts of the MONPP property this sand unit ranges in thickness from 5 to 20 feet and yields groundwater. The sand unit thins progressively to the west, having a thickness of approximately 12 feet on the east side of the discharge canal and thinning to less than a few feet within 150 feet to the west of the discharge canal. Farther to the west the sand unit is not present as shown by soil borings for monitoring wells drilled in 2016 around the Fly Ash Basin. This is consistent with the expectation that lake-deposited materials will decrease in thickness with distance away from Lake Erie. Accordingly, it appears that this sand unit is a localized lakeshore beach deposit formed by westward aggradation with rising lake level and subsequently blanketed by finer lacustrine deposits. Groundwater in the sand unit is under semi-confined conditions.

A detailed summary of the site hydrogeology is presented in the *Monitoring Well Installation Report Coal Combustion Residuals (CCR) Rule – Inactive Bottom Ash Basin DTE Monroe* (Well Installation Report) (AECOM, April 2019, Revision 1 August 2019).

## 2.0 Groundwater Monitoring

### 2.1 Monitoring Well Network

A groundwater monitoring system has been established for the MONPP BAI Inactive CCR unit as detailed in the Well Installation Report. The detection monitoring well network for the MONPP BAI Inactive CCR unit currently consists of eleven monitoring wells that are screened in the uppermost aquifer. The monitoring system is comprised of monitoring wells MW-1S through MW-3S, MW-7S, and MW-9 through MW-15 located around the perimeter of the MONPP BAI. The monitoring well locations are shown on Figure 2.

As discussed in the Stats Plan, the groundwater monitoring system wells do not serve as simple upgradient or downgradient monitoring points because of two main factors:

- The sand unit located at the bottom of the lacustrine deposits is limited in extent. The unit is present in the inactive Bottom Ash Impoundment area and extends a limited distance north into the main Monroe Plant area. As noted above, the sand unit extends westward but also thins out and is not present in monitoring wells located greater than 500 feet west of the CCR unit. Therefore, there is no representative upgradient or background monitoring position available for the unit; and
- There is a strong confined hydraulic pressure in the sand unit aquifer. The overlying finer grained lacustrine deposits are relatively dry but water levels in the monitoring wells installed in the sand unit rise to within 2.5 to 12.0 feet below ground surface (bgs), likely driven by hydraulic pressure from the underlying bedrock aquifer system.

As such, an intrawell statistical approach was selected. An intrawell statistical approach requires that each of the downgradient wells doubles as the background and compliance well, where data from each individual well during a detection monitoring event is compared to a statistical limit developed using the background dataset from that same well, for a total of eleven background/downgradient monitoring wells. Additional discussion related to the selection of an intrawell statistical approach is presented in the Stats Plan.

### 2.2 Semiannual Groundwater Monitoring

The semiannual monitoring parameters for the detection groundwater monitoring program were selected per the CCR Rule's Appendix III to Part 257 – Constituents for Detection Monitoring. The Appendix III indicator parameters consist of boron, calcium, chloride, fluoride, pH (field reading), sulfate, and total dissolved solids (TDS) and were analyzed in accordance with the sampling and analysis plan included within the Work Plan. In addition to pH, the collected field parameters included oxidation reduction potential, dissolved oxygen, specific conductivity, temperature, and turbidity.

#### 2.2.1 Data Summary

The first semiannual groundwater detection monitoring event for the 2025 monitoring period was performed from October 21 to 22, 2024, by TRC personnel and samples were analyzed by Eurofins Laboratories, Inc. (Eurofins) in accordance with the Work Plan. Static water elevation data were collected at all eleven monitoring well locations. Groundwater samples were collected

from the eleven detection monitoring wells for the Appendix III indicator parameters and field parameters. A summary of the groundwater data collected during the October 2024 event is provided on Table 1 (static groundwater elevation data), Table 2 (field data), and Table 3 (analytical data).

The second semiannual groundwater detection monitoring event was performed April 29, 2025, by TRC personnel and samples were analyzed by Eurofins in accordance with the Work Plan. Static water elevation data were collected at all eleven monitoring well locations. Groundwater samples were collected from the eleven detection monitoring wells for the Appendix III indicator parameters and field parameters. A summary of the groundwater data collected during the April 2025 event is provided on Table 1 (static groundwater elevation data), Table 2 (field data), and Table 4 (analytical data). The laboratory analytical reports are included in Appendix B.

### **2.2.2 Data Quality Review**

Data from the October 2024 and April 2025 detection monitoring events and associated verification resampling were evaluated for completeness, overall quality and usability, method-specified sample holding times, precision and accuracy, and potential sample contamination. The data were found to be complete and usable for the purposes of the CCR monitoring program. Data quality reviews are presented in Appendix C.

### **2.2.3 Groundwater Flow Rate and Direction**

Groundwater elevation data collected during the October 2024 and April 2025 sampling events continue to show that groundwater within the uppermost aquifer generally flows toward Lake Erie to the southeast, south and to the plant's discharge channel to the southwest.

Groundwater potentiometric surface elevations measured across the site during the October 2024 and April 2025 sampling events are provided on Table 1 and were used to construct groundwater potentiometric surface maps shown on Figure 3 and Figure 4, respectively.

The groundwater flow rate and direction is consistent with previous monitoring events. The average hydraulic gradient throughout the site during the October 2024 event is estimated at 0.002 ft/ft using the inferred 573 and 574 foot contour lines and groundwater elevations measured at MW-7s, MW-11, and MW-14, resulting in an estimated average seepage velocity of approximately 1.1 ft/day or 400 ft/year. The average hydraulic gradient throughout the site during the April 2025 event is estimated at 0.004 ft/ft using the 573 and 574 foot contour lines and groundwater level elevations measured at MW-7s, MW-11, and MW-14, resulting in an estimated average seepage velocity of approximately 1.1 ft/day or 400 ft/year. Both events used the hydraulic conductivity of 164 ft/day averaged from the hydraulic conductivity values calculated for MW-1S, MW-3S, and MW-7S during aquifer testing and the assumed effective porosity of 0.3 described in the Well Installation Report.

The general flow direction is similar to that identified in previous monitoring rounds and continues to demonstrate that the downgradient wells are appropriately positioned to detect the presence of Appendix III parameters that could potentially migrate from the MONPP BAI Inactive CCR unit.



## 3.0 Statistical Evaluation

### 3.1 Establishing Background Limits

Per the Stats Plan, background limits were established for the Appendix III indicator parameters following the collection of at least eight background monitoring events using data collected from each of the eleven established detection monitoring wells (MW-1S through MW-3S, MW-7S, and MW-9 through MW-15). The statistical evaluation of the background data is presented in the 2019 Annual Report (TRC, July 2019). The Appendix III background limits for each monitoring well will be used throughout the detection monitoring period to determine whether groundwater has been impacted from the MONPP BAI Inactive CCR unit by comparing concentrations in the detection monitoring wells to their respective background limits for each Appendix III indicator parameter.

### 3.2 Data Comparison to Background Limits – First Semiannual Event (October 2024)

The concentrations of the indicator parameters in each of the detection monitoring wells (MW-1S through MW-3S, MW-7S, and MW-9 through MW-15) were compared to their respective statistical background limits calculated from the background data collected from each individual well (i.e., monitoring data from MW-1S is compared to the background limit developed using the background dataset from MW-1S, and so forth). The comparisons are presented on Table 3.

The statistical evaluation of the October 2024 Appendix III indicator parameters shows potential SSIs over background for:

- Boron at MW-2S;
- Sulfate at MW-7S;
- Chloride at MW-9;
- Boron at MW-11;
- Calcium and sulfate at MW-14; and
- Fluoride and TDS at MW-15.

The exceedances observed during the First Semiannual Event in October 2024 for sulfate at MW-7S, chloride at MW-9, boron at MW-11, and sulfate at MW-14 are not attributable to the CCR unit based on previous demonstrations of natural variability for these constituents at these locations (TRC, September 2020; TRC, August 2023; TRC, March 2021; and TRC, February 2022; respectively). These ASDs continue to be applicable given the conditions in which the October 2024 exceedances for boron at MW-2S, sulfate at MW-7S, chloride at MW-9, boron at MW-11, and sulfate at MW-14 occurred, and the basis of attributing these concentrations to natural variability of local and regional groundwater quality are consistent with the previous demonstrations.

The initial observation of a constituent concentration above the established background limits does not constitute a SSI. Per the Stats Plan, if there is an initial exceedance of a prediction

limit for one or more of the constituents that have not been attributed to an alternate source, the well(s) of concern can be resampled within 30 days of the completion of the initial statistical analysis for verification purposes. Therefore, verification resampling was performed at MW-2S for boron, MW-14 for calcium, and at MW-15 for fluoride and TDS as described in Section 3.3. There were no potential SSIs compared to background for pH.

### 3.3 Verification Resampling – First Semiannual Event (December 2024)

Verification resampling is recommended per the Stats Plan and the *USEPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (Unified Guidance, USEPA, 2009) to achieve performance standards as specified by §257.93(g) in the CCR Rule. Per the Stats Plan, if there is an exceedance of a prediction limit for one or more of the parameters, the well(s) of concern will be resampled within 30 days of the completion of the initial statistical analysis. Only constituents that initially exceed their statistical limit (i.e., have no previously recorded SSIs) will be analyzed for verification purposes. As such, verification resampling was conducted on December 5, 2024, by TRC personnel for boron at MW-2S, calcium at MW-14, and fluoride and TDS at MW-15. A summary of the groundwater data collected during the verification resampling events is provided on Table 3. The associated data quality review is included in Appendix C.

The December 2024 verification sampling confirmed the SSI for boron at monitoring well MW-2S and did not confirm the potential SSIs for calcium at MW-14 or fluoride and TDS at MW-15. Per §257.94(e), DTE Electric evaluated potential alternate sources for the boron SSI at MW-2S. The boron exceedance at MW-2S has been attributed to natural variability in groundwater quality based on the demonstration that was submitted to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) on February 28, 2025 and included in this report as Appendix A.

### 3.4 Data Comparison to Background Limits – Second Semiannual Event (April 2025)

The data comparisons for the April 2025 groundwater monitoring event are presented on Table 4. Based on the statistical evaluation of the April 2025 Appendix III indicator parameters potential SSIs were identified for the following:

- Boron at MW-2S;
- Calcium and Sulfate at MW-7S;
- Chloride and TDS at MW-9;
- Boron and calcium at MW-10;
- Boron at MW-11; and
- Sulfate at MW-14.

The exceedances observed during the Second Semiannual Event in April 2025 for sulfate at MW-7S, chloride at MW-9, boron at MW-10 and MW-11, and sulfate at MW-14 are not attributable to the CCR unit based on the previous demonstrations of natural variability for these

constituents at these locations (TRC, September 2020; TRC, August 2023; TRC, March 2021; and TRC, February 2022; respectively). In addition, the boron exceedance at MW-2S is attributed to natural variability in groundwater quality based on the February 2025 demonstration (Appendix A). These ASDs continue to be applicable given the conditions in which the April 2025 exceedances occurred, and the basis of attributing these concentrations to natural variability of local and regional groundwater quality are consistent with the previous demonstrations.

The initial observation of a constituent concentration above the established background limits does not constitute a SSI. Per the Stats Plan, if there is an initial exceedance of a prediction limit for one or more of the constituents that have not been attributed to an alternate source, the well(s) of concern can be resampled within 30 days of the completion of the initial statistical analysis for verification purposes. Therefore, verification resampling was performed at MW-7S for calcium, MW-9 for TDS, and MW-10 for calcium, as described in Section 3.5. There were no potential SSIs compared to background for fluoride and pH.

### **3.5 Verification Resampling – Second Semiannual Event (May 2025)**

Verification resampling is recommended per the Stats Plan and the *USEPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (Unified Guidance, USEPA, 2009) to achieve performance standards as specified by §257.93(g) in the CCR Rule. Per the Stats Plan, if there is an exceedance of a prediction limit for one or more of the parameters, the well(s) of concern will be resampled within 30 days of the completion of the initial statistical analysis. Only constituents that initially exceed their statistical limit (i.e., have no previously recorded SSIs) will be analyzed for verification purposes. As such, verification resampling was conducted on May 29, 2025, by TRC personnel for calcium at MW-7S, TDS at MW-9, and calcium at MW-10. A summary of the groundwater data collected during the verification resampling events is provided on Table 4. The associated data quality review is included in Appendix C.

The May 2025 verification sampling did not confirm the April 2025 potential SSIs for calcium at MW-7S and MW-10, and TDS at MW-9.

#### **4.0 Conclusions and Recommendations**

There are no SSIs over background limits that are attributable to the MONPP BAI CCR unit for the October 2024 and April 2025 monitoring events and detection monitoring will continue.

The next semiannual detection monitoring event at the MONPP BAI is scheduled for the fourth calendar quarter of 2025.

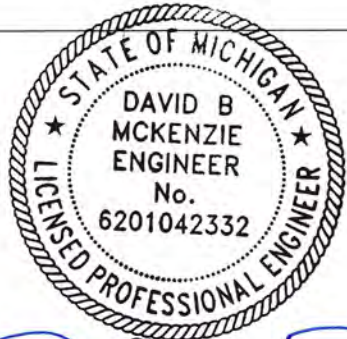
## 5.0 Groundwater Monitoring Report Certification

The U.S. EPA's Disposal of Coal Combustion Residuals from Electric Utilities Final Rule Title 40 CFR Part 257 §257.90(e) requires that the owner or operator of an existing CCR unit prepare an annual groundwater monitoring and corrective action report.

### Annual Groundwater Monitoring Report Certification Monroe Power Plant Bottom Ash Impoundment Monroe, Michigan

#### CERTIFICATION

I hereby certify that the annual groundwater and corrective action report presented within this document for the MONPP BAI CCR unit has been prepared to meet the requirements of Title 40 CFR §257.90(e) of the Federal CCR Rule. This document is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of Title 40 CFR §257.90(e).

Name: David B. McKenzie, P.E.	Expiration Date: December 17, 2025	 Stamp
Company: TRC Engineers Michigan, Inc.	Date: July 28, 2025	

## 6.0 References

- AECOM. September 2017. Groundwater Monitoring Work Plan Coal Combustion Residuals (CCR) Rule – Inactive Bottom Ash Basin, DTE Monroe Plant, Monroe, Michigan. Prepared for DTE Electric Company.
- AECOM. April 2019, Revision 2 April 2020. Groundwater Statistical Evaluation Plan Coal Combustion Residuals (CCR) Rule – Inactive Bottom Ash Basin, DTE Monroe Plant, Monroe, Michigan. Prepared for DTE Electric Company.
- AECOM. April 2019, Revision 1, August 2019. Monitoring Well Installation Report Coal Combustion Residuals (CCR) Rule – Inactive Bottom Ash Basin, DTE Monroe Plant, Monroe, Michigan. Prepared for DTE Electric Company.
- TRC. June 2020. Groundwater Monitoring and Quality Assurance Project Plan Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit. Appendix B in the Hydrogeological Monitoring Plan to DTE Electric Company dated June 30, 2020
- TRC. September 2020. Alternative Source Demonstration: 2020 First Semiannual Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit. Technical Memorandum to DTE Electric Company dated September 21, 2020.
- TRC. March 2021. Alternative Source Demonstration: 2021 Second Semiannual Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit. Technical Memorandum to DTE Electric Company dated March 18, 2021.
- TRC. February 2022. Alternative Source Demonstration: 2022 Second Semiannual Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit. Technical Memorandum to DTE Electric Company date February 24, 2022.
- TRC. August 2023. Alternative Source Demonstration: 2023 First Semiannual Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit. Technical Memorandum to DTE Electric Company dated August 30, 2024.
- TRC. February 2025. Alternative Source Demonstration: 2025 Second Semiannual Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit. Technical Memorandum to DTE Electric Company dated February 28, 2025.
- TRC. July 2024. Annual Groundwater Monitoring Report – Monroe Power Plant Bottom Ash Impoundment, Inactive Coal Combustion Residual Unit. Prepared for DTE Electric Company.

USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA facilities, Unified Guidance. Office of Conservation and Recovery. EPA 530/R-09-007.

USEPA. April 2015. 40 CFR Parts 257 and 261. Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule. 80 Federal Register 74 (April 17, 2015), pp. 21301-21501 (80 FR 21301).

USEPA. July 2018. 40 CFR Part 257. Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Amendments to the National Minimum Criteria (Phase One, Part One); Final Rule. 83 Federal Register 146 (July 30, 2018), pp. 36435-36456 (83 FR 36435).

USEPA. April 2018. Barnes Johnson (Office of Resource Conservation and Recovery) to James Roewer (c/o Edison Electric Institute) and Douglas Green, Margaret Fawal (Venable LLP). Re: Coal Combustion Residuals Rule Groundwater Monitoring Requirements. April 30, 2018. United States Environmental Protection Agency, Washington, D.C. 20460. Office of Solid Waste and Emergency Response, now the Office of Land and Emergency Management.

## Tables



Table 1  
Groundwater Elevation Summary – October 2024 and April 2025  
Monroe Power Plant BAI Inactive CCR Unit  
Monroe, Michigan

Well ID	MW-1S		MW-2S		MW-3S		MW-7S		MW-9		MW-10		MW-11		MW-12		MW-13		MW-14		MW-15	
Date Installed	9/19/2016		9/19/2016		9/20/2016		9/28/2016		9/19/2017		9/20/2017		9/20/2017		9/21/2017		9/21/2017		9/22/2017		9/26/2017	
TOC Elevation	582.62		578.85		577.58		576.20		579.05		577.46		580.58		582.49		580.97		580.76		580.80	
Geologic Unit of Screened Interval	Silt and Sand		Sand and Sandy clay		Silt and Sand		Sand and Gravel		Sand and Gravel		Sand and Sandy clay		Silt		Silt and Sand		Clay, Silt, and Sand		Silt and Sand		Sandy Clay and Sand	
Screened Interval Elevation	538.80 to 548.80		538.20 to 548.20		538.10 to 548.10		542.60 to 552.60		541.37 to 551.37		540.79 to 550.79		537.84 to 547.84		537.90 to 547.90		543.25 to 553.25		537.87 to 547.87		539.61 to 549.61	
Unit	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft
Measurement Date	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation
10/21/2024	10.14	572.48	5.10	573.75	4.08	573.50	2.80	573.40	5.39	573.66	3.74	573.72	7.00	573.58	8.90	573.59	8.45	572.52	6.08	574.68	8.34	572.46
04/29/2025	9.12	573.50	5.71	573.14	4.39	573.19	2.45	573.75	5.00	574.05	3.45	574.01	7.48	573.10	9.34	573.15	7.97	573.00	5.78	574.98	7.68	573.12

Notes:  
Elevations are reported in feet relative to the North American Vertical Datum of 1988.  
ft BTOC - feet below top of casing

**Table 2**  
Summary of Groundwater Field Parameters – October 2024 and April 2025  
Monroe Power Plant BAI Inactive CCR Unit  
Monroe, Michigan

Sample Location	Sample Date	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	pH (SU)	Specific Conductivity (umhos/cm)	Temperature (°C)	Turbidity (NTU)
MW-1S	10/22/2024	1.09	-127.0	7.1	1,710	13.5	8.00
	4/29/2025	1.00	150.0	6.9	1,303	12.9	12.1
MW-2S	10/22/2024	0.88	-187.0	7.9	1,990	14.9	9.00
	12/5/2024 <sup>(1)</sup>	0.05	-156.8	7.6	1,554	13.0	9.47
	4/29/2025	0.31	-124.5	7.6	1,932	14.4	12.7
	5/29/2025 <sup>(2)</sup>	0.48	-105.1	7.3	1,646	13.9	1.50
MW-3S	10/22/2024	0.85	-174.0	7.6	1,953	16.7	195
	4/29/2025	0.68	-45.2	7.4	1,708	16.9	66.6
MW-7S	10/21/2024	1.00	-211.0	7.5	1,370	15.9	5.95
	4/29/2025	4.50	32.4	7.2	1,879	14.7	11.3
	5/29/2025 <sup>(2)</sup>	0.42	-104.4	7.2	896	14.4	2.45
MW-9	10/21/2024	0.75	-234.0	7.0	1,378	15.7	9.00
	4/29/2025	0.44	-95.6	6.9	1,207	14.8	11.6
	5/29/2025 <sup>(2)</sup>	0.24	-67.3	6.8	1,140	14.4	4.46
MW-10	10/21/2024	0.65	-282.0	7.4	1,402	15.8	4.99
	4/29/2025	0.64	-258.1	7.0	1,246	15.0	9.29
	5/29/2025 <sup>(2)</sup>	0.39	-134.9	7.0	1,152	14.8	3.32

**Notes:**

mg/L - Milligrams per Liter.

mV - Millivolts.

SU - Standard Units.

umhos/cm - Micromhos per centimeter.

°C - Degrees Celsius.

NTU - Nephelometric Turbidity Unit

(1) Results shown for verification sampling performed on 12/5/2024.

(2) Results shown for verification sampling performed on 5/29/2025.

**Table 2**  
Summary of Groundwater Field Parameters – October 2024 and April 2025  
Monroe Power Plant BAI Inactive CCR Unit  
Monroe, Michigan

Sample Location	Sample Date	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	pH (SU)	Specific Conductivity (umhos/cm)	Temperature (°C)	Turbidity (NTU)
MW-11	10/21/2024	0.92	-232.0	7.4	2,194	15.30	10.0
	4/29/2025	0.55	-35.1	7.4	1,928	15.10	7.32
MW-12	10/22/2024	0.98	-159.0	7.7	1,869	14.20	10.0
	4/29/2025	0.71	-40.8	7.5	1,631	14.80	1.11
MW-13	10/22/2024	0.80	-164.0	7.2	874	14.40	8.00
	4/29/2025	0.17	-74.4	6.9	843	13.80	5.02
MW-14	10/21/2024	0.73	-193.0	7.2	2,467	13.00	5.80
	12/5/2024 <sup>(1)</sup>	0.20	-140.6	7.1	1,874	12.10	7.27
	4/29/2025	0.05	-75.9	7.1	2,003	13.00	0.85
MW-15	10/21/2024	0.78	-228.0	7.4	1,111	16.20	5.00
	12/5/2024 <sup>(1)</sup>	0.02	-175.0	7.3	908	14.00	7.59
	4/29/2025	0.16	-118.1	7.2	1,066	15.40	2.54

**Notes:**

mg/L - Milligrams per Liter.

mV - Millivolts.

SU - Standard Units.

umhos/cm - Micromhos per centimeter.

°C - Degrees Celsius.

NTU - Nephelometric Turbidity Unit

(1) Results shown for verification sampling performed on 12/5/2024.

(2) Results shown for verification sampling performed on 5/29/2025.

Table 3  
Comparison of Appendix III Parameter Results to Background Limits – October 2024  
Monroe Power Plant BAI Inactive CCR Unit  
Monroe, Michigan

Sample Location:		MW-1S		MW-2S			MW-3S		MW-7S		MW-9		
Sample Date:		10/22/2024	PL	10/22/2024	12/5/2024 <sup>(6)</sup>	PL	10/22/2024	PL	10/21/2024	PL	10/21/2024	PL	
Constituent	Unit	Data		Data			Data		Data		Data		
Appendix III													
Boron	ug/L	660	870	1,100	1100 <sup>(1)</sup>	1,000	890	980	420	1,400	570	640	
Calcium	ug/L	270,000	370,000	250,000	--	270,000	340,000	540,000	230,000	380,000	190,000	190,000	
Chloride	mg/L	110	170	11	--	14	13	15	35	110	74 <sup>(3)</sup>	59	
Fluoride	mg/L	0.21	0.47	0.71	--	0.89	0.81	0.98	0.62	1.6	0.47	0.56	
pH, Field	su	7.1	6.5 - 8.7	7.9	--	7.0 - 8.5	7.6	6.9 - 7.9	7.5	6.0 - 8.1	7.0	6.0 - 7.0	
Sulfate	mg/L	130	850	1,300	--	1,600	1,200	1,400	620 <sup>(2)</sup>	590	< 1	12	
Total Dissolved Solids	mg/L	950	1,600	1,700	--	2,000	1,600	2,300	1,000	2,000	740	810	

**Notes:**  
ug/L - micrograms per liter.  
mg/L - milligrams per liter.  
SU - standard units; pH is a field parameter.  
All metals were analyzed as total unless otherwise specified.  
**Bold** font indicates an exceedance of the Prediction Limit (PL).  
**RESULT** Shading and bold font indicates a confirmed exceedance of the Prediction Limit (PL).  
(1) - Exceedance was determined to be from an alternate source in the Second 2024 Semiannual alternative source demonstration dated 2/28/2025.  
(2) - Exceedance was determined to be from an alternate source in the still applicable First 2020 Semiannual alternative source demonstration dated 9/21/2020.  
(3) - Exceedance was determined to be from an alternate source in the still applicable First 2023 Semiannual alternative source demonstration dated 8/30/2023.  
(4) - Exceedance was determined to be from an alternate source in the still applicable Second 2020 Semiannual alternative source demonstration dated 3/18/2021.  
(5) - Exceedance was determined to be from an alternate source in the still applicable Second 2021 Semiannual alternative source demonstration dated 2/24/2022.  
(6) - Results shown for verification sampling performed on 12/5/2024.

Table 3  
Comparison of Appendeix III Parameter Results to Background Limits – October 2024  
Monroe Power Plant BAI Inactive CCR Unit  
Monroe, Michigan

Sample Location:		MW-10		MW-11		MW-12		MW-13		MW-14			MW-15		
Sample Date:		10/21/2024	PL	10/21/2024	PL	10/22/2024	PL	10/22/2024	PL	10/21/2024	12/5/2024 <sup>(6)</sup>	PL	10/21/2024	12/5/2024 <sup>(6)</sup>	PL
Constituent	Unit	Data		Data		Data		Data		Data	Data		Data	Data	
Appendix III															
Boron	ug/L	520	530	1,000 <sup>(4)</sup>	920	1,100	1,100	< 100	100	1,500	--	1,700	2,500	--	2,800
Calcium	ug/L	170,000	170,000	270,000	330,000	190,000	210,000	130,000	140,000	320,000	310,000	310,000	140,000	--	150,000
Chloride	mg/L	62	80	16	18	10	13	99	120	260	--	310	110	--	150
Fluoride	mg/L	0.46	0.68	0.92	1.2	0.85	0.91	0.39	0.51	0.54	--	0.57	0.68	0.47	0.64
pH, Field	su	7.4	6.6 - 7.5	7.4	6.9 - 7.5	7.7	7.4 - 7.9	7.2	6.2 - 7.7	7.2	--	6.8 - 7.3	7.4	--	6.9 - 7.4
Sulfate	mg/L	11	19	1,400	1,500	1,100	1,300	< 1	1.0	550 <sup>(5)</sup>	--	430	< 1	--	1.0
Total Dissolved Solids	mg/L	730	840	1,900	2,100	1,500	1,800	470	1,100	1,700	--	1,700	1,100	590	770

Notes:

ug/L - micrograms per liter.

mg/L - milligrams per liter.

SU - standard units; pH is a field parameter.

All metals were analyzed as total unless otherwise specified.

**Bold** font indicates an exceedance of the Prediction Limit (PL).

**RESULT** Shading and bold font indicates a confirmed exceedance of the Prediction Limit (PL).

- (1) - Exceedance was determined to be from an alternate source in the Second 2024 Semiannual alternative source demonstration dated 2/28/2025.  
(2) - Exceedance was determined to be from an alternate source in the still applicable First 2020 Semiannual alternative source demonstration dated 9/21/2020.  
(3) - Exceedance was determined to be from an alternate source in the still applicable First 2023 Semiannual alternative source demonstration dated 8/30/2023.  
(4) - Exceedance was determined to be from an alternate source in the still applicable Second 2020 Semiannual alternative source demonstration dated 3/18/2021.  
(5) - Exceedance was determined to be from an alternate source in the still applicable Second 2021 Semiannual alternative source demonstration dated 2/24/2022.  
(6) - Results shown for verification sampling performed on 12/5/2024.

**Table 4**  
Comparison of Appendix III Parameter Results to Background Limits – April 2025  
Monroe Power Plant BAI Inactive CCR Unit  
Monroe, Michigan

Sample Location: Sample Date:		MW-1S		MW-2S		MW-3S		MW-7S			MW-9		
		4/29/2025	PL	4/29/2025	PL	4/29/2025	PL	4/29/2025	5/29/2025 <sup>(1)</sup>	PL	4/29/2025	5/29/2025 <sup>(1)</sup>	PL
Constituent	Unit	Data		Data		Data		Data	Data		Data	Data	
Appendix III													
Boron	ug/L	500	870	1,100 <sup>(2)</sup>	1,000	820	980	400	--	1,400	630	--	640
Calcium	ug/L	210,000	370,000	260,000	270,000	280,000	540,000	400,000	130,000	380,000	190,000	--	190,000
Chloride	mg/L	75	170	11	14	15	15	23	--	110	79 <sup>(4)</sup>	--	59
Fluoride	mg/L	0.2	0.47	0.69	0.89	0.79	0.98	1.6	--	1.6	0.45	--	0.56
pH, Field	su	6.9	6.5 - 8.7	7.6	7.0 - 8.5	7.4	6.9 - 7.9	7.2	--	6.0 - 8.1	6.9	--	6.0 - 7.0
Sulfate	mg/L	110	850	1,300	1,600	1,200	1,400	1,300 <sup>(3)</sup>	--	590	4.9	--	12
Total Dissolved Solids	mg/L	880	1,600	1,800	2,000	1,700	2,300	2,000	--	2,000	840	810	810

**Notes:**

ug/L - micrograms per liter.

mg/L - milligrams per liter.

SU - standard units; pH is a field parameter.

All metals were analyzed as total unless otherwise specified.

**Bold** font indicates an exceedance of the Prediction Limit (PL).

**RESULT** Shading and bold font indicates a confirmed exceedance of the Prediction Limit (PL).

(1) - Results shown for verification samples collected on 5/29/2025.

(2) - Exceedance was determined to be from an alternate source in the still applicable Second 2024 Semiannual alternative source demonstration dated 2/28/2025.

(3) - Exceedance was determined to be from an alternate source in the still applicable First 2020 Semiannual alternative source demonstration dated 9/21/2020.

(4) - Exceedance was determined to be from an alternate source in the still applicable First 2023 Semiannual alternative source demonstration dated 8/30/2023.

(5) - Exceedance was determined to be from an alternate source in the still applicable Second 2020 Semiannual alternative source demonstration dated 3/18/2021.

(6) - Exceedance was determined to be from an alternate source in the still applicable Second 2021 Semiannual alternative source demonstration dated 2/24/2022.

**Table 4**  
Comparison of Appendix III Parameter Results to Background Limits – April 2025  
Monroe Power Plant BAI Inactive CCR Unit  
Monroe, Michigan

Sample Location: Sample Date:		MW-10			MW-11		MW-12		MW-13		MW-14		MW-15	
		4/29/2025	5/29/2025 <sup>(1)</sup>	PL	4/29/2025	PL	4/29/2025	PL	4/29/2025	PL	4/29/2025	PL	4/29/2025	PL
Constituent	Unit	Data			Data		Data		Data		Data		Data	
Appendix III														
Boron	ug/L	560 <sup>(5)</sup>	--	530	930 <sup>(5)</sup>	920	1,000	1,100	< 100	100	1,500	1,700	2,300	2,800
Calcium	ug/L	180,000	170,000	170,000	260,000	330,000	200,000	210,000	120,000	140,000	290,000	310,000	130,000	150,000
Chloride	mg/L	66	--	80	16	18	10	13	100	120	240	310	110	150
Fluoride	mg/L	0.43	--	0.68	0.93	1.2	0.83	0.91	0.38	0.51	0.29	0.57	0.55	0.64
pH, Field	su	7.0	--	6.6 - 7.5	7.4	6.9 - 7.5	7.5	7.4 - 7.9	6.9	6.2 - 7.7	7.1	6.8 - 7.3	7.2	6.9 - 7.4
Sulfate	mg/L	5.3	--	19	1,400	1,500	1,200	1,300	< 1	1.0	460 <sup>(6)</sup>	430	< 1	1.0
Total Dissolved Solids	mg/L	820	--	840	2,000	2,100	1,700	1,800	520	1,100	1,600	1,700	640	770

**Notes:**  
ug/L - micrograms per liter.  
mg/L - milligrams per liter.  
SU - standard units; pH is a field parameter.  
All metals were analyzed as total unless otherwise specified.  
**Bold** font indicates an exceedance of the Prediction Limit (PL).  
**RESULT** Shading and bold font indicates a confirmed exceedance of the Prediction Limit (PL).

- (1) - Results shown for verification samples collected on 5/29/2025.  
(2) - Exceedance was determined to be from an alternate source in the still applicable Second 2024 Semiannual alternative source demonstration dated 2/28/2025.  
(3) - Exceedance was determined to be from an alternate source in the still applicable First 2020 Semiannual alternative source demonstration dated 9/21/2020.  
(4) - Exceedance was determined to be from an alternate source in the still applicable First 2023 Semiannual alternative source demonstration dated 8/30/2023.  
(5) - Exceedance was determined to be from an alternate source in the still applicable Second 2020 Semiannual alternative source demonstration dated 3/18/2021.  
(6) - Exceedance was determined to be from an alternate source in the still applicable Second 2021 Semiannual alternative source demonstration dated 2/24/2022.

## Figures





BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.



1540 Eisenhower Place  
Ann Arbor, MI 48108-3284  
Phone: 734.971.7080

TRC - GIS

PROJECT: **DTE ELECTRIC COMPANY  
MONROE POWER PLANT BOTTOM ASH IMPOUNDMENT  
3500 EAST FRONT STREET  
MONROE, MI 48161**

TITLE: **SITE LOCATION MAP**

DRAWN BY:	A. ADAIR
CHECKED BY:	H. SCHNAIDT
APPROVED BY:	V. BUENING
DATE:	JULY 2025
PROJ. NO.:	620074.0000.0000
FILE:	June2024_553931.0006-001.mxd

**FIGURE 1**





LEGEND

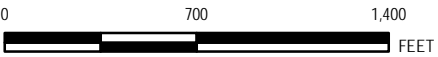
- CCR PROGRAM MONITORING WELL
- INVESTIGATION MONITORING WELL
- APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH IMPOUNDMENT
- APPROXIMATE PLANT BOUNDARY
- UNIT SEPARATION BERM

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, (APRIL 2024).



1" = 700'  
1:8,400

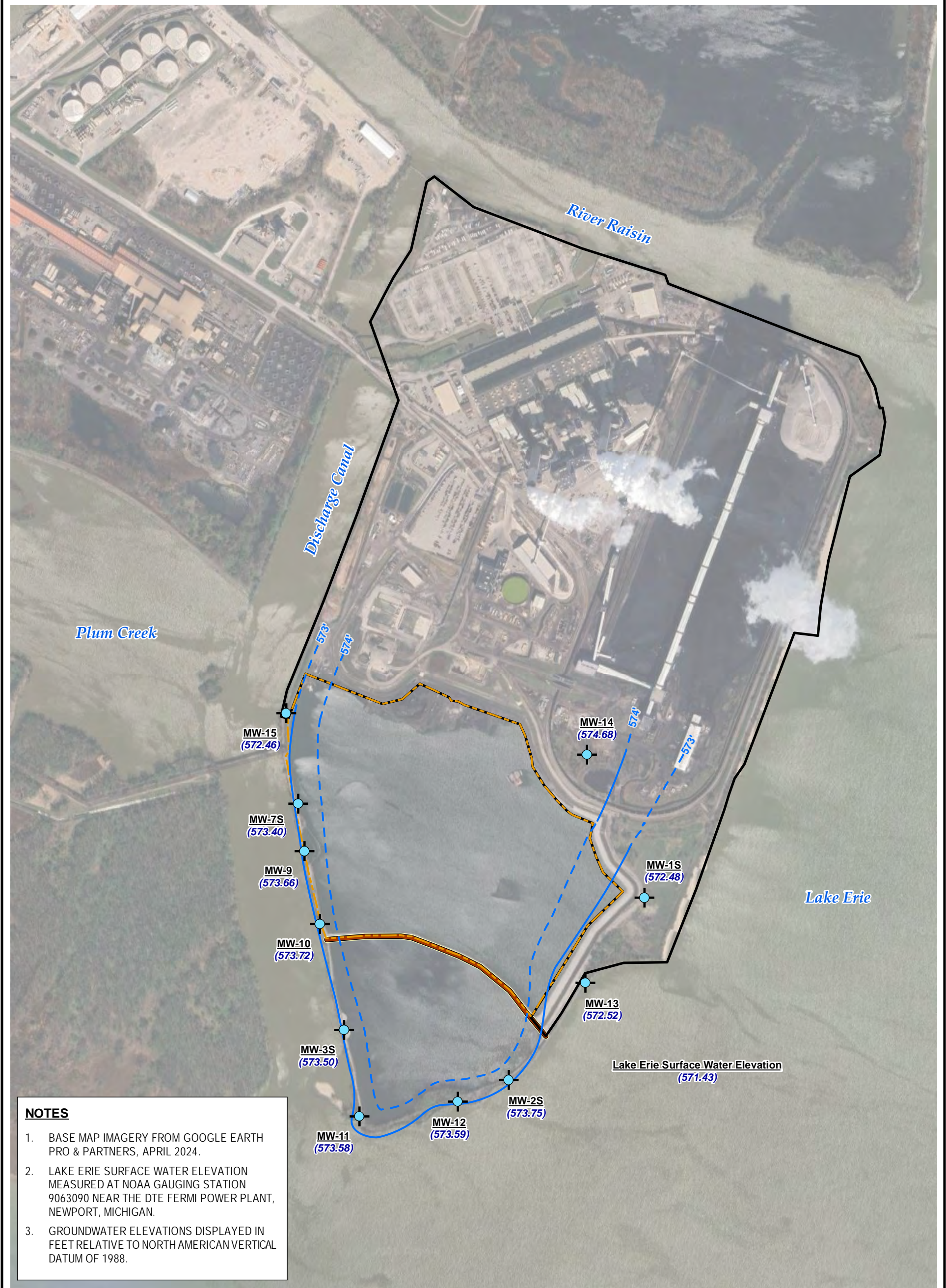


PROJECT:	DTE ELECTRIC COMPANY MONROE POWER PLANT BOTTOM ASH IMPOUNDMENT 3500 EAST FRONT STREET MONROE, MI 48161
TITLE:	INACTIVE BOTTOM ASH IMPOUNDMENT WELL LOCATION MAP

DRAWN BY:	A. FOJTIK
CHECKED BY:	H. SCHNAIDT
APPROVED BY:	V. BUENING
DATE:	JULY 2025
PROJ. NO.:	620074.0000.0000
FILE:	553931_0006-002.mxd

FIGURE 2





**NOTES**

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, APRIL 2024.
2. LAKE ERIE SURFACE WATER ELEVATION MEASURED AT NOAA GAUGING STATION 9063090 NEAR THE DTE FERMI POWER PLANT, NEWPORT, MICHIGAN.
3. GROUNDWATER ELEVATIONS DISPLAYED IN FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988.

MONITORING WELL

GROUNDWATER CONTOUR (DASHED WHERE INFERRED)

UNIT SEPARATION BERM

APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH BASIN

APPROXIMATE PLANT BOUNDARY

N

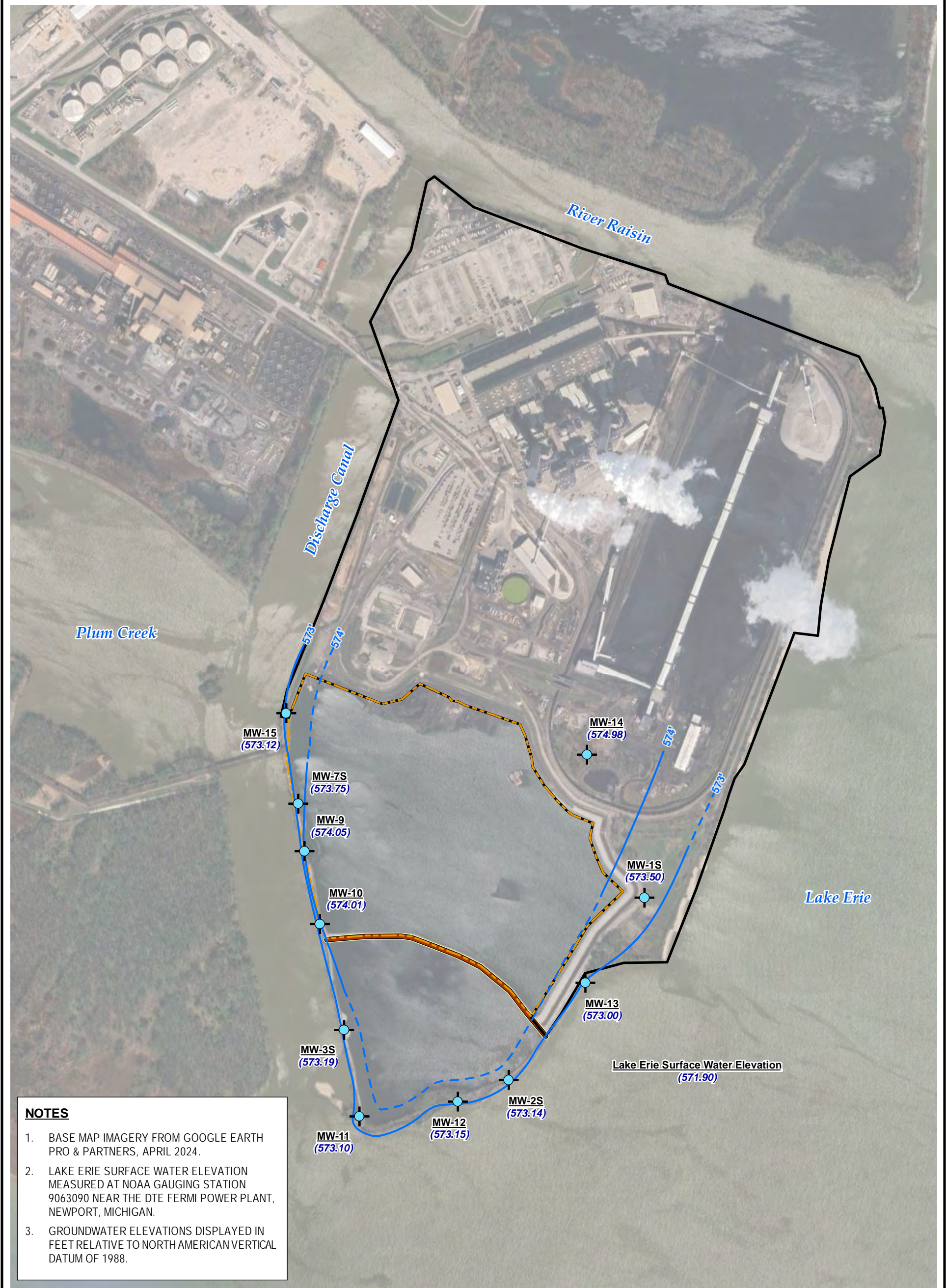
1" = 700'  
1:8,400

07001,400

FEET

<div>1540 Eisenhower Place Ann Arbor, MI 48108-3284 Phone: 734.971.7080</div>	PROJECT:	DTE ELECTRIC COMPANY MONROE POWER PLANT BOTTOM ASH IMPOUNDMENT 3500 EAST FRONT STREET MONROE, MI 48161	DRAWN BY: A. FOJTIK
	TITLE:	GROUNDWATER CONTOUR MAP OCTOBER 2024	CHECKED BY: H. SCHNAIDT
			APPROVED BY: V. BUENING
			DATE: JULY 2025
			PROJ. NO.: 620074.0000.0000
			FILE: 620074_0000-003.mxd
			FIGURE 3





**NOTES**

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, APRIL 2024.
2. LAKE ERIE SURFACE WATER ELEVATION MEASURED AT NOAA GAUGING STATION 9063090 NEAR THE DTE FERMI POWER PLANT, NEWPORT, MICHIGAN.
3. GROUNDWATER ELEVATIONS DISPLAYED IN FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988.

MONITORING WELL

GROUNDWATER CONTOUR (DASHED WHERE INFERRED)

UNIT SEPARATION BERM

APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH BASIN

APPROXIMATE PLANT BOUNDARY

N

1" = 700'  
1:8,400

07001,400

FEET

<div>1540 Eisenhower Place Ann Arbor, MI 48108-3284 Phone: 734.971.7080</div>	PROJECT:	DTE ELECTRIC COMPANY MONROE POWER PLANT BOTTOM ASH IMPOUNDMENT 3500 EAST FRONT STREET MONROE, MI 48161	DRAWN BY:	A. FOJTIK
	TITLE:	GROUNDWATER CONTOUR MAP APRIL 2025	CHECKED BY:	H. SCHNAIDT
			APPROVED BY:	V. BUENING
			DATE:	JULY 2025
			PROJ. NO.:	620074.0000
			FILE:	620074_0000-004.mxd
				FIGURE 4



## **Appendix A**

# **February 2025 Alternative Source Demonstration**



1540 Eisenhower Pl.  
Ann Arbor, MI 48108

T 734.971.7080  
TRCcompanies.com

February 28, 2025

Brett Coulter  
Jackson District Office  
Materials Management Division  
Michigan Department of Environment, Great Lakes, and Energy  
301 E. Louis Glick Hwy.  
Jackson, MI 48161

Subject: Alternate Source Demonstration: Second Semiannual 2024 Groundwater Sampling Event, Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit, 3500 East Front Street, Monroe, Michigan

Dear Mr. Coulter:

TRC was retained by DTE Electric Company (DTE Electric) to conduct routine groundwater monitoring activities at the Monroe Power Plant Bottom (MONPP) Bottom Ash Impoundment (BAI) inactive coal combustion residual (CCR) unit (the Site), located in Monroe, Michigan. Routine groundwater monitoring at the MONPP BAI Inactive CCR unit is conducted in accordance with the Michigan Department of Environment, Great Lakes, and Energy (EGLE)-approved *Hydrogeological Monitoring Plan* (MONPP BAI HMP) for the Site (TRC, June 30, 2020) and the United States Environmental Protection Agency (USEPA) final rule for the regulation and management of CCR under the Resource Conservation and Recovery Act (RCRA), as amended (the CCR Rule) (USEPA, April 2015).

As discussed in the *Second Semiannual 2024 Groundwater Monitoring Report* for the Site (TRC, January 2025), the statistical evaluation of the October 2024 detection monitoring indicator parameters indicated potential statistically significant increases (SSIs) for:

- Boron at MW-2S (1,100 micrograms per liter (µg/L)).

Verification resampling for boron at MW-2S from the October 2024 event was conducted on December 5, 2024 by TRC personnel. The verification result for boron at MW-2S (1,100 mg/L) was above the PL (1,000 mg/L); therefore, the initial SSI for boron at MW-2S is confirmed (Table 1). It should be noted that the detected concentration of boron within groundwater at MW-2S is well below the Michigan Part 201 generic groundwater surface water interface (GSI) cleanup criteria for boron.

In accordance with §257.94(e)(2) and the HMP, DTE Electric may demonstrate that a source other than the CCR unit caused the SSI or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. This Alternate Source Demonstration (ASD) has been prepared to address the aforementioned boron SSI at MW-2S identified in the October 2024 detection monitoring event. The results of this ASD show that the boron SSI at MW-2S is not due to a release from the MONPP BAI Inactive CCR unit.

## Background

The MONPP is located in Section 15, Township 7 South, Range 9 East, at 3500 East Front Street, Monroe in Monroe County, Michigan. The site location is shown in Figure 1. The MONPP BAI Inactive CCR unit is located within the southern portion of the MONPP parcel and is bounded by the MONPP facility to the north and northeast, Lake Erie to the southeast and south, and Plum Creek/the discharge canal to the west.

The bedrock in the site vicinity is overlain by approximately 40 to 50 feet of unconsolidated deposits of glacial origin. The deposits are comprised of two (2) distinct units: a hard glacial till immediately overlying bedrock and lacustrine (lakebed or lake shore) deposits which overlay the till unit. The till is comprised of highly compacted gray silty to sandy clay with some cobbles and boulders, and ranges from approximately 20 to 50 feet in thickness. The overlying lacustrine deposits are composed of 10 to 30 feet of fine-grained sand and silt with some soft clay except where there is a thin, discontinuous coarse sand unit at the base of the lacustrine sequence.

The detection monitoring well network for the MONPP BAI Inactive CCR unit consists of eleven monitoring wells that are screened in the uppermost aquifer. As discussed in the Stats Plan, intrawell statistical methods for the MONPP BAI Inactive CCR unit were selected based on the geology and hydrogeology at the Site. Monitoring wells MW-1S through MW-3S, MW-7S, and MW-9 through MW-15 are located around the perimeter of the MONPP BAI and provide data on both background and downgradient groundwater quality that has not been affected by the CCR unit (total of eleven background/downgradient monitoring wells). The monitoring well locations are shown in Figure 2 and the second semiannual 2024 groundwater contour figure is included as Figure 3. The *Monitoring Well Installation Report Coal Combustion Residuals (CCR) Rule – Inactive Bottom Ash Impoundment DTE Monroe* (Well Installation Report) (AECOM, April 2019, Revised August 2019) details the groundwater monitoring system.

## Alternate Source Demonstration

As discussed above, verification resampling for boron at MW-2S was performed as recommended per the *Groundwater Statistical Evaluation Plan – Inactive Bottom Ash Impoundment* (Stats Plan) (AECOM, April 2019, Revised April 2020) and the *USEPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (Unified Guidance) (USEPA, 2009) to achieve performance standards as specified in the HMP and by §257.93(g) in the CCR Rule. The December 2024 verification resampling confirmed the boron exceedance at MW-2S (Table 1). The following discussion presents the ASD for the confirmed prediction limit exceedance.

### **Boron at MW-2S**

The SSI of boron in the groundwater at MW-2S, shown on Table 1, is due to natural variability in groundwater quality and not a release of CCR constituents from the MONPP BAI CCR unit. The lines of evidence provided in support of this conclusion are as follows:

**Limited background sampling timeline to account for temporal variability** – Groundwater is transient by nature and is subject to natural temporal changes in chemistry that occur over time. The boron SSI observed at MW-2S is slightly above the prediction limit as shown on



Table 1. This prediction limit was calculated in 2019, following the collection of 8 baseline samples in 16 months (from November 2017 to February 2019). The relatively short duration of the background data collection timeline limited the ability of the statistical analysis to capture the natural temporal trends in the groundwater quality at the MONPP BAI.

**Laboratory precision and accuracy in boron analysis** – The laboratory reported boron concentrations have a laboratory-reported precision (+/- 10%) and accuracy (+/- 10%) range and therefore the margin of error of the reported values bracket the PL for the MW-2S groundwater samples collected during the October 2024 original sampling event and the December 2024 confirmation sampling event. As such, the boron PL is within the margin of error of the 2SA 2024 laboratory results.

**Lack of similar increase in other indicator parameters at MW-2S** – The lack of SSIs for any other parameters at MW-2S suggests a source other than the CCR unit for the observed boron SSI at this location.

**Spatial variability in groundwater quality** – Boron concentrations vary considerably across the MONPP BAI well network. The boron concentrations observed in the MONPP BAI well network between 2017 and 2024 ranged from 34 to 2,900 ug/L. The boron concentrations observed at MW-2S during the October 2024 event is only slightly above the prediction limit (Table 1) and is well within the range of 34 to 2,900 ug/L observed across the entire monitoring network (Figure 4). This further demonstrates that boron concentrations at MW-2S are due to natural variability as they are within the expected range across the site.

The data also shows consistent and similar changes in boron concentrations occurring simultaneously across the majority of the well network (e.g. MW-03S, MW-09, MW-10, MW-11, MW-12, MW-14) along with MW-8S that is screened in the uppermost sand unit and not hydraulically connected to the BAI. This is observed in Figure 4 that shows the small peaks and valleys of the concentrations follow the same pattern from event to event, particularly over the past six events. This further supports the conclusion that the change in concentration observed at MW-2S is influenced by naturally occurring factors unrelated to the BAI CCR unit.

## Conclusions and Recommendations


The information provided in this report serves as the ASD for the DTE Electric MONPP BAI Inactive CCR unit and was prepared in accordance with 40 CFR 257.94(e)(2) of the CCR Rule and the MONPP BAI HMP. This ASD demonstrates that the boron SSI from the second semiannual 2024 groundwater monitoring event is due to natural variability and is not due to a release of CCR related constituents into the groundwater from the MONPP BAI Inactive CCR unit. Therefore, based on the information provided in this ASD, DTE Electric plans to continue detection monitoring as per 40 CFR 257.94 and the MONPP BAI HMP at the MONPP BAI Inactive CCR unit.



## Signatures and Certifications

### Engineer Certification Statement

I hereby certify that the alternative source demonstration presented within this document for the MONPP BAI Inactive CCR unit has been prepared to meet the requirements of Title 40 CFR §257.94(e)(2) of the Federal CCR Rule and the June 30, 2020 Hydrogeological Monitoring Plan (HMP). This document is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of Title 40 CFR §257.94(e)(2) and the HMP.

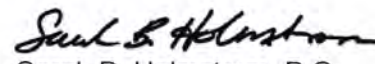
Name: David B. McKenzie, P.E.	Expiration Date: December 17, 2025	
Company: TRC Engineers Michigan, Inc.	Date:  February 28, 2025	

In addition, the signature below certifies that this letter report was prepared under the direction of a qualified groundwater scientist in accordance with the EGLE-approved HMP and the Stats Plan. A copy of this report will be placed in the facility file.

Sincerely,

TRC

  
Vincent E Buening, C.P.G.  
Sr. Project Manager

  
Sarah B. Holmstrom, P.G.  
Senior Hydrogeologist

cc: Christopher P. Scieszka, DTE Electric Company

## Attachments

Table 1	Comparison of Groundwater Detection Monitoring Sampling Results to Background Limits – October and December 2024
Figure 1	Well Location Map
Figure 2	Groundwater Contour Map October 2024
Figure 3	Boron Time Series Plot (All Wells)
Attachment 1	References

# Table

Table 1  
Comparison of Groundwater Detection Parameter Results to Background Limits – October and December 2024  
Monroe Power Plant BAI Inactive CCR Unit  
Monroe, Michigan

Sample Location:		MW-1S		MW-2S			MW-3S		MW-7S		MW-9			
Sample Date:		10/22/2024	PL	10/22/2024	12/5/2024 <sup>(5)</sup>	PL	10/22/2024	PL	10/21/2024	PL	10/21/2024	PL		
Constituent	Unit	Data		Data			Data		Data		Data		Data	
Appendix III														
Boron	ug/L	660	870	1,100	1,100	1,000	890	980	420	1,400	570	640		
Calcium	ug/L	270,000	370,000	250,000	--	270,000	340,000	540,000	230,000	380,000	190,000	190,000		
Chloride	mg/L	110	170	11	--	14	13	15	35	110	74 <sup>(2)</sup>	59		
Fluoride	mg/L	0.21	0.47	0.71	--	0.89	0.81	0.98	0.62	1.6	0.47	0.56		
pH, Field	su	7.1	6.5 - 8.7	7.9	--	7.0 - 8.5	7.6	6.9 - 7.9	7.5	6.0 - 8.1	7.0	6.0 - 7.0		
Sulfate	mg/L	130	850	1,300	--	1,600	1,200	1,400	620 <sup>(1)</sup>	590	< 1	12		
Total Dissolved Solids	mg/L	950	1,600	1,700	--	2,000	1,600	2,300	1,000	2,000	740	810		
Part 115 Parameters														
Iron	ug/L	3,700	n=8	2,800	--	n=8	15,000	n<8	< 100	n=8	3,400	n=8		

Notes:  
ug/L - micrograms per liter.  
mg/L - milligrams per liter.  
SU - standard units; pH is a field parameter.  
All metals were analyzed as total unless otherwise specified.  
Bold font indicates an exceedance of the Prediction Limit (PL).

RESULT Shading and bold font indicates a confirmed exceedance of the Prediction Limit (PL).

- (1) - Exceedance was determined to be from an alternate source in the First 2020 Semiannual alternative source demonstration dated 9/21/2020.  
(2) - Exceedance was determined to be from an alternate source in the First 2023 Semiannual alternative source demonstration dated 8/30/2023.  
(3) - Exceedance was determined to be from an alternate source in the Second 2020 Semiannual alternative source demonstration dated 3/18/2021.  
(4) - Exceedance was determined to be from an alternate source in the Second 2021 Semiannual alternative source demonstration dated 2/24/2022.  
(5) - Results shown for verification sampling performed on 12/5/2024.

Table 1  
Comparison of Groundwater Detection Parameter Results to Background Limits – October and December 2024  
Monroe Power Plant BAI Inactive CCR Unit  
Monroe, Michigan

Sample Location:		MW-10		MW-11		MW-12		MW-13		MW-14			MW-15		
Sample Date:		10/21/2024	PL	10/21/2024	PL	10/22/2024	PL	10/22/2024	PL	10/21/2024	12/5/2024 <sup>(5)</sup>	PL	10/21/2024	12/5/2024 <sup>(5)</sup>	PL
Constituent	Unit	Data		Data		Data		Data		Data			Data		
Appendix III															
Boron	ug/L	520	530	1,000 <sup>(3)</sup>	920	1,100	1,100	< 100	100	1,500	--	1,700	2,500	--	2,800
Calcium	ug/L	170,000	170,000	270,000	330,000	190,000	210,000	130,000	140,000	320,000	310,000	310,000	140,000	--	150,000
Chloride	mg/L	62	80	16	18	10	13	99	120	260	--	310	110	--	150
Fluoride	mg/L	0.46	0.68	0.92	1.2	0.85	0.91	0.39	0.51	0.54	--	0.57	0.68	0.47	0.64
pH, Field	su	7.4	6.6 - 7.5	7.4	6.9 - 7.5	7.7	7.4 - 7.9	7.2	6.2 - 7.7	7.2	--	6.8 - 7.3	7.4	--	6.9 - 7.4
Sulfate	mg/L	11	19	1,400	1,500	1,100	1,300	< 1	1.0	550 <sup>(4)</sup>	--	430	< 1	--	1.0
Total Dissolved Solids	mg/L	730	840	1,900	2,100	1,500	1,800	470	1,100	1,700	--	1,700	1,100	590	770
Part 115 Parameters															
Iron	ug/L	110	n=8	2,700	n=8	2,400	n=8	10,000	n=8	7,500	--	n=8	9,700	--	n=8

Notes:  
ug/L - micrograms per liter.  
mg/L - milligrams per liter.  
SU - standard units; pH is a field parameter.  
All metals were analyzed as total unless otherwise specified.

Bold font indicates an exceedance of the Prediction Limit (PL).

RESULT Shading and bold font indicates a confirmed exceedance of the Prediction Limit (PL).

- (1) - Exceedance was determined to be from an alternate source in the First 2020 Semiannual alternative source demonstration dated 9/21/2020.  
(2) - Exceedance was determined to be from an alternate source in the First 2023 Semiannual alternative source demonstration dated 8/30/2023.  
(3) - Exceedance was determined to be from an alternate source in the Second 2020 Semiannual alternative source demonstration dated 3/18/2021.  
(4) - Exceedance was determined to be from an alternate source in the Second 2021 Semiannual alternative source demonstration dated 2/24/2022.  
(5) - Results shown for verification sampling performed on 12/5/2024.

# Figures





LEGEND

- CCR PROGRAM  
MONITORING WELL
- INVESTIGATION MONITORING WELL
- APPROXIMATE BOUNDARY OF  
INACTIVE BOTTOM ASH IMPOUNDMENT
- APPROXIMATE PLANT BOUNDARY
- UNIT SEPARATION BERM

NOTES

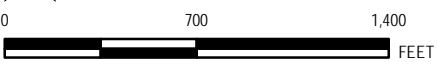
1. BASE MAP IMAGERY FROM GOOGLE EARTH  
PRO & PARTNERS, (APRIL 2024).

N



1" = 700'

1:8,400



1540 Eisenhower Place  
Ann Arbor, MI 48108-3284  
Phone: 734.971.7080

PROJECT:

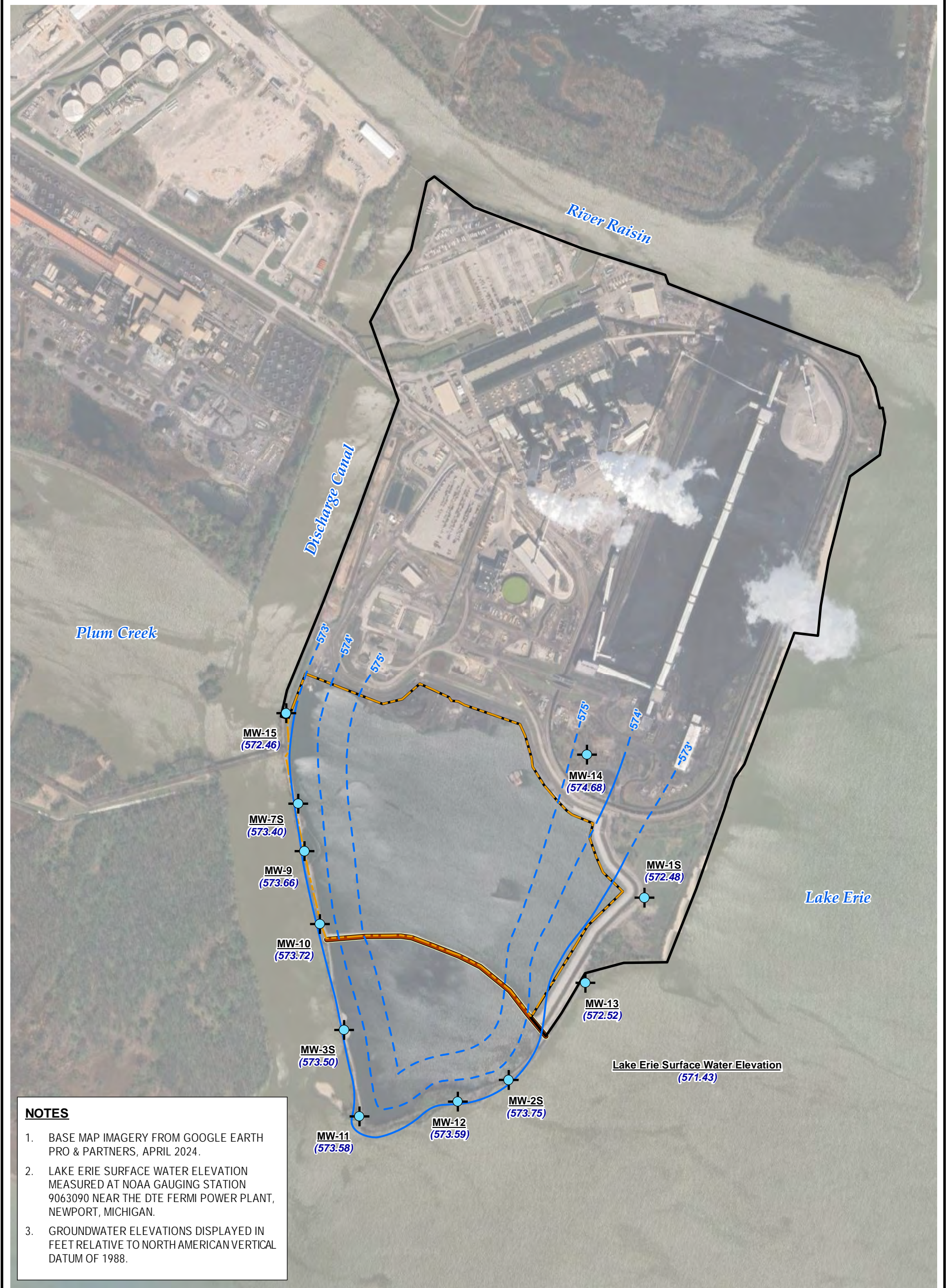
DTE ELECTRIC COMPANY  
MONROE POWER PLANT BOTTOM ASH IMPOUNDMENT  
3500 EAST FRONT STREET  
MONROE, MI 48161

TITLE:

INACTIVE BOTTOM ASH IMPOUNDMENT  
WELL LOCATION MAP

DRAWN BY:	A. FOJTIK
CHECKED BY:	H. SCHNAIDT
APPROVED BY:	V. BUENING
DATE:	JANUARY 2025
PROJ. NO.:	553931.0006
FILE:	553931_0006-002.mxd
FIGURE 1	






**NOTES**

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, APRIL 2024.
2. LAKE ERIE SURFACE WATER ELEVATION MEASURED AT NOAA GAUGING STATION 9063090 NEAR THE DTE FERMI POWER PLANT, NEWPORT, MICHIGAN.
3. GROUNDWATER ELEVATIONS DISPLAYED IN FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988.

**LEGEND**

 MONITORING WELL

 GROUNDWATER CONTOUR (DASHED WHERE INFERRED)

 UNIT SEPARATION BERM

 APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH BASIN

 APPROXIMATE PLANT BOUNDARY



N

0 700 1,400

1" = 700'

1:8,400

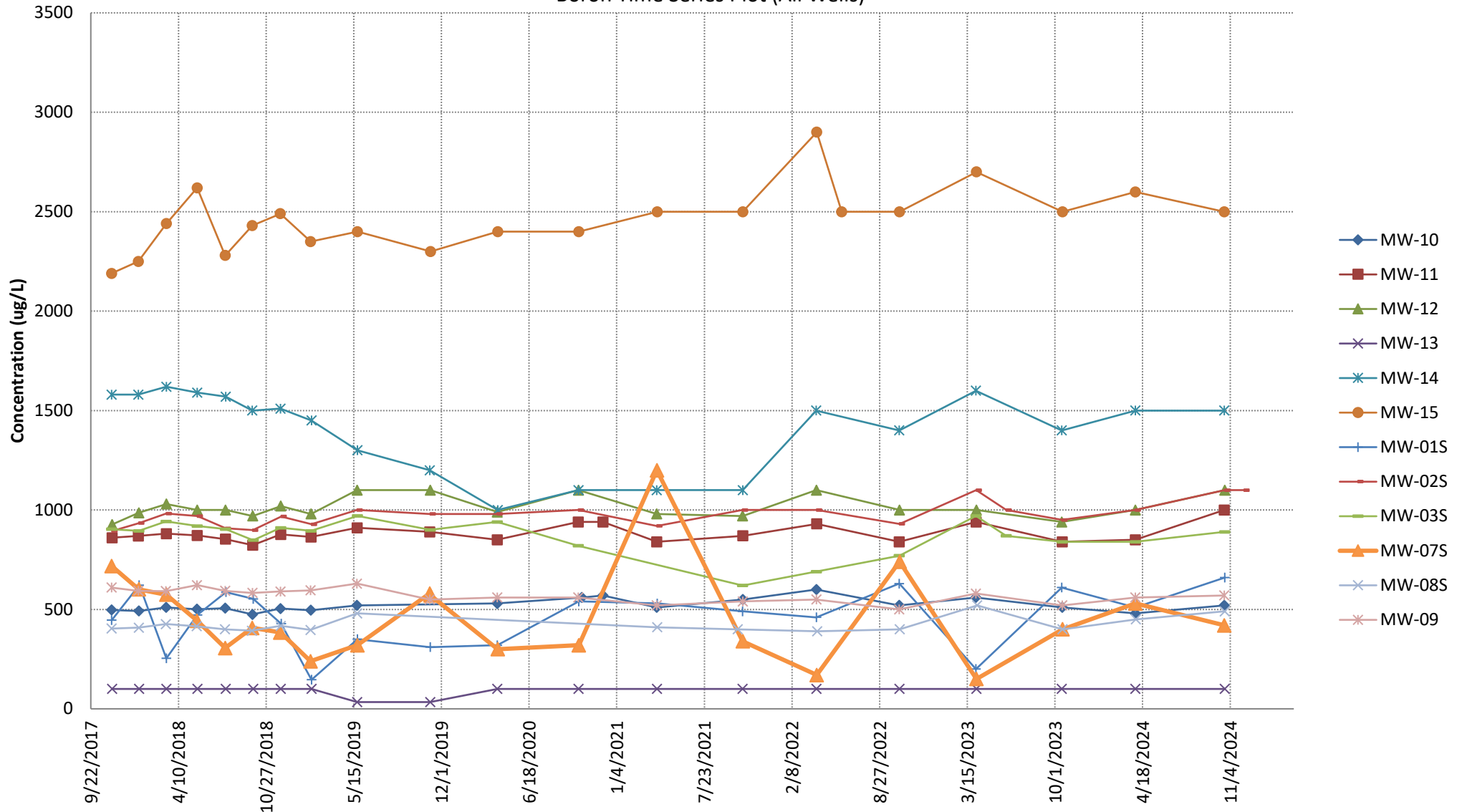
FEET

 <div>1540 Eisenhower Place Ann Arbor, MI 48108-3284 Phone: 734.971.7080</div>	PROJECT:	DTE ELECTRIC COMPANY MONROE POWER PLANT BOTTOM ASH IMPOUNDMENT 3500 EAST FRONT STREET MONROE, MI 48161	DRAWN BY:	A. FOJTIK
	TITLE:	GROUNDWATER CONTOUR MAP OCTOBER 2024	CHECKED BY:	H. SCHNAIDT
			APPROVED BY:	V. BUENING
			DATE:	JANUARY 2025
			PROJ. NO.:	553931.0006
			FILE:	553931_0006-003q.mxd
				FIGURE 2



**Figure 3**

Boron Time Series Plot (All Wells)



# **Attachment 1 References**

## References

- AECOM. April 2019, Revised August 2019. Monitoring Well Installation Report Coal Combustion Residuals (CCR) Rule – Inactive Bottom Ash Impoundment, DTE Monroe Plant, Monroe, Michigan. Prepared for DTE Electric Company.
- AECOM. April 2019, Revised April 2020. Revised Groundwater Statistical Evaluation Plan – Inactive Bottom Ash Impoundment, DTE Monroe Plant, Monroe, Michigan. Prepared for DTE Electric Company.
- TRC. June 30, 2020. Hydrogeological Monitoring Plan for the DTE Electric Company Monroe Power Bottom Ash Impoundment, 3500 East Front Street, Monroe, Michigan. Prepared for DTE Electric Company.
- TRC. January 30, 2025. Second Semiannual 2024 Groundwater Monitoring Report prepared for the DTE Electric Company Monroe Power Plant Bottom Ash Impoundment Coal Combustion Residual Unit, 3500 East Front Street Monroe, Michigan.
- USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA facilities, Unified Guidance. Office of Conservation and Recovery. EPA 530/R-09-007.

## **Appendix B**

### **Laboratory Reports**



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mr. Vincent Buening  
TRC Environmental Corporation.  
1540 Eisenhower Place  
Ann Arbor, Michigan 48108-7080

Generated 11/8/2024 3:49:28 PM

## JOB DESCRIPTION

CCR DTE MONPP-Bottom Ash Impoundment

## JOB NUMBER

240-213667-1

# Eurofins Cleveland

## 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 North Central, LLC Project Manager.

## Authorization



Generated  
11/8/2024 3:49:28 PM

Authorized for release by  
Kris Brooks, Project Manager II  
[Kris.Brooks@et.eurofinsus.com](mailto:Kris.Brooks@et.eurofinsus.com)  
(330)966-9790



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Method Summary . . . . .	6
Sample Summary . . . . .	7
Detection Summary . . . . .	8
Client Sample Results . . . . .	11
QC Sample Results . . . . .	23
QC Association Summary . . . . .	28
Lab Chronicle . . . . .	31
Certification Summary . . . . .	35
Chain of Custody . . . . .	36

## Definitions/Glossary

Client: TRC Environmental Corporation.

Job ID: 240-213667-1

Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

### 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.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

#### General Chemistry

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

### Glossary

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



## Case Narrative

Client: TRC Environmental Corporation.  
Project: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

**Job ID: 240-213667-1**

**Eurofins Cleveland**

### **Job Narrative 240-213667-1**

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 10/25/2024 8:00 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 1.3°C, 1.5°C and 2.1°C.

#### **Metals**

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

#### **General Chemistry**

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

Eurofins Cleveland

## Method Summary

Client: TRC Environmental Corporation.

Job ID: 240-213667-1

Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
9056A	Anions, Ion Chromatography	SW846	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE

### Protocol References:

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 CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

## Sample Summary

Client: TRC Environmental Corporation.

Job ID: 240-213667-1

Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-213667-1	MW-14	Water	10/21/24 08:43	10/25/24 08:00
240-213667-2	DUP-01	Water	10/21/24 00:00	10/25/24 08:00
240-213667-3	MW-15	Water	10/21/24 10:21	10/25/24 08:00
240-213667-4	MW-7S	Water	10/21/24 10:47	10/25/24 08:00
240-213667-5	MW-9	Water	10/21/24 11:23	10/25/24 08:00
240-213667-6	MW-10	Water	10/21/24 11:58	10/25/24 08:00
240-213667-7	MW-11	Water	10/21/24 13:45	10/25/24 08:00
240-213667-8	MW-3S	Water	10/22/24 08:05	10/25/24 08:00
240-213667-9	MW-12	Water	10/22/24 08:50	10/25/24 08:00
240-213667-10	MW-2S	Water	10/22/24 09:30	10/25/24 08:00
240-213667-11	MW-13	Water	10/22/24 10:17	10/25/24 08:00
240-213667-12	MW-1S	Water	10/22/24 11:09	10/25/24 08:00

## Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

### Client Sample ID: MW-14

### Lab Sample ID: 240-213667-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	ug/L	1		6010D	Total
								Recoverable
Calcium	320000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	7500		100	ug/L	1		6020B	Total
								Recoverable
Chloride	260		10	mg/L	10		9056A	Total/NA
Fluoride	0.54		0.050	mg/L	1		9056A	Total/NA
Sulfate	550		10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1700		20	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: DUP-01

### Lab Sample ID: 240-213667-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	ug/L	1		6010D	Total
								Recoverable
Calcium	300000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	7100		100	ug/L	1		6020B	Total
								Recoverable
Chloride	260		10	mg/L	10		9056A	Total/NA
Fluoride	0.53		0.050	mg/L	1		9056A	Total/NA
Sulfate	560		10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1600		20	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-15

### Lab Sample ID: 240-213667-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	2500		100	ug/L	1		6010D	Total
								Recoverable
Calcium	140000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	9700		100	ug/L	1		6020B	Total
								Recoverable
Chloride	110		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.68		0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	1100		20	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-7S

### Lab Sample ID: 240-213667-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	420		100	ug/L	1		6010D	Total
								Recoverable
Calcium	230000		1000	ug/L	1		6020B	Total
								Recoverable
Chloride	35		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.62		0.050	mg/L	1		9056A	Total/NA
Sulfate	620		5.0	mg/L	5		9056A	Total/NA
Total Dissolved Solids	1000		10	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-9

### Lab Sample ID: 240-213667-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	570		100	ug/L	1		6010D	Total
								Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



## Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

### Client Sample ID: MW-9 (Continued)

### Lab Sample ID: 240-213667-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Calcium	190000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	3400		100	ug/L	1		6020B	Total
								Recoverable
Chloride	74		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.47		0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	740		10	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-10

### Lab Sample ID: 240-213667-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	520		100	ug/L	1		6010D	Total
								Recoverable
Calcium	170000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	110		100	ug/L	1		6020B	Total
								Recoverable
Chloride	62		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.46		0.050	mg/L	1		9056A	Total/NA
Sulfate	11		1.0	mg/L	1		9056A	Total/NA
Total Dissolved Solids	730		10	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-11

### Lab Sample ID: 240-213667-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1000		100	ug/L	1		6010D	Total
								Recoverable
Calcium	270000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	2700		100	ug/L	1		6020B	Total
								Recoverable
Chloride	16		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.92		0.050	mg/L	1		9056A	Total/NA
Sulfate	1400		10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1900		20	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-3S

### Lab Sample ID: 240-213667-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	890		100	ug/L	1		6010D	Total
								Recoverable
Boron	970		100	ug/L	1		6010D	Dissolved
Calcium	340000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	15000	F1	100	ug/L	1		6020B	Total
								Recoverable
Calcium	230000		1000	ug/L	1		6020B	Dissolved
Iron	1500		100	ug/L	1		6020B	Dissolved
Chloride	13		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.81		0.050	mg/L	1		9056A	Total/NA
Sulfate	1200		10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1600		20	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

## Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

### Client Sample ID: MW-12

### Lab Sample ID: 240-213667-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	ug/L	1		6010D	Total
								Recoverable
Calcium	190000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	2400		100	ug/L	1		6020B	Total
								Recoverable
Chloride	10		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.85		0.050	mg/L	1		9056A	Total/NA
Sulfate	1100		10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1500		20	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-2S

### Lab Sample ID: 240-213667-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	ug/L	1		6010D	Total
								Recoverable
Calcium	250000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	2800		100	ug/L	1		6020B	Total
								Recoverable
Chloride	11		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.71		0.050	mg/L	1		9056A	Total/NA
Sulfate	1300		10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1700		20	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-13

### Lab Sample ID: 240-213667-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Calcium	130000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	10000		100	ug/L	1		6020B	Total
								Recoverable
Chloride	99		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.39		0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	470		10	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-1S

### Lab Sample ID: 240-213667-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	660		100	ug/L	1		6010D	Total
								Recoverable
Calcium	270000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	3700		100	ug/L	1		6020B	Total
								Recoverable
Chloride	110		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.21		0.050	mg/L	1		9056A	Total/NA
Sulfate	130		1.0	mg/L	1		9056A	Total/NA
Total Dissolved Solids	950		20	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

## Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-14

Lab Sample ID: 240-213667-1

Date Collected: 10/21/24 08:43

Matrix: Water

Date Received: 10/25/24 08:00

### Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	ug/L		10/28/24 12:00	10/29/24 10:54	1

### Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	320000		1000	ug/L		10/28/24 12:00	10/29/24 13:38	1
Iron	7500		100	ug/L		10/28/24 12:00	10/29/24 13:38	1

### General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	260		10	mg/L			11/04/24 20:57	10
Fluoride (SW846 9056A)	0.54		0.050	mg/L			11/04/24 20:06	1
Sulfate (SW846 9056A)	550		10	mg/L			11/04/24 20:57	10
Total Dissolved Solids (SM 2540C)	1700		20	mg/L			10/25/24 11:42	1

## Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: DUP-01

Lab Sample ID: 240-213667-2

Date Collected: 10/21/24 00:00

Matrix: Water

Date Received: 10/25/24 08:00

### Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	ug/L		10/28/24 12:00	10/29/24 12:08	1

### Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	300000		1000	ug/L		10/28/24 12:00	10/29/24 13:41	1
Iron	7100		100	ug/L		10/28/24 12:00	10/29/24 13:41	1

### General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	260		10	mg/L			11/04/24 22:05	10
Fluoride (SW846 9056A)	0.53		0.050	mg/L			11/04/24 21:48	1
Sulfate (SW846 9056A)	560		10	mg/L			11/04/24 22:05	10
Total Dissolved Solids (SM 2540C)	1600		20	mg/L			10/28/24 08:29	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-15

Lab Sample ID: 240-213667-3

Date Collected: 10/21/24 10:21

Matrix: Water

Date Received: 10/25/24 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2500		100	ug/L		10/28/24 12:00	10/29/24 12:12	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		1000	ug/L		10/28/24 12:00	10/29/24 14:08	1
Iron	9700		100	ug/L		10/28/24 12:00	10/29/24 14:08	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	110		1.0	mg/L			11/04/24 22:56	1
Fluoride (SW846 9056A)	0.68		0.050	mg/L			11/04/24 22:56	1
Sulfate (SW846 9056A)	1.0	U	1.0	mg/L			11/04/24 22:56	1
Total Dissolved Solids (SM 2540C)	1100		20	mg/L			10/25/24 11:42	1



## Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-7S

Lab Sample ID: 240-213667-4

Date Collected: 10/21/24 10:47

Matrix: Water

Date Received: 10/25/24 08:00

### Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	420		100	ug/L		10/28/24 12:00	10/29/24 12:16	1

### Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	230000		1000	ug/L		10/28/24 12:00	10/29/24 14:12	1
Iron	100	U	100	ug/L		10/28/24 12:00	10/29/24 14:12	1

### General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	35		1.0	mg/L			11/04/24 23:30	1
Fluoride (SW846 9056A)	0.62		0.050	mg/L			11/04/24 23:30	1
Sulfate (SW846 9056A)	620		5.0	mg/L			11/04/24 23:47	5
Total Dissolved Solids (SM 2540C)	1000		10	mg/L			10/25/24 11:42	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-9

Lab Sample ID: 240-213667-5

Date Collected: 10/21/24 11:23

Matrix: Water

Date Received: 10/25/24 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	570		100	ug/L		10/28/24 12:00	10/29/24 12:20	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	190000		1000	ug/L		10/28/24 12:00	10/29/24 14:15	1
Iron	3400		100	ug/L		10/28/24 12:00	10/29/24 14:15	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	74		1.0	mg/L			11/05/24 00:04	1
Fluoride (SW846 9056A)	0.47		0.050	mg/L			11/05/24 00:04	1
Sulfate (SW846 9056A)	1.0 U		1.0	mg/L			11/05/24 00:04	1
Total Dissolved Solids (SM 2540C)	740		10	mg/L			10/25/24 11:42	1

## Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-10

Lab Sample ID: 240-213667-6

Date Collected: 10/21/24 11:58

Matrix: Water

Date Received: 10/25/24 08:00

### Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	520		100	ug/L		10/28/24 12:00	10/29/24 12:25	1

### Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	170000		1000	ug/L		10/28/24 12:00	10/29/24 14:18	1
Iron	110		100	ug/L		10/28/24 12:00	10/29/24 14:18	1

### General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	62		1.0	mg/L			11/05/24 00:38	1
Fluoride (SW846 9056A)	0.46		0.050	mg/L			11/05/24 00:38	1
Sulfate (SW846 9056A)	11		1.0	mg/L			11/05/24 00:38	1
Total Dissolved Solids (SM 2540C)	730		10	mg/L			10/25/24 11:42	1

## Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-11

Lab Sample ID: 240-213667-7

Date Collected: 10/21/24 13:45

Matrix: Water

Date Received: 10/25/24 08:00

### Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1000		100	ug/L		10/28/24 12:00	10/29/24 12:29	1

### Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	270000		1000	ug/L		10/28/24 12:00	10/29/24 14:21	1
Iron	2700		100	ug/L		10/28/24 12:00	10/29/24 14:21	1

### General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	16		1.0	mg/L			11/05/24 01:12	1
Fluoride (SW846 9056A)	0.92		0.050	mg/L			11/05/24 01:12	1
Sulfate (SW846 9056A)	1400		10	mg/L			11/05/24 01:29	10
Total Dissolved Solids (SM 2540C)	1900		20	mg/L			10/25/24 11:42	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-3S

Lab Sample ID: 240-213667-8

Date Collected: 10/22/24 08:05

Matrix: Water

Date Received: 10/25/24 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	890		100	ug/L		11/05/24 14:00	11/06/24 18:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	970		100	ug/L		10/28/24 12:00	10/29/24 12:33	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	340000		1000	ug/L		11/05/24 14:00	11/06/24 12:36	1
Iron	15000	F1	100	ug/L		11/05/24 14:00	11/06/24 12:36	1

## Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	230000		1000	ug/L		10/28/24 12:00	10/29/24 14:23	1
Iron	1500		100	ug/L		10/28/24 12:00	10/29/24 14:23	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	13		1.0	mg/L			11/05/24 02:20	1
Fluoride (SW846 9056A)	0.81		0.050	mg/L			11/05/24 02:20	1
Sulfate (SW846 9056A)	1200		10	mg/L			11/05/24 02:37	10
Total Dissolved Solids (SM 2540C)	1600		20	mg/L			10/25/24 11:42	1



# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-12

Lab Sample ID: 240-213667-9

Date Collected: 10/22/24 08:50

Matrix: Water

Date Received: 10/25/24 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1100		100	ug/L		10/28/24 12:00	10/29/24 12:37	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	190000		1000	ug/L		10/28/24 12:00	10/29/24 14:25	1
Iron	2400		100	ug/L		10/28/24 12:00	10/29/24 14:25	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	10		1.0	mg/L			11/05/24 02:54	1
Fluoride (SW846 9056A)	0.85		0.050	mg/L			11/05/24 02:54	1
Sulfate (SW846 9056A)	1100		10	mg/L			11/07/24 15:01	10
Total Dissolved Solids (SM 2540C)	1500		20	mg/L			10/25/24 11:42	1

## Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-2S

Lab Sample ID: 240-213667-10

Date Collected: 10/22/24 09:30

Matrix: Water

Date Received: 10/25/24 08:00

### Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1100		100	ug/L		10/28/24 12:00	10/29/24 12:42	1

### Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	250000		1000	ug/L		10/28/24 12:00	10/29/24 14:28	1
Iron	2800		100	ug/L		10/28/24 12:00	10/29/24 14:28	1

### General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	11		1.0	mg/L			11/05/24 03:28	1
Fluoride (SW846 9056A)	0.71		0.050	mg/L			11/05/24 03:28	1
Sulfate (SW846 9056A)	1300		10	mg/L			11/05/24 03:45	10
Total Dissolved Solids (SM 2540C)	1700		20	mg/L			10/25/24 11:42	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-13

Lab Sample ID: 240-213667-11

Date Collected: 10/22/24 10:17

Matrix: Water

Date Received: 10/25/24 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	ug/L		10/28/24 12:00	10/29/24 12:46	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	ug/L		10/28/24 12:00	10/29/24 14:30	1
Iron	10000		100	ug/L		10/28/24 12:00	10/29/24 14:30	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	99		1.0	mg/L			11/05/24 04:02	1
Fluoride (SW846 9056A)	0.39		0.050	mg/L			11/05/24 04:02	1
Sulfate (SW846 9056A)	1.0	U	1.0	mg/L			11/05/24 04:02	1
Total Dissolved Solids (SM 2540C)	470		10	mg/L			10/25/24 11:42	1

## Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-1S

Lab Sample ID: 240-213667-12

Date Collected: 10/22/24 11:09

Matrix: Water

Date Received: 10/25/24 08:00

### Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	660		100	ug/L		10/28/24 12:00	10/29/24 12:59	1

### Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	270000		1000	ug/L		10/28/24 12:00	10/29/24 14:33	1
Iron	3700		100	ug/L		10/28/24 12:00	10/29/24 14:33	1

### General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	110		1.0	mg/L			11/05/24 06:18	1
Fluoride (SW846 9056A)	0.21		0.050	mg/L			11/05/24 06:18	1
Sulfate (SW846 9056A)	130		1.0	mg/L			11/05/24 06:18	1
Total Dissolved Solids (SM 2540C)	950		20	mg/L			10/25/24 11:42	1

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

## Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-632623/1-A  
Matrix: Water  
Analysis Batch: 632969

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 632623

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	ug/L		10/28/24 12:00	10/29/24 10:46	1

Lab Sample ID: LCS 240-632623/2-A  
Matrix: Water  
Analysis Batch: 632969

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 632623

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	973		ug/L		97	80 - 120

Lab Sample ID: 240-213667-1 MS  
Matrix: Water  
Analysis Batch: 632969

Client Sample ID: MW-14  
Prep Type: Total Recoverable  
Prep Batch: 632623

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1500		1000	2660		ug/L		112	75 - 125

Lab Sample ID: 240-213667-1 MSD  
Matrix: Water  
Analysis Batch: 632969

Client Sample ID: MW-14  
Prep Type: Total Recoverable  
Prep Batch: 632623

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1500		1000	2540		ug/L		100	75 - 125	5	20

Lab Sample ID: MB 240-634002/1-A  
Matrix: Water  
Analysis Batch: 634221

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 634002

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	ug/L		11/05/24 14:00	11/06/24 18:01	1

Lab Sample ID: LCS 240-634002/2-A  
Matrix: Water  
Analysis Batch: 634221

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 634002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1050		ug/L		105	80 - 120

Lab Sample ID: 240-213667-8 MS  
Matrix: Water  
Analysis Batch: 634221

Client Sample ID: MW-3S  
Prep Type: Total Recoverable  
Prep Batch: 634002

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	890		1000	1980		ug/L		109	75 - 125

Lab Sample ID: 240-213667-8 MSD  
Matrix: Water  
Analysis Batch: 634221

Client Sample ID: MW-3S  
Prep Type: Total Recoverable  
Prep Batch: 634002

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	890		1000	1990		ug/L		110	75 - 125	1	20

Eurofins Cleveland

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-632623/1-A

Matrix: Water

Analysis Batch: 633017

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 632623

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	ug/L		10/28/24 12:00	10/29/24 13:33	1
Iron	100	U	100	ug/L		10/28/24 12:00	10/29/24 13:33	1

Lab Sample ID: LCS 240-632623/3-A

Matrix: Water

Analysis Batch: 633017

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 632623

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24000		ug/L		96	80 - 120
Iron	5000	4770		ug/L		95	80 - 120

Lab Sample ID: 240-213667-2 MS

Matrix: Water

Analysis Batch: 633017

Client Sample ID: DUP-01

Prep Type: Total Recoverable

Prep Batch: 632623

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	300000		25000	313000	4	ug/L		38	80 - 120
Iron	7100		5000	11400		ug/L		87	80 - 120

Lab Sample ID: 240-213667-2 MSD

Matrix: Water

Analysis Batch: 633017

Client Sample ID: DUP-01

Prep Type: Total Recoverable

Prep Batch: 632623

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	300000		25000	324000	4	ug/L		84	80 - 120	4	20
Iron	7100		5000	11800		ug/L		94	80 - 120	3	20

Lab Sample ID: MB 240-634002/1-A

Matrix: Water

Analysis Batch: 634287

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 634002

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	ug/L		11/05/24 14:00	11/06/24 12:31	1
Iron	100	U	100	ug/L		11/05/24 14:00	11/06/24 12:31	1

Lab Sample ID: LCS 240-634002/3-A

Matrix: Water

Analysis Batch: 634287

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 634002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	25100		ug/L		101	80 - 120
Iron	5000	5110		ug/L		102	80 - 120

Lab Sample ID: 240-213667-8 MS

Matrix: Water

Analysis Batch: 634287

Client Sample ID: MW-3S

Prep Type: Total Recoverable

Prep Batch: 634002

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	340000		25000	370000	4	ug/L		130	80 - 120
Iron	15000	F1	5000	21800	F1	ug/L		127	80 - 120

Eurofins Cleveland



# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: 240-213667-8 MSD

Matrix: Water

Analysis Batch: 634287

Client Sample ID: MW-3S

Prep Type: Total Recoverable

Prep Batch: 634002

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	340000		25000	365000	4	ug/L		111	80 - 120	1	20
Iron	15000	F1	5000	21500		ug/L		120	80 - 120	2	20

## Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-633893/3

Matrix: Water

Analysis Batch: 633893

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	mg/L			11/04/24 19:32	1
Fluoride	0.050	U	0.050	mg/L			11/04/24 19:32	1
Sulfate	1.0	U	1.0	mg/L			11/04/24 19:32	1

Lab Sample ID: LCS 240-633893/4

Matrix: Water

Analysis Batch: 633893

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.1		mg/L		98	90 - 110
Fluoride	2.50	2.51		mg/L		101	90 - 110
Sulfate	50.0	49.4		mg/L		99	90 - 110

Lab Sample ID: 240-213667-1 MS

Matrix: Water

Analysis Batch: 633893

Client Sample ID: MW-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.54		2.50	2.87		mg/L		93	80 - 120

Lab Sample ID: 240-213667-1 MS

Matrix: Water

Analysis Batch: 633893

Client Sample ID: MW-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	260		500	684		mg/L		85	80 - 120
Sulfate	550		500	964		mg/L		83	80 - 120

Lab Sample ID: 240-213667-1 MSD

Matrix: Water

Analysis Batch: 633893

Client Sample ID: MW-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.54		2.50	2.89		mg/L		94	80 - 120	1	15

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

## Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-213667-1 MSD

Matrix: Water

Analysis Batch: 633893

Client Sample ID: MW-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	260		500	772		mg/L		103	80 - 120	12	15
Fluoride	0.50	U F2	25.0	26.5	F2	mg/L		106	80 - 120	19	15
Sulfate	550		500	1050		mg/L		101	80 - 120	9	15

Lab Sample ID: 240-213667-11 MS

Matrix: Water

Analysis Batch: 633893

Client Sample ID: MW-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	99		50.0	146		mg/L		94	80 - 120		
Fluoride	0.39		2.50	2.92		mg/L		101	80 - 120		
Sulfate	1.0	U	50.0	54.8		mg/L		110	80 - 120		

Lab Sample ID: 240-213667-11 MS

Matrix: Water

Analysis Batch: 633893

Client Sample ID: MW-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	5.0	U	250	276		mg/L		110	80 - 120		

Lab Sample ID: 240-213667-11 MSD

Matrix: Water

Analysis Batch: 633893

Client Sample ID: MW-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	99		50.0	145		mg/L		91	80 - 120	1	15
Fluoride	0.39		2.50	2.87		mg/L		99	80 - 120	2	15
Sulfate	1.0	U	50.0	53.9		mg/L		108	80 - 120	2	15

Lab Sample ID: 240-213667-11 MSD

Matrix: Water

Analysis Batch: 633893

Client Sample ID: MW-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100		250	348		mg/L		99	80 - 120	5	15
Fluoride	0.37		12.5	12.9		mg/L		100	80 - 120	7	15
Sulfate	5.0	U	250	258		mg/L		103	80 - 120	7	15

Lab Sample ID: MB 240-634247/3

Matrix: Water

Analysis Batch: 634247

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	mg/L			11/07/24 13:02	1
Fluoride	0.050	U	0.050	mg/L			11/07/24 13:02	1
Sulfate	1.0	U	1.0	mg/L			11/07/24 13:02	1

Eurofins Cleveland

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

## Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-634247/4

Matrix: Water

Analysis Batch: 634247

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.8		mg/L		100	90 - 110
Fluoride	2.50	2.54		mg/L		102	90 - 110
Sulfate	50.0	50.4		mg/L		101	90 - 110

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

Lab Sample ID: MB 240-632519/1

Matrix: Water

Analysis Batch: 632519

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	mg/L			10/25/24 11:42	1

Lab Sample ID: LCS 240-632519/2

Matrix: Water

Analysis Batch: 632519

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	495	487		mg/L		98	80 - 120

Lab Sample ID: 240-213667-9 DU

Matrix: Water

Analysis Batch: 632519

Client Sample ID: MW-12

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1500		1670		mg/L		9	20

Lab Sample ID: 240-213667-11 DU

Matrix: Water

Analysis Batch: 632519

Client Sample ID: MW-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	470		540		mg/L		13	20

Lab Sample ID: MB 240-632674/1

Matrix: Water

Analysis Batch: 632674

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	mg/L			10/28/24 08:29	1

Lab Sample ID: LCS 240-632674/2

Matrix: Water

Analysis Batch: 632674

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	495	475		mg/L		96	80 - 120

Eurofins Cleveland

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

## Metals

### Prep Batch: 632623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-1	MW-14	Total Recoverable	Water	3005A	
240-213667-2	DUP-01	Total Recoverable	Water	3005A	
240-213667-3	MW-15	Total Recoverable	Water	3005A	
240-213667-4	MW-7S	Total Recoverable	Water	3005A	
240-213667-5	MW-9	Total Recoverable	Water	3005A	
240-213667-6	MW-10	Total Recoverable	Water	3005A	
240-213667-7	MW-11	Total Recoverable	Water	3005A	
240-213667-8	MW-3S	Dissolved	Water	3005A	
240-213667-9	MW-12	Total Recoverable	Water	3005A	
240-213667-10	MW-2S	Total Recoverable	Water	3005A	
240-213667-11	MW-13	Total Recoverable	Water	3005A	
240-213667-12	MW-1S	Total Recoverable	Water	3005A	
MB 240-632623/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-632623/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-632623/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-213667-1 MS	MW-14	Total Recoverable	Water	3005A	
240-213667-1 MSD	MW-14	Total Recoverable	Water	3005A	
240-213667-2 MS	DUP-01	Total Recoverable	Water	3005A	
240-213667-2 MSD	DUP-01	Total Recoverable	Water	3005A	

### Analysis Batch: 632969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-1	MW-14	Total Recoverable	Water	6010D	632623
240-213667-2	DUP-01	Total Recoverable	Water	6010D	632623
240-213667-3	MW-15	Total Recoverable	Water	6010D	632623
240-213667-4	MW-7S	Total Recoverable	Water	6010D	632623
240-213667-5	MW-9	Total Recoverable	Water	6010D	632623
240-213667-6	MW-10	Total Recoverable	Water	6010D	632623
240-213667-7	MW-11	Total Recoverable	Water	6010D	632623
240-213667-8	MW-3S	Dissolved	Water	6010D	632623
240-213667-9	MW-12	Total Recoverable	Water	6010D	632623
240-213667-10	MW-2S	Total Recoverable	Water	6010D	632623
240-213667-11	MW-13	Total Recoverable	Water	6010D	632623
240-213667-12	MW-1S	Total Recoverable	Water	6010D	632623
MB 240-632623/1-A	Method Blank	Total Recoverable	Water	6010D	632623
LCS 240-632623/2-A	Lab Control Sample	Total Recoverable	Water	6010D	632623
240-213667-1 MS	MW-14	Total Recoverable	Water	6010D	632623
240-213667-1 MSD	MW-14	Total Recoverable	Water	6010D	632623

### Analysis Batch: 633017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-1	MW-14	Total Recoverable	Water	6020B	632623
240-213667-2	DUP-01	Total Recoverable	Water	6020B	632623
240-213667-3	MW-15	Total Recoverable	Water	6020B	632623
240-213667-4	MW-7S	Total Recoverable	Water	6020B	632623
240-213667-5	MW-9	Total Recoverable	Water	6020B	632623
240-213667-6	MW-10	Total Recoverable	Water	6020B	632623
240-213667-7	MW-11	Total Recoverable	Water	6020B	632623
240-213667-8	MW-3S	Dissolved	Water	6020B	632623
240-213667-9	MW-12	Total Recoverable	Water	6020B	632623
240-213667-10	MW-2S	Total Recoverable	Water	6020B	632623

Eurofins Cleveland

## QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

### Metals (Continued)

#### Analysis Batch: 633017 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-11	MW-13	Total Recoverable	Water	6020B	632623
240-213667-12	MW-1S	Total Recoverable	Water	6020B	632623
MB 240-632623/1-A	Method Blank	Total Recoverable	Water	6020B	632623
LCS 240-632623/3-A	Lab Control Sample	Total Recoverable	Water	6020B	632623
240-213667-2 MS	DUP-01	Total Recoverable	Water	6020B	632623
240-213667-2 MSD	DUP-01	Total Recoverable	Water	6020B	632623

#### Prep Batch: 634002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-8	MW-3S	Total Recoverable	Water	3005A	
MB 240-634002/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-634002/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-634002/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-213667-8 MS	MW-3S	Total Recoverable	Water	3005A	
240-213667-8 MS	MW-3S	Total Recoverable	Water	3005A	
240-213667-8 MSD	MW-3S	Total Recoverable	Water	3005A	
240-213667-8 MSD	MW-3S	Total Recoverable	Water	3005A	

#### Analysis Batch: 634221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-8	MW-3S	Total Recoverable	Water	6010D	634002
MB 240-634002/1-A	Method Blank	Total Recoverable	Water	6010D	634002
LCS 240-634002/2-A	Lab Control Sample	Total Recoverable	Water	6010D	634002
240-213667-8 MS	MW-3S	Total Recoverable	Water	6010D	634002
240-213667-8 MSD	MW-3S	Total Recoverable	Water	6010D	634002

#### Analysis Batch: 634287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-8	MW-3S	Total Recoverable	Water	6020B	634002
MB 240-634002/1-A	Method Blank	Total Recoverable	Water	6020B	634002
LCS 240-634002/3-A	Lab Control Sample	Total Recoverable	Water	6020B	634002
240-213667-8 MS	MW-3S	Total Recoverable	Water	6020B	634002
240-213667-8 MSD	MW-3S	Total Recoverable	Water	6020B	634002

### General Chemistry

#### Analysis Batch: 632519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-1	MW-14	Total/NA	Water	SM 2540C	
240-213667-3	MW-15	Total/NA	Water	SM 2540C	
240-213667-4	MW-7S	Total/NA	Water	SM 2540C	
240-213667-5	MW-9	Total/NA	Water	SM 2540C	
240-213667-6	MW-10	Total/NA	Water	SM 2540C	
240-213667-7	MW-11	Total/NA	Water	SM 2540C	
240-213667-8	MW-3S	Total/NA	Water	SM 2540C	
240-213667-9	MW-12	Total/NA	Water	SM 2540C	
240-213667-10	MW-2S	Total/NA	Water	SM 2540C	
240-213667-11	MW-13	Total/NA	Water	SM 2540C	
240-213667-12	MW-1S	Total/NA	Water	SM 2540C	
MB 240-632519/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-632519/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins Cleveland

## QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

### General Chemistry (Continued)

#### Analysis Batch: 632519 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-9 DU	MW-12	Total/NA	Water	SM 2540C	
240-213667-11 DU	MW-13	Total/NA	Water	SM 2540C	

#### Analysis Batch: 632674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-2	DUP-01	Total/NA	Water	SM 2540C	
MB 240-632674/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-632674/2	Lab Control Sample	Total/NA	Water	SM 2540C	

#### Analysis Batch: 633893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-1	MW-14	Total/NA	Water	9056A	
240-213667-1	MW-14	Total/NA	Water	9056A	
240-213667-2	DUP-01	Total/NA	Water	9056A	
240-213667-2	DUP-01	Total/NA	Water	9056A	
240-213667-3	MW-15	Total/NA	Water	9056A	
240-213667-4	MW-7S	Total/NA	Water	9056A	
240-213667-4	MW-7S	Total/NA	Water	9056A	
240-213667-5	MW-9	Total/NA	Water	9056A	
240-213667-6	MW-10	Total/NA	Water	9056A	
240-213667-7	MW-11	Total/NA	Water	9056A	
240-213667-7	MW-11	Total/NA	Water	9056A	
240-213667-8	MW-3S	Total/NA	Water	9056A	
240-213667-8	MW-3S	Total/NA	Water	9056A	
240-213667-9	MW-12	Total/NA	Water	9056A	
240-213667-10	MW-2S	Total/NA	Water	9056A	
240-213667-10	MW-2S	Total/NA	Water	9056A	
240-213667-11	MW-13	Total/NA	Water	9056A	
240-213667-12	MW-1S	Total/NA	Water	9056A	
MB 240-633893/3	Method Blank	Total/NA	Water	9056A	
LCS 240-633893/4	Lab Control Sample	Total/NA	Water	9056A	
240-213667-1 MS	MW-14	Total/NA	Water	9056A	
240-213667-1 MS	MW-14	Total/NA	Water	9056A	
240-213667-1 MSD	MW-14	Total/NA	Water	9056A	
240-213667-1 MSD	MW-14	Total/NA	Water	9056A	
240-213667-11 MS	MW-13	Total/NA	Water	9056A	
240-213667-11 MS	MW-13	Total/NA	Water	9056A	
240-213667-11 MSD	MW-13	Total/NA	Water	9056A	
240-213667-11 MSD	MW-13	Total/NA	Water	9056A	

#### Analysis Batch: 634247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213667-9	MW-12	Total/NA	Water	9056A	
MB 240-634247/3	Method Blank	Total/NA	Water	9056A	
LCS 240-634247/4	Lab Control Sample	Total/NA	Water	9056A	



## Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

**Client Sample ID: MW-14**

**Date Collected: 10/21/24 08:43**

**Date Received: 10/25/24 08:00**

**Lab Sample ID: 240-213667-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 10:54
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 13:38
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/04/24 20:06
Total/NA	Analysis	9056A		10	633893	JMR	EET CLE	11/04/24 20:57
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

**Client Sample ID: DUP-01**

**Date Collected: 10/21/24 00:00**

**Date Received: 10/25/24 08:00**

**Lab Sample ID: 240-213667-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:08
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 13:41
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/04/24 21:48
Total/NA	Analysis	9056A		10	633893	JMR	EET CLE	11/04/24 22:05
Total/NA	Analysis	SM 2540C		1	632674	TAV2	EET CLE	10/28/24 08:29

**Client Sample ID: MW-15**

**Date Collected: 10/21/24 10:21**

**Date Received: 10/25/24 08:00**

**Lab Sample ID: 240-213667-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:12
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:08
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/04/24 22:56
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

**Client Sample ID: MW-7S**

**Date Collected: 10/21/24 10:47**

**Date Received: 10/25/24 08:00**

**Lab Sample ID: 240-213667-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:16
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:12
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/04/24 23:30
Total/NA	Analysis	9056A		5	633893	JMR	EET CLE	11/04/24 23:47

Eurofins Cleveland

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

## Client Sample ID: MW-7S

Date Collected: 10/21/24 10:47

Date Received: 10/25/24 08:00

## Lab Sample ID: 240-213667-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

## Client Sample ID: MW-9

Date Collected: 10/21/24 11:23

Date Received: 10/25/24 08:00

## Lab Sample ID: 240-213667-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:20
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:15
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/05/24 00:04
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

## Client Sample ID: MW-10

Date Collected: 10/21/24 11:58

Date Received: 10/25/24 08:00

## Lab Sample ID: 240-213667-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:25
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:18
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/05/24 00:38
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

## Client Sample ID: MW-11

Date Collected: 10/21/24 13:45

Date Received: 10/25/24 08:00

## Lab Sample ID: 240-213667-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:29
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:21
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/05/24 01:12
Total/NA	Analysis	9056A		10	633893	JMR	EET CLE	11/05/24 01:29
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

**Client Sample ID: MW-3S**

**Lab Sample ID: 240-213667-8**

**Date Collected: 10/22/24 08:05**

**Matrix: Water**

**Date Received: 10/25/24 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Dissolved	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:33
Total Recoverable	Prep	3005A			634002	BN	EET CLE	11/05/24 14:00
Total Recoverable	Analysis	6010D		1	634221	RKT	EET CLE	11/06/24 18:09
Dissolved	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Dissolved	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:23
Total Recoverable	Prep	3005A			634002	BN	EET CLE	11/05/24 14:00
Total Recoverable	Analysis	6020B		1	634287	AJC	EET CLE	11/06/24 12:36
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/05/24 02:20
Total/NA	Analysis	9056A		10	633893	JMR	EET CLE	11/05/24 02:37
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

**Client Sample ID: MW-12**

**Lab Sample ID: 240-213667-9**

**Date Collected: 10/22/24 08:50**

**Matrix: Water**

**Date Received: 10/25/24 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:37
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:25
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/05/24 02:54
Total/NA	Analysis	9056A		10	634247	JMR	EET CLE	11/07/24 15:01
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

**Client Sample ID: MW-2S**

**Lab Sample ID: 240-213667-10**

**Date Collected: 10/22/24 09:30**

**Matrix: Water**

**Date Received: 10/25/24 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:42
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:28
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/05/24 03:28
Total/NA	Analysis	9056A		10	633893	JMR	EET CLE	11/05/24 03:45
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

Client Sample ID: MW-13  
Date Collected: 10/22/24 10:17  
Date Received: 10/25/24 08:00

Lab Sample ID: 240-213667-11  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:46
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:30
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/05/24 04:02
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

Client Sample ID: MW-1S  
Date Collected: 10/22/24 11:09  
Date Received: 10/25/24 08:00

Lab Sample ID: 240-213667-12  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6010D		1	632969	RKT	EET CLE	10/29/24 12:59
Total Recoverable	Prep	3005A			632623	AJC	EET CLE	10/28/24 12:00
Total Recoverable	Analysis	6020B		1	633017	AJC	EET CLE	10/29/24 14:33
Total/NA	Analysis	9056A		1	633893	JMR	EET CLE	11/05/24 06:18
Total/NA	Analysis	SM 2540C		1	632519	TAV2	EET CLE	10/25/24 11:42

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

## Accreditation/Certification Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP-Bottom Ash Impoundment

Job ID: 240-213667-1

### Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-24

## Eurofins Cleveland

180 S. Van Buren Avenue

Barberton, OH 44203

Phone (330) 497-9396 Phone (330) 497-0772

MICHIGAN  
190

## Chain of Custody Record



Environment Testing

<b>Client Information</b>		Sampler: <u>Javier Jasso</u>		Lab PM: <u>Brooks, Kris M</u>		Carrier Tracking No(s):		COC No: <u>240-125211-43683.2</u>																																																			
Client Contact: <u>Mr. Vincent Buening</u>		Phone: <u>734 904 3310</u>		E-Mail: <u>Kris.Brooks@et.eurofinsus.com</u>		State of Origin:		Page: <u>1</u> of <u>2</u>																																																			
Company: <u>TRC Environmental Corporation.</u>		PWSID:		Analysis Requested																																																							
Address: <u>1540 Eisenhower Place</u>		Due Date Requested:		<div style="display: flex; justify-content: space-between;"> <div>           Field Filtered Sample (Yes or No)            Perform MS/MSD (Yes or No)            2540C Calcd - TDS            9056A - 28D - Chloride, Fluoride and Sulfate            6010B Bo. 6020 Ca         </div> <div>           Total Number of containers         </div> </div>																																																							
City: <u>Ann Arbor</u>		TAT Requested (days):																																																									
State, Zip: <u>MI, 48108-7080</u>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																																																									
Phone: <u>313-971-7080(Tel) 313-971-9022(Fax)</u>		PO #: <u>214277</u>																																																									
Email: <u>vbuening@trccompanies.com</u>		WO #:																																																									
Project Name: <u>DTE MONPP-Bottom Ash Impoundment</u>		Project #: <u>24016830</u>		Preservation Codes: N - None D - HNO3																																																							
Site:		SSOW#:		Other:																																																							
<b>Sample Identification</b>		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)				2540C Calcd - TDS				9056A - 28D - Chloride, Fluoride and Sulfate				6010B Bo. 6020 Ca				Total Number of containers				Special Instructions/Note:																													
				Preservation Code:																																																							
<u>mw-14</u>		<u>10/16/24</u>	<u>0843</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>Dup #01</u>		<u>11/1</u>	<u>—</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>mw-15</u>		<u>11/1</u>	<u>1021</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>mw-7s</u>		<u>11/1</u>	<u>1047</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>mw-9</u>		<u>11/1</u>	<u>1123</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>mw-10</u>		<u>11/1</u>	<u>1150</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>mw-11</u>		<u>11/1</u>	<u>1245</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>mw-3s</u>		<u>10/22/24</u>	<u>0805</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>mw-12</u>		<u>11/1</u>	<u>0850</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>mw-2s</u>		<u>11/1</u>	<u>0930</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<u>mw-13</u>		<u>11/1</u>	<u>1017</u>	<u>G</u>	<u>Gw</u>	<u>N</u>				<u>N</u>				<u>N</u>				<u>D</u>																																									
<b>Possible Hazard Identification</b>										<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>																																																	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological										<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> 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: <u>[Signature]</u>										Date/Time: <u>10/22/24 1300</u>										Company: <u>TRC</u>										Received by: <u>TAC SK</u>										Date/Time: <u>10/23/24 1300</u>										Company: <u>TRC</u>									
Relinquished by: <u>[Signature]</u>										Date/Time: <u>10/24/24 1220</u>										Company: <u>TRC</u>										Received by: <u>[Signature]</u>										Date/Time: <u>10/24/24</u>										Company: <u>EETA</u>									
Relinquished by: <u>[Signature]</u>										Date/Time: <u>10/24/24</u>										Company: <u>EETA</u>										Received by: <u>KATHARINE MARTIN</u>										Date/Time: <u>10/25/24 800</u>										Company: <u>EVR</u>									
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No										Custody Seal No.:										Cooler Temperature(s) °C and Other Remarks:																																							





Ver. 05/06/2024  
11/8/2024

Eurofins - Cleveland Sample Receipt Form/Narrative Login # : \_\_\_\_\_

Barberton Facility

Client TPC Site Name \_\_\_\_\_ Cooler unpacked by: EW

Cooler Received on 10/25/24 UPS FAS Waypoint Opened on 10/25/24

FedEx: 1<sup>st</sup> Grd Exp Client Drop Off Eurofins Courier Other \_\_\_\_\_

Receipt After-hours Drop-off Date/Time \_\_\_\_\_ Storage Location \_\_\_\_\_

Eurofins Cooler # EC Foam Box Client Cooler Box Other \_\_\_\_\_

Packing material used. Bubble Wrap Foam Plastic Bag None Other \_\_\_\_\_

COOLANT: Wet Ice Blue Ice Dry Ice Water None \_\_\_\_\_

1 Cooler temperature upon receipt ☒ See Multiple Cooler Form

IR GUN # 17 (CF +0 °C) Observed Cooler Temp \_\_\_\_\_ °C Corrected Cooler Temp. \_\_\_\_\_ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1

-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA

-Were tamper/custody seals intact and uncompromised? Yes No NA

3 Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5 Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No

7 Did all bottles arrive in good condition (Unbroken)? Yes No

8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No

9 For each sample, does the COC specify preservatives (Y/N), # of containers (N), and sample type of grab/comp (Y/N)? Yes No

10 Were correct bottle(s) used for the test(s) indicated? Yes No

11 Sufficient quantity received to perform indicated analyses? Yes No

12. Are these work share samples and all listed on the COC? Yes No

If yes, Questions 13-17 have been checked at the originating laboratory

13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC447997

14. Were VOAs on the COC? Yes No

15 Were air bubbles >6 mm in any VOA vials? Yes No NA

16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # \_\_\_\_\_

17 Was a LL Hg or Me Hg trip blank present? Yes No

Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other \_\_\_\_\_

Concerning \_\_\_\_\_

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page Samples processed by: \_\_\_\_\_

19 SAMPLE CONDITION

Sample(s) \_\_\_\_\_ were received after the recommended holding time had expired

Sample(s) \_\_\_\_\_ were received in a broken container

Sample(s) \_\_\_\_\_ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) \_\_\_\_\_ were further preserved in the laboratory

Time preserved. \_\_\_\_\_ Preservative(s) added/Lot number(s) \_\_\_\_\_

VOA Sample Preservation - Date/Time VOAs Frozen \_\_\_\_\_

Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC



10/25/2024

Login Container Summary Report

240-213667

11/8/2024

Temperature readings

Client Sample ID	Lab ID	Container Type	Container pH	Temp	Preservation Added	Preservation Lot Number
MW-14	240-213667-A-1	Plastic 125mL - unpreserved				
MW-14	240-213667-B-1	Plastic 500ml - unpreserved				
MW-14	240-213667-C-1	Plastic 500ml - with Nitric Acid	<2			
MW-01	240-213667-A-2	Plastic 125mL - unpreserved				
MW-01	240-213667-B-2	Plastic 500ml - unpreserved				
MW-01	240-213667-C-2	Plastic 500ml - with Nitric Acid	<2			
MW-15	240-213667-A-3	Plastic 125mL - unpreserved				
MW-15	240-213667-B-3	Plastic 500ml - unpreserved				
MW-15	240-213667-C-3	Plastic 500ml - with Nitric Acid	<2			
MW-7S	240-213667-A-4	Plastic 125mL - unpreserved				
MW-7S	240-213667-B-4	Plastic 500ml - unpreserved				
MW-7S	240-213667-C-4	Plastic 500ml - with Nitric Acid	<2			
MW-9	240-213667-A-5	Plastic 125mL - unpreserved				
MW-9	240-213667-B-5	Plastic 500ml - unpreserved				
MW-9	240-213667-C-5	Plastic 500ml - with Nitric Acid	<2			
MW-10	240-213667-A-6	Plastic 125mL - unpreserved				
MW-10	240-213667-B-6	Plastic 500ml - unpreserved				
MW-10	240-213667-C-6	Plastic 500ml - with Nitric Acid	<2			
MW-11	240-213667-A-7	Plastic 125mL - unpreserved				
MW-11	240-213667-B-7	Plastic 500ml - unpreserved				
MW-11	240-213667-C-7	Plastic 500ml - with Nitric Acid	<2			
MW-3S	240-213667-A-8	Plastic 125 mL oblong - unpreserved				
MW-3S	240-213667-B-8	Plastic 500ml - unpreserved				
MW-3S	240-213667-C-8	Plastic 500ml - with Nitric Acid	<2			
MW-3S	240-213667-D-8	Plastic 500ml - with Nitric Acid	<2			
MW-12	240-213667-A-9	Plastic 125mL - unpreserved				
MW-12	240-213667-B-9	Plastic 500ml - unpreserved				
MW-12	240-213667-C-9	Plastic 500ml - with Nitric Acid	<2			
MW-2S	240-213667-A-10	Plastic 125mL - unpreserved				
MW-2S	240-213667-B-10	Plastic 500ml - unpreserved				
MW-2S	240-213667-C-10	Plastic 500ml - with Nitric Acid	<2			
MW-13	240-213667-A-11	Plastic 125mL - unpreserved				
MW-13	240-213667-B-11	Plastic 500ml - unpreserved				
MW-13	240-213667-C-11	Plastic 500ml - with Nitric Acid	<2			
MW-1S	240-213667-A-12	Plastic 125mL - unpreserved				

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservation</u> <u>Temp</u>	<u>Added</u>	<u>Preservation</u> <u>Lot Number</u>
MW-1S	240-213667-B-12	Plastic 500ml - unpreserved				
MW-1S	240-213667-C-12	Plastic 500ml - with Nitric Acid	<2			



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mr. Vincent Buening  
TRC Environmental Corporation.  
1540 Eisenhower Place  
Ann Arbor, Michigan 48108-7080

Generated 1/2/2025 11:22:09 AM Revision 2

## JOB DESCRIPTION

CCR DTE MONPP Bottom Ash Impoundment

## JOB NUMBER

240-216227-1



# Eurofins Cleveland

## 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 North Central, LLC Project Manager.

## Authorization



Authorized for release by  
Kris Brooks, Project Manager II  
[Kris.Brooks@et.eurofinsus.com](mailto:Kris.Brooks@et.eurofinsus.com)  
(330)966-9790

Generated  
1/2/2025 11:22:09 AM  
Revision 2



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Method Summary . . . . .	6
Sample Summary . . . . .	7
Detection Summary . . . . .	8
Client Sample Results . . . . .	9
QC Sample Results . . . . .	15
QC Association Summary . . . . .	17
Lab Chronicle . . . . .	18
Certification Summary . . . . .	19
Chain of Custody . . . . .	20

## Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
-----------	-----------------------

U	Indicates the analyte was analyzed for but not detected.
---	--

#### General Chemistry

Qualifier	Qualifier Description
-----------	-----------------------

U	Indicates the analyte was analyzed for but not detected.
---	--

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
--------------	---

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

## Case Narrative

Client: TRC Environmental Corporation.  
Project: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

**Job ID: 240-216227-1**

**Eurofins Cleveland**

### Job Narrative 240-216227-1

#### REVISION

The report being provided is a revision of the original report sent on 12/12/2024. The report (revision 2) is being revised due to chloride and sulfate were not requested for sample MW-15 and DUP-03.

#### Report revision history

Revision 1 - 12/27/2024 - Reason - sample DUP-01 switched between jobs 240-216226 and 240-216227.

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 12/7/2024 8:00 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 2.8°C.

#### **Metals**

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

#### **General Chemistry**

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

Eurofins Cleveland

## Method Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
9056A	Anions, Ion Chromatography	SW846	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE

### Protocol References:

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 CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

# Sample Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-216227-1	MW-2S	Water	12/05/24 14:20	12/07/24 08:00
240-216227-2	MW-14	Water	12/05/24 15:08	12/07/24 08:00
240-216227-3	MW-15	Water	12/05/24 12:57	12/07/24 08:00
240-216227-4	DUP-01	Water	12/05/24 00:00	12/07/24 08:00
240-216227-5	DUP-02	Water	12/05/24 00:00	12/07/24 08:00
240-216227-6	DUP-03	Water	12/05/24 00:00	12/07/24 08:00



## Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

### Client Sample ID: MW-2S

### Lab Sample ID: 240-216227-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	ug/L	1		6010D	Total Recoverable

### Client Sample ID: MW-14

### Lab Sample ID: 240-216227-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Calcium	310000		1000	ug/L	1		6020B	Total Recoverable

### Client Sample ID: MW-15

### Lab Sample ID: 240-216227-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	590		10	mg/L	1		2540 C-2020	Total/NA
Fluoride	0.47		0.050	mg/L	1		9056A	Total/NA

### Client Sample ID: DUP-01

### Lab Sample ID: 240-216227-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	ug/L	1		6010D	Total Recoverable

### Client Sample ID: DUP-02

### Lab Sample ID: 240-216227-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Calcium	290000		1000	ug/L	1		6020B	Total Recoverable

### Client Sample ID: DUP-03

### Lab Sample ID: 240-216227-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	590		10	mg/L	1		2540 C-2020	Total/NA
Fluoride	0.47		0.050	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

**Client Sample ID: MW-2S**  
**Date Collected: 12/05/24 14:20**  
**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-1**  
**Matrix: Water**

Method: SW846 6010D - Metals (ICP) - Total Recoverable									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Boron	1100		100	ug/L		12/09/24 14:00	12/11/24 11:09	1	

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

**Client Sample ID: MW-14**  
**Date Collected: 12/05/24 15:08**  
**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-2**  
**Matrix: Water**

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	310000		1000	ug/L		12/09/24 14:00	12/10/24 23:42	1	

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

**Client Sample ID: MW-15**  
**Date Collected: 12/05/24 12:57**  
**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-3**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540 C-2020)	590		10	mg/L			12/11/24 10:33	1	
Fluoride (SW846 9056A)	0.47		0.050	mg/L			12/10/24 03:52	1	

Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

Client Sample ID: DUP-01

Date Collected: 12/05/24 00:00

Date Received: 12/07/24 08:00

Lab Sample ID: 240-216227-4

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Boron	1100		100	ug/L		12/09/24 14:00	12/11/24 11:05	1	

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

**Client Sample ID: DUP-02**  
**Date Collected: 12/05/24 00:00**  
**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-5**  
**Matrix: Water**

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	290000		1000	ug/L		12/10/24 14:00	12/11/24 13:52	1	



# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

**Client Sample ID: DUP-03**  
**Date Collected: 12/05/24 00:00**  
**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-6**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540 C-2020)	590		10	mg/L			12/11/24 10:33	1	
Fluoride (SW846 9056A)	0.47		0.050	mg/L			12/10/24 04:34	1	

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

## Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-638081/1-A  
Matrix: Water  
Analysis Batch: 638476

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 638081

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	ug/L		12/09/24 14:00	12/11/24 09:08	1

Lab Sample ID: LCS 240-638081/2-A  
Matrix: Water  
Analysis Batch: 638476

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 638081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1060		ug/L		106	80 - 120

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-638086/1-A  
Matrix: Water  
Analysis Batch: 638317

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 638086

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	ug/L		12/09/24 14:00	12/10/24 22:31	1

Lab Sample ID: LCS 240-638086/2-A  
Matrix: Water  
Analysis Batch: 638317

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 638086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	25200		ug/L		101	80 - 120

Lab Sample ID: MB 240-638205/1-A  
Matrix: Water  
Analysis Batch: 638439

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 638205

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	ug/L		12/10/24 14:00	12/11/24 11:57	1

Lab Sample ID: LCS 240-638205/2-A  
Matrix: Water  
Analysis Batch: 638439

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 638205

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24500		ug/L		98	80 - 120

## Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-638381/1  
Matrix: Water  
Analysis Batch: 638381

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	mg/L			12/11/24 10:33	1

Eurofins Cleveland

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

## Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-638381/2

Matrix: Water

Analysis Batch: 638381

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	242	230		mg/L		95	80 - 120

## Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-638142/3

Matrix: Water

Analysis Batch: 638142

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.050	U	0.050	mg/L			12/09/24 18:42	1

Lab Sample ID: LCS 240-638142/4

Matrix: Water

Analysis Batch: 638142

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.47		mg/L		99	90 - 110

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

## Metals

### Prep Batch: 638081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216227-1	MW-2S	Total Recoverable	Water	3005A	
240-216227-4	DUP-01	Total Recoverable	Water	3005A	
MB 240-638081/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-638081/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Prep Batch: 638086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216227-2	MW-14	Total Recoverable	Water	3005A	
MB 240-638086/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-638086/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Prep Batch: 638205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216227-5	DUP-02	Total Recoverable	Water	3005A	
MB 240-638205/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-638205/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 638317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216227-2	MW-14	Total Recoverable	Water	6020B	638086
MB 240-638086/1-A	Method Blank	Total Recoverable	Water	6020B	638086
LCS 240-638086/2-A	Lab Control Sample	Total Recoverable	Water	6020B	638086

### Analysis Batch: 638439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216227-5	DUP-02	Total Recoverable	Water	6020B	638205
MB 240-638205/1-A	Method Blank	Total Recoverable	Water	6020B	638205
LCS 240-638205/2-A	Lab Control Sample	Total Recoverable	Water	6020B	638205

### Analysis Batch: 638476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216227-1	MW-2S	Total Recoverable	Water	6010D	638081
240-216227-4	DUP-01	Total Recoverable	Water	6010D	638081
MB 240-638081/1-A	Method Blank	Total Recoverable	Water	6010D	638081
LCS 240-638081/2-A	Lab Control Sample	Total Recoverable	Water	6010D	638081

## General Chemistry

### Analysis Batch: 638142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216227-3	MW-15	Total/NA	Water	9056A	
240-216227-6	DUP-03	Total/NA	Water	9056A	
MB 240-638142/3	Method Blank	Total/NA	Water	9056A	
LCS 240-638142/4	Lab Control Sample	Total/NA	Water	9056A	

### Analysis Batch: 638381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216227-3	MW-15	Total/NA	Water	2540 C-2020	
240-216227-6	DUP-03	Total/NA	Water	2540 C-2020	
MB 240-638381/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-638381/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Eurofins Cleveland

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

**Client Sample ID: MW-2S**

**Date Collected: 12/05/24 14:20**

**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			638081	BN	EET CLE	12/09/24 14:00
Total Recoverable	Analysis	6010D		1	638476	RKT	EET CLE	12/11/24 11:09

**Client Sample ID: MW-14**

**Date Collected: 12/05/24 15:08**

**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			638086	BN	EET CLE	12/09/24 14:00
Total Recoverable	Analysis	6020B		1	638317	AJC	EET CLE	12/10/24 23:42

**Client Sample ID: MW-15**

**Date Collected: 12/05/24 12:57**

**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540 C-2020		1	638381	PQD2	EET CLE	12/11/24 10:33
Total/NA	Analysis	9056A		1	638142	JMR	EET CLE	12/10/24 03:52

**Client Sample ID: DUP-01**

**Date Collected: 12/05/24 00:00**

**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			638081	BN	EET CLE	12/09/24 14:00
Total Recoverable	Analysis	6010D		1	638476	RKT	EET CLE	12/11/24 11:05

**Client Sample ID: DUP-02**

**Date Collected: 12/05/24 00:00**

**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-5**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			638205	GK	EET CLE	12/10/24 14:00
Total Recoverable	Analysis	6020B		1	638439	AJC	EET CLE	12/11/24 13:52

**Client Sample ID: DUP-03**

**Date Collected: 12/05/24 00:00**

**Date Received: 12/07/24 08:00**

**Lab Sample ID: 240-216227-6**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540 C-2020		1	638381	PQD2	EET CLE	12/11/24 10:33
Total/NA	Analysis	9056A		1	638142	JMR	EET CLE	12/10/24 04:34

## Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Eurofins Cleveland

## Accreditation/Certification Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MONPP Bottom Ash Impoundment

Job ID: 240-216227-1

### Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-24
Wisconsin	State	399167560	08-31-25



Barberton, OH 44203-3543  
phone 330.497.9396 fax 330.497.0772

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

Eurofins Environment Testing America

[illegible]

<b>Eurofins - Cleveland Sample Receipt Form/Narrative</b>		<b>Login #</b> _____	
<b>Barberton Facility</b>			
Client <u>TRC</u>	Site Name _____	Cooler unpacked by <u>TF</u>	
Cooler Received on <u>12/7/24</u>	Opened on <u>12/7/24</u>		
FedEx: 1 <sup>st</sup> Grd Exp <u>UPS FAS (Waypoint)</u>	Client Drop Off <u>Eurofins Courier</u>	Other _____	
Receipt After-hours Drop-off Date/Time _____		Storage Location _____	
Eurofins Cooler # <u>EC</u>	Foam Box <u>Bubble Wrap</u>	Client Cooler <u>Box</u>	Other _____
Packing material used. <u>Bubble Wrap</u>		Foam <u>None</u>	Plastic Bag <u>None</u>
COOLANT: <u>Water</u>		Blue Ice <u>None</u>	Dry Ice <u>None</u>
Water <u>None</u>		Other _____	
1 Cooler temperature upon receipt <u>40.2</u> <input type="checkbox"/> See Multiple Cooler Form			
IR GUN # <u>4721</u> (CF <u>40.1</u> °C) Observed Cooler Temp. <u>26</u> °C Corrected Cooler Temp. <u>28</u> °C			
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u>			
-Were the seals on the outside of the cooler(s) signed & dated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
-Were tamper/custody seals intact and uncompromised? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
3 Shippers' packing slip attached to the cooler(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
4 Did custody papers accompany the sample(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
5 Were the custody papers relinquished & signed in the appropriate place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
6. Was/were the person(s) who collected the samples clearly identified on the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
7 Did all bottles arrive in good condition (Unbroken)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
10 Were correct bottle(s) used for the test(s) indicated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
11 Sufficient quantity received to perform indicated analyses? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
12 Are these work share samples and all listed on the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
13 If yes, Questions 13-17 have been checked at the originating laboratory			
13 Were all preserved sample(s) at the correct pH upon receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
14 Were VOAAs on the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
15 Were air bubbles >6 mm in any VOA vials? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____			
17 Was a LL Hg or Me Hg trip blank present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____			
Concerning _____			
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES <input type="checkbox"/> additional next page		Samples processed by: _____	
19. SAMPLE CONDITION			
Sample(s) _____ were received after the recommended holding time had expired.			
Sample(s) _____ were received in a broken container			
Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)			
20. SAMPLE PRESERVATION			
Sample(s) <u>200.02</u> were further preserved in the laboratory			
Time preserved _____ Preservative(s) added/Lot number(s): _____			
VOA Sample Preservation - Date/Time VOAs Frozen _____			

Temperature readings					
Client Sample ID	Lab ID	Container Type	Container		Preservation Lot Number
			pH	Temp	
MW-2S	240-216227-A-1	Plastic 250ml - with Nitric Acid	<2		
MW-14	240-216227-A-2	Plastic 250ml - with Nitric Acid	<2		
MW-15	240-216227-A-3	Plastic 60 mL - unpreserved			
MW-15	240-216227-B-3	Plastic 500ml - unpreserved			
DUP-01	240-216227-A-4	Plastic 250ml - with Nitric Acid	<2		
DUP-02	240-216227-A-5	Plastic 250ml - with Nitric Acid	>2		
DUP-03	240-216227-A-6	Plastic 60 mL - unpreserved			
DUP-03	240-216227-B-6	Plastic 500ml - unpreserved			



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mr. Vincent Buening  
TRC Environmental Corporation.  
1540 Eisenhower Place  
Ann Arbor, Michigan 48108-7080

Generated 5/14/2025 2:10:05 PM

## JOB DESCRIPTION

CCR DTE MNPP-Bottom Ash Impoundment

## JOB NUMBER

240-223387-1

# Eurofins Cleveland

## 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 North Central, LLC Project Manager.

## Authorization



Generated  
5/14/2025 2:10:05 PM

Authorized for release by  
Kris Brooks, Project Manager II  
[Kris.Brooks@et.eurofinsus.com](mailto:Kris.Brooks@et.eurofinsus.com)  
(330)966-9790



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Method Summary . . . . .	6
Sample Summary . . . . .	7
Detection Summary . . . . .	8
Client Sample Results . . . . .	11
QC Sample Results . . . . .	23
QC Association Summary . . . . .	25
Lab Chronicle . . . . .	27
Certification Summary . . . . .	31
Chain of Custody . . . . .	32



## Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

#### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### Glossary

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

## Case Narrative

Client: TRC Environmental Corporation.  
Project: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

**Job ID: 240-223387-1**

**Eurofins Cleveland**

### **Job Narrative 240-223387-1**

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 5/1/2025 8:00 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 2.2°C, 2.3°C, 2.6°C and 2.7°C.

#### **Metals**

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

#### **General Chemistry**

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

Eurofins Cleveland

## Method Summary

Client: TRC Environmental Corporation.

Job ID: 240-223387-1

Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
9056A	Anions, Ion Chromatography	SW846	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE

### Protocol References:

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 CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

## Sample Summary

Client: TRC Environmental Corporation.

Job ID: 240-223387-1

Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-223387-1	MW-3S	Water	04/29/25 09:06	05/01/25 08:00
240-223387-2	MW-11	Water	04/29/25 09:58	05/01/25 08:00
240-223387-3	MW-12	Water	04/29/25 10:43	05/01/25 08:00
240-223387-4	MW-14	Water	04/29/25 12:22	05/01/25 08:00
240-223387-5	MW-01S	Water	04/29/25 09:07	05/01/25 08:00
240-223387-6	MW-02S	Water	04/29/25 11:26	05/01/25 08:00
240-223387-7	MW-13	Water	04/29/25 10:23	05/01/25 08:00
240-223387-8	MW-15	Water	04/29/25 12:37	05/01/25 08:00
240-223387-9	MW-7S	Water	04/29/25 12:20	05/01/25 08:00
240-223387-10	MW-9	Water	04/29/25 11:10	05/01/25 08:00
240-223387-11	MW-10	Water	04/29/25 10:30	05/01/25 08:00
240-223387-12	DUP-01	Water	04/29/25 00:00	05/01/25 08:00

## Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

### Client Sample ID: MW-3S

### Lab Sample ID: 240-223387-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	820		100	ug/L	1		6010D	Total Recoverable
Calcium	280000		1000	ug/L	1		6020B	Total Recoverable
Iron	11000		100	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	1700		20	mg/L	1		2540 C-2020	Total/NA
Chloride	15		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.79		0.050	mg/L	1		9056A	Total/NA
Sulfate	1200		10	mg/L	10		9056A	Total/NA

### Client Sample ID: MW-11

### Lab Sample ID: 240-223387-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	930		100	ug/L	1		6010D	Total Recoverable
Calcium	260000		1000	ug/L	1		6020B	Total Recoverable
Iron	1900		100	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	2000		20	mg/L	1		2540 C-2020	Total/NA
Chloride	16		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.93		0.050	mg/L	1		9056A	Total/NA
Sulfate	1400		10	mg/L	10		9056A	Total/NA

### Client Sample ID: MW-12

### Lab Sample ID: 240-223387-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1000		100	ug/L	1		6010D	Total Recoverable
Calcium	200000		1000	ug/L	1		6020B	Total Recoverable
Iron	1400		100	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	1700		20	mg/L	1		2540 C-2020	Total/NA
Chloride	10		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.83		0.050	mg/L	1		9056A	Total/NA
Sulfate	1200		10	mg/L	10		9056A	Total/NA

### Client Sample ID: MW-14

### Lab Sample ID: 240-223387-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	ug/L	1		6010D	Total Recoverable
Calcium	290000		1000	ug/L	1		6020B	Total Recoverable
Iron	6300		100	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	1600		20	mg/L	1		2540 C-2020	Total/NA
Chloride	240		10	mg/L	10		9056A	Total/NA
Fluoride	0.29		0.050	mg/L	1		9056A	Total/NA
Sulfate	460		10	mg/L	10		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

## Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

### Client Sample ID: MW-01S

### Lab Sample ID: 240-223387-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	500		100	ug/L	1		6010D	Total
								Recoverable
Calcium	210000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	620		100	ug/L	1		6020B	Total
								Recoverable
Total Dissolved Solids	880		10	mg/L	1		2540 C-2020	Total/NA
Chloride	75		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.20		0.050	mg/L	1		9056A	Total/NA
Sulfate	110		1.0	mg/L	1		9056A	Total/NA

### Client Sample ID: MW-02S

### Lab Sample ID: 240-223387-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	ug/L	1		6010D	Total
								Recoverable
Calcium	260000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	3100		100	ug/L	1		6020B	Total
								Recoverable
Total Dissolved Solids	1800		20	mg/L	1		2540 C-2020	Total/NA
Chloride	11		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.69		0.050	mg/L	1		9056A	Total/NA
Sulfate	1300		10	mg/L	10		9056A	Total/NA

### Client Sample ID: MW-13

### Lab Sample ID: 240-223387-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Calcium	120000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	9400		100	ug/L	1		6020B	Total
								Recoverable
Total Dissolved Solids	520		10	mg/L	1		2540 C-2020	Total/NA
Chloride	100		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.38		0.050	mg/L	1		9056A	Total/NA

### Client Sample ID: MW-15

### Lab Sample ID: 240-223387-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	2300		100	ug/L	1		6010D	Total
								Recoverable
Calcium	130000		1000	ug/L	1		6020B	Total
								Recoverable
Iron	8400		100	ug/L	1		6020B	Total
								Recoverable
Total Dissolved Solids	640		10	mg/L	1		2540 C-2020	Total/NA
Chloride	110		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.55		0.050	mg/L	1		9056A	Total/NA

### Client Sample ID: MW-7S

### Lab Sample ID: 240-223387-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	400		100	ug/L	1		6010D	Total
								Recoverable
Calcium	400000		1000	ug/L	1		6020B	Total
								Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



## Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

### Client Sample ID: MW-7S (Continued)

Lab Sample ID: 240-223387-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Iron	1500		100	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	2000		20	mg/L	1		2540 C-2020	Total/NA
Chloride	23		1.0	mg/L	1		9056A	Total/NA
Fluoride	1.6		0.050	mg/L	1		9056A	Total/NA
Sulfate	1300		10	mg/L	10		9056A	Total/NA

### Client Sample ID: MW-9

Lab Sample ID: 240-223387-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	630		100	ug/L	1		6010D	Total Recoverable
Calcium	190000		1000	ug/L	1		6020B	Total Recoverable
Iron	3500		100	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	840		10	mg/L	1		2540 C-2020	Total/NA
Chloride	79		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.45		0.050	mg/L	1		9056A	Total/NA
Sulfate	4.9		1.0	mg/L	1		9056A	Total/NA

### Client Sample ID: MW-10

Lab Sample ID: 240-223387-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	560		100	ug/L	1		6010D	Total Recoverable
Calcium	180000		1000	ug/L	1		6020B	Total Recoverable
Iron	650		100	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	820		10	mg/L	1		2540 C-2020	Total/NA
Chloride	66		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.43		0.050	mg/L	1		9056A	Total/NA
Sulfate	5.3		1.0	mg/L	1		9056A	Total/NA

### Client Sample ID: DUP-01

Lab Sample ID: 240-223387-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Boron	2300		100	ug/L	1		6010D	Total Recoverable
Calcium	140000		1000	ug/L	1		6020B	Total Recoverable
Iron	8800		100	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	680		10	mg/L	1		2540 C-2020	Total/NA
Chloride	110		1.0	mg/L	1		9056A	Total/NA
Fluoride	0.41		0.050	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-3S

Lab Sample ID: 240-223387-1

Date Collected: 04/29/25 09:06

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	820		100	ug/L		05/01/25 14:00	05/03/25 07:07	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	280000		1000	ug/L		05/01/25 14:00	05/02/25 14:47	1
Iron	11000		100	ug/L		05/01/25 14:00	05/02/25 14:47	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	1700		20	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	15		1.0	mg/L			05/09/25 10:13	1
Fluoride (SW846 9056A)	0.79		0.050	mg/L			05/09/25 10:13	1
Sulfate (SW846 9056A)	1200		10	mg/L			05/12/25 16:19	10

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-11

Lab Sample ID: 240-223387-2

Date Collected: 04/29/25 09:58

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	930		100	ug/L		05/01/25 14:00	05/03/25 07:11	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	260000		1000	ug/L		05/01/25 14:00	05/02/25 14:50	1
Iron	1900		100	ug/L		05/01/25 14:00	05/02/25 14:50	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	2000		20	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	16		1.0	mg/L			05/09/25 11:38	1
Fluoride (SW846 9056A)	0.93		0.050	mg/L			05/09/25 11:38	1
Sulfate (SW846 9056A)	1400		10	mg/L			05/09/25 11:59	10

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-12

Lab Sample ID: 240-223387-3

Date Collected: 04/29/25 10:43

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1000		100	ug/L		05/01/25 14:00	05/03/25 07:16	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	200000		1000	ug/L		05/01/25 14:00	05/02/25 14:52	1
Iron	1400		100	ug/L		05/01/25 14:00	05/02/25 14:52	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	1700		20	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	10		1.0	mg/L			05/09/25 12:20	1
Fluoride (SW846 9056A)	0.83		0.050	mg/L			05/09/25 12:20	1
Sulfate (SW846 9056A)	1200		10	mg/L			05/12/25 16:28	10

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-14

Lab Sample ID: 240-223387-4

Date Collected: 04/29/25 12:22

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	ug/L		05/01/25 14:00	05/03/25 07:21	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	290000		1000	ug/L		05/01/25 14:00	05/02/25 14:55	1
Iron	6300		100	ug/L		05/01/25 14:00	05/02/25 14:55	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	1600		20	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	240		10	mg/L			05/09/25 13:24	10
Fluoride (SW846 9056A)	0.29		0.050	mg/L			05/09/25 13:03	1
Sulfate (SW846 9056A)	460		10	mg/L			05/09/25 13:24	10

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-01S

Lab Sample ID: 240-223387-5

Date Collected: 04/29/25 09:07

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	500		100	ug/L		05/01/25 14:00	05/03/25 07:25	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	210000		1000	ug/L		05/01/25 14:00	05/02/25 14:57	1
Iron	620		100	ug/L		05/01/25 14:00	05/02/25 14:57	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	880		10	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	75		1.0	mg/L			05/09/25 13:45	1
Fluoride (SW846 9056A)	0.20		0.050	mg/L			05/09/25 13:45	1
Sulfate (SW846 9056A)	110		1.0	mg/L			05/09/25 13:45	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-02S

Lab Sample ID: 240-223387-6

Date Collected: 04/29/25 11:26

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1100		100	ug/L		05/01/25 14:00	05/03/25 07:39	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	260000		1000	ug/L		05/01/25 14:00	05/02/25 15:00	1
Iron	3100		100	ug/L		05/01/25 14:00	05/02/25 15:00	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	1800		20	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	11		1.0	mg/L			05/09/25 14:27	1
Fluoride (SW846 9056A)	0.69		0.050	mg/L			05/09/25 14:27	1
Sulfate (SW846 9056A)	1300		10	mg/L			05/09/25 15:31	10



# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-13

Lab Sample ID: 240-223387-7

Date Collected: 04/29/25 10:23

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	ug/L		05/01/25 14:00	05/03/25 07:43	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	ug/L		05/01/25 14:00	05/02/25 15:07	1
Iron	9400		100	ug/L		05/01/25 14:00	05/02/25 15:07	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	520		10	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	100		1.0	mg/L			05/09/25 15:52	1
Fluoride (SW846 9056A)	0.38		0.050	mg/L			05/09/25 15:52	1
Sulfate (SW846 9056A)	1.0	U	1.0	mg/L			05/09/25 15:52	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-15

Lab Sample ID: 240-223387-8

Date Collected: 04/29/25 12:37

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2300		100	ug/L		05/01/25 14:00	05/03/25 07:48	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	ug/L		05/01/25 14:00	05/02/25 15:10	1
Iron	8400		100	ug/L		05/01/25 14:00	05/02/25 15:10	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	640		10	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	110		1.0	mg/L			05/09/25 21:10	1
Fluoride (SW846 9056A)	0.55		0.050	mg/L			05/09/25 21:10	1
Sulfate (SW846 9056A)	1.0	U	1.0	mg/L			05/09/25 21:10	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-7S

Lab Sample ID: 240-223387-9

Date Collected: 04/29/25 12:20

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	400		100	ug/L		05/01/25 14:00	05/03/25 07:53	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	400000		1000	ug/L		05/01/25 14:00	05/02/25 15:12	1
Iron	1500		100	ug/L		05/01/25 14:00	05/02/25 15:12	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	2000		20	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	23		1.0	mg/L			05/09/25 21:53	1
Fluoride (SW846 9056A)	1.6		0.050	mg/L			05/09/25 21:53	1
Sulfate (SW846 9056A)	1300		10	mg/L			05/09/25 22:14	10

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-9

Lab Sample ID: 240-223387-10

Date Collected: 04/29/25 11:10

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	630		100	ug/L		05/01/25 14:00	05/03/25 07:57	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	190000		1000	ug/L		05/01/25 14:00	05/02/25 15:15	1
Iron	3500		100	ug/L		05/01/25 14:00	05/02/25 15:15	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	840		10	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	79		1.0	mg/L			05/09/25 22:35	1
Fluoride (SW846 9056A)	0.45		0.050	mg/L			05/09/25 22:35	1
Sulfate (SW846 9056A)	4.9		1.0	mg/L			05/09/25 22:35	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: MW-10

Lab Sample ID: 240-223387-11

Date Collected: 04/29/25 10:30

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	560		100	ug/L		05/01/25 14:00	05/03/25 08:02	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	180000		1000	ug/L		05/01/25 14:00	05/02/25 15:18	1
Iron	650		100	ug/L		05/01/25 14:00	05/02/25 15:18	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	820		10	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	66		1.0	mg/L			05/10/25 00:00	1
Fluoride (SW846 9056A)	0.43		0.050	mg/L			05/10/25 00:00	1
Sulfate (SW846 9056A)	5.3		1.0	mg/L			05/10/25 00:00	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: DUP-01

Lab Sample ID: 240-223387-12

Date Collected: 04/29/25 00:00

Matrix: Water

Date Received: 05/01/25 08:00

## Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2300		100	ug/L		05/01/25 14:00	05/03/25 08:07	1

## Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		1000	ug/L		05/01/25 14:00	05/02/25 15:20	1
Iron	8800		100	ug/L		05/01/25 14:00	05/02/25 15:20	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	680		10	mg/L			05/02/25 12:09	1
Chloride (SW846 9056A)	110		1.0	mg/L			05/10/25 00:42	1
Fluoride (SW846 9056A)	0.41		0.050	mg/L			05/10/25 00:42	1
Sulfate (SW846 9056A)	1.0	U	1.0	mg/L			05/10/25 00:42	1

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

## Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-654387/1-A  
Matrix: Water  
Analysis Batch: 654662

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 654387

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	ug/L		05/01/25 14:00	05/03/25 05:55	1

Lab Sample ID: LCS 240-654387/2-A  
Matrix: Water  
Analysis Batch: 654662

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 654387

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	977		ug/L		98	80 - 120

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-654387/1-A  
Matrix: Water  
Analysis Batch: 654666

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 654387

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	ug/L		05/01/25 14:00	05/02/25 14:08	1
Iron	100	U	100	ug/L		05/01/25 14:00	05/02/25 14:08	1

Lab Sample ID: LCS 240-654387/3-A  
Matrix: Water  
Analysis Batch: 654666

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 654387

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23700		ug/L		95	80 - 120
Iron	5000	4830		ug/L		97	80 - 120

## Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-654561/1  
Matrix: Water  
Analysis Batch: 654561

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	mg/L			05/02/25 12:09	1

Lab Sample ID: LCS 240-654561/2  
Matrix: Water  
Analysis Batch: 654561

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	176	160		mg/L		91	80 - 120

Lab Sample ID: 240-223387-5 DU  
Matrix: Water  
Analysis Batch: 654561

Client Sample ID: MW-01S  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	880		903		mg/L		3	20

Eurofins Cleveland



# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

## Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-655322/3

Matrix: Water

Analysis Batch: 655322

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	mg/L			05/09/25 07:02	1
Fluoride	0.050	U	0.050	mg/L			05/09/25 07:02	1
Sulfate	1.0	U	1.0	mg/L			05/09/25 07:02	1

Lab Sample ID: LCS 240-655322/4

Matrix: Water

Analysis Batch: 655322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.7		mg/L		101	90 - 110
Fluoride	2.50	2.64		mg/L		106	90 - 110
Sulfate	50.0	52.2		mg/L		104	90 - 110

Lab Sample ID: MB 240-655748/3

Matrix: Water

Analysis Batch: 655748

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.050	U	0.050	mg/L			05/12/25 15:30	1
Sulfate	1.0	U	1.0	mg/L			05/12/25 15:30	1

Lab Sample ID: LCS 240-655748/4

Matrix: Water

Analysis Batch: 655748

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.51		mg/L		100	90 - 110
Sulfate	50.0	49.6		mg/L		99	90 - 110

## QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

### Metals

#### Prep Batch: 654387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223387-1	MW-3S	Total Recoverable	Water	3005A	
240-223387-2	MW-11	Total Recoverable	Water	3005A	
240-223387-3	MW-12	Total Recoverable	Water	3005A	
240-223387-4	MW-14	Total Recoverable	Water	3005A	
240-223387-5	MW-01S	Total Recoverable	Water	3005A	
240-223387-6	MW-02S	Total Recoverable	Water	3005A	
240-223387-7	MW-13	Total Recoverable	Water	3005A	
240-223387-8	MW-15	Total Recoverable	Water	3005A	
240-223387-9	MW-7S	Total Recoverable	Water	3005A	
240-223387-10	MW-9	Total Recoverable	Water	3005A	
240-223387-11	MW-10	Total Recoverable	Water	3005A	
240-223387-12	DUP-01	Total Recoverable	Water	3005A	
MB 240-654387/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-654387/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-654387/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

#### Analysis Batch: 654662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223387-1	MW-3S	Total Recoverable	Water	6010D	654387
240-223387-2	MW-11	Total Recoverable	Water	6010D	654387
240-223387-3	MW-12	Total Recoverable	Water	6010D	654387
240-223387-4	MW-14	Total Recoverable	Water	6010D	654387
240-223387-5	MW-01S	Total Recoverable	Water	6010D	654387
240-223387-6	MW-02S	Total Recoverable	Water	6010D	654387
240-223387-7	MW-13	Total Recoverable	Water	6010D	654387
240-223387-8	MW-15	Total Recoverable	Water	6010D	654387
240-223387-9	MW-7S	Total Recoverable	Water	6010D	654387
240-223387-10	MW-9	Total Recoverable	Water	6010D	654387
240-223387-11	MW-10	Total Recoverable	Water	6010D	654387
240-223387-12	DUP-01	Total Recoverable	Water	6010D	654387
MB 240-654387/1-A	Method Blank	Total Recoverable	Water	6010D	654387
LCS 240-654387/2-A	Lab Control Sample	Total Recoverable	Water	6010D	654387

#### Analysis Batch: 654666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223387-1	MW-3S	Total Recoverable	Water	6020B	654387
240-223387-2	MW-11	Total Recoverable	Water	6020B	654387
240-223387-3	MW-12	Total Recoverable	Water	6020B	654387
240-223387-4	MW-14	Total Recoverable	Water	6020B	654387
240-223387-5	MW-01S	Total Recoverable	Water	6020B	654387
240-223387-6	MW-02S	Total Recoverable	Water	6020B	654387
240-223387-7	MW-13	Total Recoverable	Water	6020B	654387
240-223387-8	MW-15	Total Recoverable	Water	6020B	654387
240-223387-9	MW-7S	Total Recoverable	Water	6020B	654387
240-223387-10	MW-9	Total Recoverable	Water	6020B	654387
240-223387-11	MW-10	Total Recoverable	Water	6020B	654387
240-223387-12	DUP-01	Total Recoverable	Water	6020B	654387
MB 240-654387/1-A	Method Blank	Total Recoverable	Water	6020B	654387
LCS 240-654387/3-A	Lab Control Sample	Total Recoverable	Water	6020B	654387

Eurofins Cleveland

## QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

### General Chemistry

#### Analysis Batch: 654561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223387-1	MW-3S	Total/NA	Water	2540 C-2020	
240-223387-2	MW-11	Total/NA	Water	2540 C-2020	
240-223387-3	MW-12	Total/NA	Water	2540 C-2020	
240-223387-4	MW-14	Total/NA	Water	2540 C-2020	
240-223387-5	MW-01S	Total/NA	Water	2540 C-2020	
240-223387-6	MW-02S	Total/NA	Water	2540 C-2020	
240-223387-7	MW-13	Total/NA	Water	2540 C-2020	
240-223387-8	MW-15	Total/NA	Water	2540 C-2020	
240-223387-9	MW-7S	Total/NA	Water	2540 C-2020	
240-223387-10	MW-9	Total/NA	Water	2540 C-2020	
240-223387-11	MW-10	Total/NA	Water	2540 C-2020	
240-223387-12	DUP-01	Total/NA	Water	2540 C-2020	
MB 240-654561/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-654561/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-223387-5 DU	MW-01S	Total/NA	Water	2540 C-2020	

#### Analysis Batch: 655322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223387-1	MW-3S	Total/NA	Water	9056A	
240-223387-2	MW-11	Total/NA	Water	9056A	
240-223387-2	MW-11	Total/NA	Water	9056A	
240-223387-3	MW-12	Total/NA	Water	9056A	
240-223387-4	MW-14	Total/NA	Water	9056A	
240-223387-4	MW-14	Total/NA	Water	9056A	
240-223387-5	MW-01S	Total/NA	Water	9056A	
240-223387-6	MW-02S	Total/NA	Water	9056A	
240-223387-6	MW-02S	Total/NA	Water	9056A	
240-223387-7	MW-13	Total/NA	Water	9056A	
240-223387-8	MW-15	Total/NA	Water	9056A	
240-223387-9	MW-7S	Total/NA	Water	9056A	
240-223387-9	MW-7S	Total/NA	Water	9056A	
240-223387-10	MW-9	Total/NA	Water	9056A	
240-223387-11	MW-10	Total/NA	Water	9056A	
240-223387-12	DUP-01	Total/NA	Water	9056A	
MB 240-655322/3	Method Blank	Total/NA	Water	9056A	
LCS 240-655322/4	Lab Control Sample	Total/NA	Water	9056A	

#### Analysis Batch: 655748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223387-1	MW-3S	Total/NA	Water	9056A	
240-223387-3	MW-12	Total/NA	Water	9056A	
MB 240-655748/3	Method Blank	Total/NA	Water	9056A	
LCS 240-655748/4	Lab Control Sample	Total/NA	Water	9056A	

## Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

### Client Sample ID: MW-3S

Date Collected: 04/29/25 09:06

Date Received: 05/01/25 08:00

### Lab Sample ID: 240-223387-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:07
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 14:47
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		10	655748	JMR	EET CLE	05/12/25 16:19
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 10:13

### Client Sample ID: MW-11

Date Collected: 04/29/25 09:58

Date Received: 05/01/25 08:00

### Lab Sample ID: 240-223387-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:11
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 14:50
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 11:38
Total/NA	Analysis	9056A		10	655322	JMR	EET CLE	05/09/25 11:59

### Client Sample ID: MW-12

Date Collected: 04/29/25 10:43

Date Received: 05/01/25 08:00

### Lab Sample ID: 240-223387-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:16
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 14:52
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		10	655748	JMR	EET CLE	05/12/25 16:28
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 12:20

### Client Sample ID: MW-14

Date Collected: 04/29/25 12:22

Date Received: 05/01/25 08:00

### Lab Sample ID: 240-223387-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:21
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 14:55
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09

Eurofins Cleveland

## Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

**Client Sample ID: MW-14**

**Lab Sample ID: 240-223387-4**

**Date Collected: 04/29/25 12:22**

**Matrix: Water**

**Date Received: 05/01/25 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 13:03
Total/NA	Analysis	9056A		10	655322	JMR	EET CLE	05/09/25 13:24

**Client Sample ID: MW-01S**

**Lab Sample ID: 240-223387-5**

**Date Collected: 04/29/25 09:07**

**Matrix: Water**

**Date Received: 05/01/25 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:25
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 14:57
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 13:45

**Client Sample ID: MW-02S**

**Lab Sample ID: 240-223387-6**

**Date Collected: 04/29/25 11:26**

**Matrix: Water**

**Date Received: 05/01/25 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:39
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 15:00
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 14:27
Total/NA	Analysis	9056A		10	655322	JMR	EET CLE	05/09/25 15:31

**Client Sample ID: MW-13**

**Lab Sample ID: 240-223387-7**

**Date Collected: 04/29/25 10:23**

**Matrix: Water**

**Date Received: 05/01/25 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:43
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 15:07
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 15:52

## Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

### Client Sample ID: MW-15

Date Collected: 04/29/25 12:37

Date Received: 05/01/25 08:00

### Lab Sample ID: 240-223387-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:48
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 15:10
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 21:10

### Client Sample ID: MW-7S

Date Collected: 04/29/25 12:20

Date Received: 05/01/25 08:00

### Lab Sample ID: 240-223387-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:53
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 15:12
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 21:53
Total/NA	Analysis	9056A		10	655322	JMR	EET CLE	05/09/25 22:14

### Client Sample ID: MW-9

Date Collected: 04/29/25 11:10

Date Received: 05/01/25 08:00

### Lab Sample ID: 240-223387-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 07:57
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 15:15
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/09/25 22:35

### Client Sample ID: MW-10

Date Collected: 04/29/25 10:30

Date Received: 05/01/25 08:00

### Lab Sample ID: 240-223387-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 08:02
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 15:18
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/10/25 00:00

Eurofins Cleveland

Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

Client Sample ID: DUP-01

Lab Sample ID: 240-223387-12

Date Collected: 04/29/25 00:00

Matrix: Water

Date Received: 05/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6010D		1	654662	AJC	EET CLE	05/03/25 08:07
Total Recoverable	Prep	3005A			654387	MN7X	EET CLE	05/01/25 14:00
Total Recoverable	Analysis	6020B		1	654666	S4FJ	EET CLE	05/02/25 15:20
Total/NA	Analysis	2540 C-2020		1	654561	AAP	EET CLE	05/02/25 12:09
Total/NA	Analysis	9056A		1	655322	JMR	EET CLE	05/10/25 00:42

Laboratory References:  
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



## Accreditation/Certification Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE MNPP-Bottom Ash Impoundment

Job ID: 240-223387-1

### Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

## Eurofins Cleveland

180 S. Van Buren Avenue

Barberton, OH 44203

Phone (330) 497-9396 Phone (330) 497-0772

## Chain of Custody Record

MICHIGAN  
190

Environment Testing

<b>Client Information</b>		Sampler: <u>A. Kost, A. Shaker, E. W. Elgowski</u>		Lab PM: Brooks, Kris M		Carrier Tracking No(s):		COC No: 240-132144-45395.1									
Client Contact: Mr. Vincent Buening		Phone: <u>E. W. Elgowski</u>		E-Mail: Kris.Brooks@et.eurofinsus.com		State of Origin: <u>MT</u>		Page: Page 1 of 2									
Company: TRC Environmental Corporation.		PWSID:		Analysis Requested													
Address: 1540 Eisenhower Place		Due Date Requested: <u>Standard</u>		<table border="1"> <tr> <td rowspan="4">Field Filtered Sample (Yes or No)</td> <td rowspan="4">Perform MS/MSD (Yes or No)</td> <td rowspan="4">2540C_Calcd - TDS</td> <td rowspan="4">9056A_28D - Chloride, Fluoride and Sulfate</td> <td rowspan="4">6010B-Bo, 6020-Ca, Fe</td> <td rowspan="4">Total Number of containers</td> </tr> <tr></tr> <tr></tr> <tr></tr> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd - TDS	9056A_28D - Chloride, Fluoride and Sulfate	6010B-Bo, 6020-Ca, Fe	Total Number of containers		
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd - TDS	9056A_28D - Chloride, Fluoride and Sulfate													6010B-Bo, 6020-Ca, Fe	Total Number of containers
City: Ann Arbor		TAT Requested (days): <u>Standard</u>															
State, Zip: MI, 48108-7080		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No															
Phone: 313-971-7080(Tel) 313-971-9022(Fax)		PO #: 229274		Preservation Codes: N - None D - HNO3													
Email: vbuening@trccompanies.com		WO #: 620074.0000.0000															
Project Name: DTE MONPP-Bottom Ash Impoundment		Project #: 24016830															
Site:		SSOW#:		Other:													
<b>Sample Identification</b>		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)									
						Preservation Code:											
<u>MW-35</u>		<u>4/29/25</u>		<u>0906</u>		<u>G</u>		<u>Water</u>									
<u>MW-11</u>		<u>0958</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<u>MW-12</u>		<u>1043</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<u>MW-14</u>		<u>1222</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<u>MW-01S</u>		<u>0907</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<u>MW-02S</u>		<u>1126</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<u>MW-B</u>		<u>10:23</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<u>MW-15</u>		<u>12:37</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<u>MW-7S</u>		<u>12:20</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<u>MW-9</u>		<u>11:10</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<u>MW-10</u>		<u>10:30</u>		<u>G</u>		<u>Water</u>		<u>Water</u>									
<b>Possible Hazard Identification</b>		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>													
Deliverable Requested: I, II, III, IV, Other (specify) <u>TRC EDD</u>				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months													
Empty Kit Relinquished by: <u>[Signature]</u>		Date: <u>4/29/25</u>		Time: <u>13:30</u>		Method of Shipment: <u>TRC Storage</u>											
Relinquished by: <u>[Signature]</u>		Date/Time: <u>4/29/25 13:30</u>		Company: <u>TRC</u>		Received by: <u>[Signature]</u>		Date/Time: <u>4/29/25 13:30</u>									
Relinquished by: <u>[Signature]</u>		Date/Time: <u>4-30-25 1035</u>		Company: <u>TRC</u>		Received by: <u>[Signature]</u>		Date/Time: <u>4-30-25 1035</u>									
Relinquished by: <u>[Signature]</u>		Date/Time: <u>4/30/25 1220</u>		Company: <u>TRC</u>		Received by: <u>[Signature]</u>		Date/Time: <u>5/1/25 0000</u>									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:													



240-223387 COC

# MICHIGAN

## 190

Ver: 05/06/2024 5/14/2025

Eurofins - Cleveland Sample Receipt Form/Narrative		Client <u>TPC</u> Site Name _____	
Cooler Received on <u>5/11/25</u>		Opened on <u>5/11/25</u>	
FedEx: 1 <sup>st</sup> Grd Exp <u>UPS FAS Waypoint</u> Client Drop Off _____		Eurofins Courier _____ Other _____	
Receipt After-hours Drop-off Date/Time <u>4/30/25</u>		Storage Location <u>Walle in cooler</u>	
Eurofins Cooler # <u>EC</u> Foam Box _____ Client Cooler _____ Box _____ Other _____			
Packing material used. <u>Bubble Wrap</u> Foam _____ Plastic Bag _____ None _____			
COOLANT. <u>Wet Ice</u> Blue Ice _____ Dry Ice _____ Water _____ None _____			
<p>1 Cooler temperature upon receipt <input checked="" type="checkbox"/> See Multiple Cooler Form</p> <p>IR GUN # <u>13</u> (CF <u>+05</u> °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C</p>			
<p>2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u></p> <p>-Were the seals on the outside of the cooler(s) signed &amp; dated? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/> NA <input type="radio"/></p> <p>-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/> NA <input type="radio"/></p> <p>-Were tamper/custody seals intact and uncompromised? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/> NA <input type="radio"/></p> <p>3 Shippers' packing slip attached to the cooler(s)? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>4 Did custody papers accompany the sample(s)? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>5 Were the custody papers relinquished &amp; signed in the appropriate place? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>6. Was/were the person(s) who collected the samples clearly identified on the COC? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>7 Did all bottles arrive in good condition (Unbroken)? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>9 For each sample, does the COC specify preservatives (M/N), # of containers (C/N), and sample type of grab/comp (C/N)? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>10 Were correct bottle(s) used for the test(s) indicated? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>11 Sufficient quantity received to perform indicated analyses? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>12. Are these work share samples and all listed on the COC? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>If yes, Questions 13-17 have been checked at the originating laboratory</p> <p>13 Were all preserved sample(s) at the correct pH upon receipt? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/> NA <input type="radio"/> pH Strip Lot# HC457151</p> <p>14 Were VOAs on the COC? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>15 Were air bubbles &gt;6 mm in any VOA vials? <u>Yes</u> <input checked="" type="radio"/> Larger than this. <input checked="" type="radio"/> No <input type="radio"/> NA <input type="radio"/></p> <p>16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>17 Was a LL Hg or Me Hg trip blank present? <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/></p> <p>Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____</p> <p>Concerning _____</p>			
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES <input type="checkbox"/> additional next page		Labeled by: <u>Ron Shea</u>	
		Labels Verified by: <u>Marlin</u>	
19 SAMPLE CONDITION			
Sample(s) _____		were received after the recommended holding time had expired	
Sample(s) _____		were received in a broken container	
Sample(s) _____		were received with bubble >6 mm in diameter (Notify PM)	
20. SAMPLE PRESERVATION			
Sample(s) _____		were further preserved in the laboratory	
Time preserved. _____ Preservative(s) added/Lot number(s). _____			
VOA Sample Preservation - Date/Time VOAs Frozen. _____			

Tests that are not checked for pH by Receiving  
VOAs  
Oil and Grease  
TOC



Login #

5/14/2025

[illegible]

Temperature readings

Client Sample ID	Lab ID	Container Type	Container pH	Preservation Temp	Preservation Added	Preservation Lot Number
MW-3S	240-223387-A-1	Plastic 60 mL - unpreserved				
MW-3S	240-223387-B-1	Plastic 500ml - unpreserved				
MW-3S	240-223387-C-1	Plastic 500ml - with Nitric Acid	<2			
MW-11	240-223387-A-2	Plastic 60 mL - unpreserved				
MW-11	240-223387-B-2	Plastic 500ml - unpreserved				
MW-11	240-223387-C-2	Plastic 500ml - with Nitric Acid	<2			
MW-12	240-223387-A-3	Plastic 60 mL - unpreserved				
MW-12	240-223387-B-3	Plastic 500ml - unpreserved				
MW-12	240-223387-C-3	Plastic 500ml - with Nitric Acid	<2			
MW-14	240-223387-A-4	Plastic 60 mL - unpreserved				
MW-14	240-223387-B-4	Plastic 500ml - unpreserved				
MW-14	240-223387-C-4	Plastic 500ml - with Nitric Acid	<2			
MW-01S	240-223387-A-5	Plastic 60 mL - unpreserved				
MW-01S	240-223387-B-5	Plastic 500ml - unpreserved				
MW-01S	240-223387-C-5	Plastic 500ml - with Nitric Acid	<2			
MW-02S	240-223387-A-6	Plastic 60 mL - unpreserved				
MW-02S	240-223387-B-6	Plastic 500ml - unpreserved				
MW-02S	240-223387-C-6	Plastic 500ml - with Nitric Acid	<2			
MW-13	240-223387-A-7	Plastic 60 mL - unpreserved				
MW-13	240-223387-B-7	Plastic 500ml - unpreserved				
MW-13	240-223387-C-7	Plastic 500ml - with Nitric Acid	<2			
MW-15	240-223387-A-8	Plastic 60 mL - unpreserved				
MW-15	240-223387-B-8	Plastic 500ml - unpreserved				
MW-15	240-223387-C-8	Plastic 500ml - with Nitric Acid	<2			
MW-7S	240-223387-A-9	Plastic 60 mL - unpreserved				
MW-7S	240-223387-B-9	Plastic 500ml - unpreserved				
MW-7S	240-223387-C-9	Plastic 500ml - with Nitric Acid	<2			
MW-9	240-223387-A-10	Plastic 60 mL - unpreserved				
MW-9	240-223387-B-10	Plastic 500ml - unpreserved				
MW-9	240-223387-C-10	Plastic 500ml - with Nitric Acid	<2			
MW-10	240-223387-A-11	Plastic 60 mL - unpreserved				
MW-10	240-223387-B-11	Plastic 500ml - unpreserved				
MW-10	240-223387-C-11	Plastic 500ml - with Nitric Acid	<2			
DUP-01	240-223387-A-12	Plastic 60 mL - unpreserved				
DUP-01	240-223387-B-12	Plastic 500ml - unpreserved				

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservation</u> <u>Temp</u>	<u>Preservation</u> <u>Added</u>	<u>Lot Number</u>
-------------------------	---------------	-----------------------	-------------------------------	------------------------------------	-------------------------------------	-------------------

DUP-01	240-223387-C-12	Plastic 500ml - with Nitric Acid	<2			
--------	-----------------	----------------------------------	----	--	--	--





# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mr. Vincent Buening  
TRC Environmental Corporation.  
1540 Eisenhower Place  
Ann Arbor, Michigan 48108-7080

Generated 6/24/2025 12:12:49 PM Revision 1

## JOB DESCRIPTION

CCR DTE Monroe Power Plant BAI

## JOB NUMBER

240-225626-1

# Eurofins Cleveland

## 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 North Central, LLC Project Manager.

## Authorization



Authorized for release by  
Kris Brooks, Project Manager II  
[Kris.Brooks@et.eurofinsus.com](mailto:Kris.Brooks@et.eurofinsus.com)  
(330)966-9790

Generated  
6/24/2025 12:12:49 PM  
Revision 1



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Method Summary . . . . .	6
Sample Summary . . . . .	7
Detection Summary . . . . .	8
Client Sample Results . . . . .	9
QC Sample Results . . . . .	15
QC Association Summary . . . . .	16
Lab Chronicle . . . . .	17
Certification Summary . . . . .	18
Chain of Custody . . . . .	19

## Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
-----------	-----------------------

U	Indicates the analyte was analyzed for but not detected.
---	--

#### General Chemistry

Qualifier	Qualifier Description
-----------	-----------------------

U	Indicates the analyte was analyzed for but not detected.
---	--

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
--------------	---

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

## Case Narrative

Client: TRC Environmental Corporation.  
Project: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

**Job ID: 240-225626-1**

**Eurofins Cleveland**

### Job Narrative 240-225626-1

#### REVISION

The report being provided is a revision of the original report sent on 6/5/2025. The report (revision 1) is being revised due to change is the metal list for sample MW-2S.

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 5/31/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.6°C and 2.1°C.

#### **Metals**

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

#### **General Chemistry**

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

Eurofins Cleveland

## Method Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE

### Protocol References:

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 CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

# Sample Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-225626-1	MW-2S	Water	05/29/25 09:22	05/31/25 08:00
240-225626-2	MW-7S	Water	05/29/25 12:39	05/31/25 08:00
240-225626-3	MW-10	Water	05/29/25 10:35	05/31/25 08:00
240-225626-4	DUP-01	Water	05/29/25 00:00	05/31/25 08:00
240-225626-5	MW-9	Water	05/29/25 11:33	05/31/25 08:00
240-225626-6	DUP-02	Water	05/29/25 00:00	05/31/25 08:00



## Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

### Client Sample ID: MW-2S

### Lab Sample ID: 240-225626-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Iron	2800		100	ug/L	1		6020B	Total Recoverable

### Client Sample ID: MW-7S

### Lab Sample ID: 240-225626-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Calcium	130000		1000	ug/L	1		6020B	Total Recoverable
Iron	5200		100	ug/L	1		6020B	Total Recoverable

### Client Sample ID: MW-10

### Lab Sample ID: 240-225626-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Calcium	170000		1000	ug/L	1		6020B	Total Recoverable
Iron	430		100	ug/L	1		6020B	Total Recoverable

### Client Sample ID: DUP-01

### Lab Sample ID: 240-225626-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Calcium	140000		1000	ug/L	1		6020B	Total Recoverable
Iron	5700		100	ug/L	1		6020B	Total Recoverable

### Client Sample ID: MW-9

### Lab Sample ID: 240-225626-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	810		10	mg/L	1		2540 C-2020	Total/NA

### Client Sample ID: DUP-02

### Lab Sample ID: 240-225626-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	800		10	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

Client Sample ID: MW-2S  
Date Collected: 05/29/25 09:22  
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225626-1  
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2800		100	ug/L		06/03/25 05:00	06/04/25 14:48	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

**Client Sample ID: MW-7S**  
**Date Collected: 05/29/25 12:39**  
**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-2**  
**Matrix: Water**

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Calcium	130000		1000	ug/L		06/03/25 05:00	06/04/25 14:51	1	
Iron	5200		100	ug/L		06/03/25 05:00	06/04/25 14:51	1	

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

**Client Sample ID: MW-10**  
**Date Collected: 05/29/25 10:35**  
**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-3**  
**Matrix: Water**

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	170000		1000	ug/L		06/03/25 05:00	06/04/25 14:53	1	
Iron	430		100	ug/L		06/03/25 05:00	06/04/25 14:53	1	

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

**Client Sample ID: DUP-01**  
**Date Collected: 05/29/25 00:00**  
**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-4**  
**Matrix: Water**

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	140000		1000	ug/L		06/03/25 05:00	06/04/25 15:01	1	
Iron	5700		100	ug/L		06/03/25 05:00	06/04/25 15:01	1	

Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

**Client Sample ID: MW-9**  
**Date Collected: 05/29/25 11:33**  
**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-5**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540 C-2020)	810		10	mg/L			06/03/25 14:18	1	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

Client Sample ID: DUP-02  
Date Collected: 05/29/25 00:00  
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225626-6  
Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540 C-2020)	800		10	mg/L			06/03/25 14:18	1	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13



# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-658201/1-A  
Matrix: Water  
Analysis Batch: 658646

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 658201

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	ug/L		06/03/25 05:00	06/04/25 13:58	1
Iron	100	U	100	ug/L		06/03/25 05:00	06/04/25 13:58	1

Lab Sample ID: LCS 240-658201/2-A  
Matrix: Water  
Analysis Batch: 658646

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 658201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	26400		ug/L		106	80 - 120
Iron	5000	5160		ug/L		103	80 - 120

## Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-658409/1  
Matrix: Water  
Analysis Batch: 658409

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	mg/L			06/03/25 14:18	1

Lab Sample ID: LCS 240-658409/2  
Matrix: Water  
Analysis Batch: 658409

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	240	225		mg/L		94	80 - 120

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

## Metals

### Prep Batch: 658201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225626-1	MW-2S	Total Recoverable	Water	3005A	
240-225626-2	MW-7S	Total Recoverable	Water	3005A	
240-225626-3	MW-10	Total Recoverable	Water	3005A	
240-225626-4	DUP-01	Total Recoverable	Water	3005A	
MB 240-658201/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-658201/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 658646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225626-1	MW-2S	Total Recoverable	Water	6020B	658201
240-225626-2	MW-7S	Total Recoverable	Water	6020B	658201
240-225626-3	MW-10	Total Recoverable	Water	6020B	658201
240-225626-4	DUP-01	Total Recoverable	Water	6020B	658201
MB 240-658201/1-A	Method Blank	Total Recoverable	Water	6020B	658201
LCS 240-658201/2-A	Lab Control Sample	Total Recoverable	Water	6020B	658201

## General Chemistry

### Analysis Batch: 658409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225626-5	MW-9	Total/NA	Water	2540 C-2020	
240-225626-6	DUP-02	Total/NA	Water	2540 C-2020	
MB 240-658409/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-658409/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

**Client Sample ID: MW-2S**

**Date Collected: 05/29/25 09:22**

**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			658201	MN7X	EET CLE	06/03/25 05:00
Total Recoverable	Analysis	6020B		1	658646	S4FJ	EET CLE	06/04/25 14:48

**Client Sample ID: MW-7S**

**Date Collected: 05/29/25 12:39**

**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			658201	MN7X	EET CLE	06/03/25 05:00
Total Recoverable	Analysis	6020B		1	658646	S4FJ	EET CLE	06/04/25 14:51

**Client Sample ID: MW-10**

**Date Collected: 05/29/25 10:35**

**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			658201	MN7X	EET CLE	06/03/25 05:00
Total Recoverable	Analysis	6020B		1	658646	S4FJ	EET CLE	06/04/25 14:53

**Client Sample ID: DUP-01**

**Date Collected: 05/29/25 00:00**

**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			658201	MN7X	EET CLE	06/03/25 05:00
Total Recoverable	Analysis	6020B		1	658646	S4FJ	EET CLE	06/04/25 15:01

**Client Sample ID: MW-9**

**Date Collected: 05/29/25 11:33**

**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-5**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540 C-2020		1	658409	C5SV	EET CLE	06/03/25 14:18

**Client Sample ID: DUP-02**

**Date Collected: 05/29/25 00:00**

**Date Received: 05/31/25 08:00**

**Lab Sample ID: 240-225626-6**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540 C-2020		1	658409	C5SV	EET CLE	06/03/25 14:18

## Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Eurofins Cleveland

## Accreditation/Certification Summary

Client: TRC Environmental Corporation.  
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-225626-1

### Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	06-15-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

240-225626 COC

Eurofins - Cleveland Sample Receipt Form/Narrative  
Barberton Facility

Login # .

Client TRC

Site Name

Cooler unpacked by:

Cooler Received on 5/31/25

Opened on 5/31/25

Jmccasky

FedEx: 1<sup>st</sup> Grd Exp

UPS

FAS

W

Drop-off Date/Time

Client Drop Off

Eurofins Courier

Other

Receipt After-hours

Storage Location

Eurofins Cooler #

EC

Foam Box

Client Cooler

Box

Other

Other

Other

Packing material used.

Bubble Wrap

Foam

Plastic Bag

None

Other

Other

1 Cooler temperature upon receipt

COOLANT

We Ice

Blue Ice

Dry Ice

Water

None

Other

Other

IR GUN # 17 (CF 10.2 °C)

Observed Cooler Temp.

10.2 °C

Corrected Cooler Temp

10.2 °C

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

2 Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes ☒ No ☐ NA

-Were the seals on the outside of the cooler(s) signed & dated?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

-Were tamper/custody seals intact and uncompromised?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

3 Shippers' packing slip attached to the cooler(s)?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

4 Did custody papers accompany the sample(s)?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

5 Were the custody papers relinquished & signed in the appropriate place?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

6 Was/were the person(s) who collected the samples clearly identified on the COC?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

7 Did all bottles arrive in good condition (Unbroken)?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?

Yes ☒ No ☐ NA

Other

Other

10 Were correct bottle(s) used for the test(s) indicated?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

11 Sufficient quantity received to perform indicated analyses?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

12. Are these work share samples and all listed on the COC?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

If yes, Questions 13-17 have been checked at the originating laboratory

13 Were all preserved sample(s) at the correct pH upon receipt?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

14 Were VOAs on the COC?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

15 Were air bubbles >6 mm in any VOA vials? ☒ Larger than this

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

17 Was a LL Hg or Me Hg trip blank present?

Yes ☒ No ☐ NA

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other

Concerning \_\_\_\_\_

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

19 SAMPLE CONDITION

Sample(s) \_\_\_\_\_ were received after the recommended holding time had expired

Sample(s) \_\_\_\_\_ were received in a broken container

Sample(s) \_\_\_\_\_ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) \_\_\_\_\_ were further preserved in the laboratory

Time preserved. \_\_\_\_\_ Preservative(s) added/Lot number(s) \_\_\_\_\_

VOA Sample Preservation Date/Time VOAs Frozen \_\_\_\_\_



[illegible]



5/31/2025

Login Container Summary Report

240-225626

Temperature readings				
<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservation Temp Added</u> <u>Lot Number</u>
MW-2S	240-225626-A-1	Plastic 500ml - with Nitric Acid	<2	
MW-7S	240-225626-A-2	Plastic 500ml - with Nitric Acid	<2	
MW-10	240-225626-A-3	Plastic 500ml - with Nitric Acid	<2	
DUP-01	240-225626-A-4	Plastic 500ml - with Nitric Acid	<2	
MW-9	240-225626-A-5	Plastic 500ml - unpreserved	<2	
DUP-02	240-225626-A-6	Plastic 500ml - unpreserved	<2	

## **Appendix C**

### **Data Quality Reviews**

**Laboratory Data Quality Review  
Groundwater Monitoring Event October 2024  
DTE Electric Company Monroe Power Plant Bottom Ash  
Impoundment**

Groundwater samples were collected by TRC for the October 2024 sampling event. Samples were analyzed for anions, total and/or dissolved metals, and total dissolved solids by Eurofins Cleveland, located in Barberton, Ohio. The laboratory analytical results are reported in laboratory report 240-213667-1.

During the October 2024 sampling event, a groundwater sample was collected from each of the following wells:

- |         |         |         |         |
|---------|---------|---------|---------|
| ■ MW-1S | ■ MW-2S | ■ MW-3S | ■ MW-7S |
| ■ MW-9  | ■ MW-10 | ■ MW-11 | ■ MW-12 |
| ■ MW-13 | ■ MW-14 | ■ MW-15 |         |

Each sample was analyzed for one the following constituents:

Analyte Group	Method
Anions (Chloride, Fluoride, Sulfate)	SW846 9056A
Total Recoverable Boron	SW846 3005A/6010D
Total Recoverable Calcium	SW846 3005A/6020B
Total Dissolved Solids (TDS)	SM 2540C

TRC reviewed the laboratory data to assess data usability. The following sections summarize the data review procedure and the results of the review.

### **Data Quality Review Procedure**

The analytical data were reviewed using the USEPA National Functional Guidelines for Inorganic Superfund Data Review (USEPA, 2020). The following items were included in the evaluation of the data:

- Sample receipt, as noted in the cover page or case narrative;
- Technical holding times for analyses;
- Reporting limits (RLs) compared to project-required RLs;
- Data for method blanks and equipment blanks, where applicable. Method blanks are used to assess potential contamination arising from laboratory sample preparation and/or analytical procedures. Equipment blanks are used to assess potential contamination arising from field procedures;
- Data for laboratory control samples (LCSs). The LCSs are used to assess the accuracy of the analytical method using a clean matrix;
- Data for matrix spike and matrix spike duplicate samples (MS/MSDs), when performed on project samples. The MS/MSDs are used to assess the accuracy and precision of the analytical method using a sample from the dataset;

- Data for laboratory duplicates, when performed on project samples. The laboratory duplicates are used to assess the precision of the analytical method using a sample from the dataset;
- Data for blind field duplicates. Field duplicate samples are used to assess variability introduced by the sampling and analytical processes; and
- Overall usability of the data.

This data usability report addresses the following items:

- Usability of the data if quality control (QC) results suggest potential problems with all or some of the data;
- Actions regarding specific QC criteria exceedances.

## Review Summary

The data quality objectives and laboratory completeness goals for the project were met, and the data are usable for their intended purpose. A summary of the data quality review, including non-conformances and issues identified in this evaluation are noted below.

- The reviewed Appendix III constituents as well as iron will be utilized for the purposes of a detection monitoring program.
- Data are usable for the purposes of the detection monitoring program.

## QA/QC Sample Summary

- TDS was analyzed slightly after the 7th day of collection for sample DUP-01. However, there is no impact on data usability since the sample was analyzed for TDS on the 7th day after collection.
- Target analytes were not detected in the method blanks.
- A field blank and equipment blank were not submitted with this sample set.
- LCS recoveries for all target analytes were within laboratory control limits.
- Laboratory duplicate analyses were performed on samples MW-12 and MW-13 for TDS; the RPDs were within the acceptance limit.
- The RLs met the project requirements and were deemed suitable for data usability.
- MS/MSD analyses were performed on sample MW-14 for total boron, fluoride, chloride, and sulfate, MW-13 for chloride, fluoride, and sulfate, MW-3S for total boron, and total calcium and DUP-01 for total calcium; all criteria were met with the following exceptions:
  - The percent recoveries for total calcium in the MS performed on samples DUP-01 and MW-3S were outside of the acceptance limits. However, the results for total calcium in the parent samples were >4x the spike concentration; therefore, this is no impact on data usability due to this issue.
  - The RPD for fluoride (19%) in the diluted MS/MSD performed on sample MW-14 was above the acceptance limit (15%). However, the laboratory reported two RPDs for fluoride in this MS/MSD pair and the RPD from the undiluted MS/MSD was acceptable. Therefore, based on professional judgement, there is no impact on the data usability due to this issue.

- Samples DUP-01/MW-14 were submitted as a field duplicate pair with this data set; all criteria were met.

**Laboratory Data Quality Review  
Groundwater Monitoring Event December 2024  
(Detection Verification Monitoring)  
DTE Electric Company Monroe Power Plant Bottom Ash  
Impoundment**

Groundwater samples were collected by TRC for the December 2024 sampling event. Samples were analyzed for fluoride, total boron, total calcium, and/or total dissolved solids by Eurofins Cleveland, located in Barberton, Ohio. The laboratory analytical results are reported in laboratory report 240-216227-1 (Revision 2).

During the December 2024 verification event, a groundwater sample was collected from each of the following wells:

- MW-2S
- MW-14
- MW-15

Each sample was analyzed for one or more of the following constituents:

Analyte Group	Method
Anions (Chloride, Fluoride, Sulfate)	SW846 9056A
Total Recoverable Boron	SW846 3005A/6010D
Total Recoverable Calcium	SW846 3005A/6020B
Total Dissolved Solids (TDS)	SM 2540C

TRC reviewed the laboratory data to assess data usability. The following sections summarize the data review procedure and the results of the review.

### **Data Quality Review Procedure**

The analytical data were reviewed using the USEPA National Functional Guidelines for Inorganic Superfund Data Review (USEPA, 2020). The following items were included in the evaluation of the data:

- Sample receipt, as noted in the cover page or case narrative;
- Technical holding times for analyses;
- Reporting limits (RLs) compared to project-required RLs;
- Data for method blanks and equipment blanks, where applicable. Method blanks are used to assess potential contamination arising from laboratory sample preparation and/or analytical procedures. Equipment blanks are used to assess potential contamination arising from field procedures;
- Data for laboratory control samples (LCSs). The LCSs are used to assess the accuracy of the analytical method using a clean matrix;
- Data for matrix spike and matrix spike duplicate samples (MS/MSDs), when performed on project samples. The MS/MSDs are used to assess the accuracy and precision of the analytical method using a sample from the dataset;

- Data for laboratory duplicates, when performed on project samples. The laboratory duplicates are used to assess the precision of the analytical method using a sample from the dataset;
- Data for blind field duplicates. Field duplicate samples are used to assess variability introduced by the sampling and analytical processes; and
- Overall usability of the data.

This data usability report addresses the following items:

- Usability of the data if quality control (QC) results suggest potential problems with all or some of the data;
- Actions regarding specific QC criteria exceedances.

## **Review Summary**

The data quality objectives and laboratory completeness goals for the project were met, and the data are usable for their intended purpose. A summary of the data quality review, including non-conformances and issues identified in this evaluation are noted below.

- The reviewed Appendix III constituents will be utilized for the purposes of a detection monitoring program.
- Data are usable for the purposes of the detection monitoring program.

## **QA/QC Sample Summary**

- Target analytes were not detected in the method blanks.
- An equipment blank and field blank were not submitted with this data set.
- LCS recoveries for all target analytes were within laboratory control limits.
- The RLs met the project requirements and were deemed suitable for data usability.
- MS/MSD and laboratory duplicate analyses were not performed on a sample from this data set.
- Samples DUP-01/MW-2S, DUP-02/MW-14, and DUP-03/MW-15 were submitted as the field duplicate pairs with this data set; all criteria were met.



**Laboratory Data Quality Review  
Groundwater Monitoring Event April 2025  
DTE Electric Company Monroe Power Plant Bottom Ash  
Impoundment**

Groundwater samples were collected by TRC for the April 2025 sampling event. Samples were analyzed for anions, total metals, and total dissolved solids by Eurofins Cleveland, located in Barberton, Ohio. The laboratory analytical results are reported in laboratory report 240-223387-1.

During the April 2025 sampling event, a groundwater sample was collected from each of the following wells:

- MW-01S                      ■ MW-02S                      ■ MW-3S                      ■ MW-7S
- MW-9                        ■ MW-10                      ■ MW-11                      ■ MW-12
- MW-13                      ■ MW-14                      ■ MW-15

Each sample was analyzed for one the following constituents:

Analyte Group	Method
Anions (Chloride, Fluoride, Sulfate)	SW846 9056A
Total Boron	SW846 3005A/6010D
Total Calcium	SW846 3005A/6020B
Total Dissolved Solids (TDS)	SM 2540C-2020

TRC reviewed the laboratory data to assess data usability. The following sections summarize the data review procedure and the results of the review.

### **Data Quality Review Procedure**

The analytical data were reviewed using the USEPA National Functional Guidelines for Inorganic Superfund Data Review (USEPA, 2020). The following items were included in the evaluation of the data:

- Chain-of-custody (COC) and data completeness;
- Sample receipt, as noted in the cover page or case narrative
- Technical holding times for analyses;
- Reporting limits (RLs) compared to project-required RLs;
- Data for method blanks and equipment blanks, where applicable. Method blanks are used to assess potential contamination arising from laboratory sample preparation and/or analytical procedures. Equipment blanks are used to assess potential contamination arising from field procedures;
- Data for laboratory control samples (LCSs) and laboratory control sample duplicates (LCSDs), when performed. The LCSs and/or LCSDs are used to assess the accuracy of the analytical method using a clean matrix;

- Data for matrix spike (MS) and matrix spike duplicate samples (MSDs), when performed on project samples. The MS/MSDs are used to assess the accuracy and precision of the analytical method using a sample from the dataset;
- Data for laboratory duplicates, when performed on project samples. The laboratory duplicates are used to assess the precision of the analytical method using a sample from the dataset;
- Data for blind field duplicates. Field duplicate samples are used to assess variability introduced by the sampling and analytical processes; and
- Overall usability of the data.

This data usability report addresses the following items:

- Usability of the data if quality control (QC) results suggest potential problems with all or some of the data;
- Actions regarding specific QC criteria exceedances.

## Review Summary

The data quality objectives and laboratory completeness goals for the project were met, and the data are usable for their intended purpose. A summary of the data quality review, including non-conformances and issues identified in this evaluation are noted below.

- The reviewed Appendix III constituents will be utilized for the purposes of a detection monitoring program.
- Data are usable for the purposes of the detection monitoring program.
- When the data are evaluated through an assessment monitoring statistical program, findings below may be used to support the removal of outliers.

## QA/QC Sample Summary

- Sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. The following discrepancies were noted:
  - The laboratory reported boron using SW846 method 6010D rather than 6010B as requested on the COC. There was no adverse impact on the data usability due to this issue.
- The cooler temperature was between 0-6°C and acid was used for sample preservation, as applicable.
  - The samples were relinquished to the laboratory one day after collection. The field staff has stated during previous rounds of data review that when this occurs, samples are stored in coolers, on ice until shipment to the lab. There is no impact on data usability.
- All preparation and analysis holding time requirements were met.
- Target analytes were not detected in the method blanks.
- A field blank and equipment blank were not submitted with this sample set.
- LCS recoveries for all target analytes were within laboratory control limits.
- MS and MSD analyses were not performed on a sample from this data set.

- Laboratory duplicate analysis was performed on sample MW-01S for TDS; the RPD was within the QC limit.
- Samples DUP-01 and MW-15 were submitted as the field duplicate pair with this data set; all criteria were met.
- The RLs met the project requirements and were deemed suitable for data usability.
  - The RL for TDS (20 mg/L) in samples MW-3S, MW-11, MW-12, MW-14, MW-02S, and MW-7S was greater than the QAPP-specified RL (10 mg/L); a lower volume was likely analyzed due to conductivity. There is no adverse impact on data usability since TDS was detected in the listed samples.
  - The RL for boron (100 µg/L) was lower than the QAPP-specified RL (200 µg/L). There is no adverse impact the data usability since the reported RL is lower than the QAPP specified RL and the boron detections are greater than the requested RL.
- The following dilutions were performed on the samples in this data set; RLs were elevated accordingly by the laboratory:
  - Samples MW-3S, MW-11, MW-12, MW-02S, and MW-7S were diluted 10-fold for sulfate, and sample MW-14 was diluted 10-fold for chloride and sulfate likely due to the concentrations of sulfate and/or chloride which exceeded the calibration range when analyzed undiluted. There is no impact on data usability due to this issue since sulfate in samples MW-3S, MW-11, MW-12, MW-02S, and MW-7S, and chloride and sulfate in sample MW-14 were detected above the RLs.

**Laboratory Data Quality Review  
Groundwater Monitoring Event May 2025  
DTE Electric Company Monroe Power Plant Bottom Ash  
Impoundment**

Groundwater samples were collected by TRC for the May 2025 sampling event. Samples were analyzed for total metals and total dissolved solids by Eurofins Cleveland, located in Barberton, Ohio. The laboratory analytical results are reported in laboratory report 240-225626-1.

During the May 2025 sampling event, a groundwater sample was collected from each of the following wells:

- MW-7S
- MW-9
- MW-10

Each sample was analyzed for one or more of the following constituents:

Analyte Group	Method
Total Calcium	SW846 3005A/6020B
Total Dissolved Solids (TDS)	SM 2540C-2020

TRC reviewed the laboratory data to assess data usability. The following sections summarize the data review procedure and the results of the review.

### **Data Quality Review Procedure**

The analytical data were reviewed using the USEPA National Functional Guidelines for Inorganic Superfund Data Review (USEPA, 2020). The following items were included in the evaluation of the data:

- Chain-of-custody (COC) and data completeness;
- Sample receipt, as noted in the cover page or case narrative;
- Technical holding times for analyses;
- Reporting limits (RLs) compared to project-required RLs;
- Data for method blanks and equipment blanks, where applicable. Method blanks are used to assess potential contamination arising from laboratory sample preparation and/or analytical procedures. Equipment blanks are used to assess potential contamination arising from field procedures;
- Data for laboratory control samples (LCSs). The LCSs are used to assess the accuracy of the analytical method using a clean matrix;
- Data for matrix spike (MS) and matrix spike duplicate samples (MSDs), when performed on project samples. The MS/MSDs are used to assess the accuracy and precision of the analytical method using a sample from the dataset;
- Data for laboratory duplicates, when performed on project samples. The laboratory duplicates are used to assess the precision of the analytical method using a sample from the dataset;

- Data for blind field duplicates. Field duplicate samples are used to assess variability introduced by the sampling and analytical processes; and
- Overall usability of the data.

This data usability report addresses the following items:

- Usability of the data if quality control (QC) results suggest potential problems with all or some of the data;
- Actions regarding specific QC criteria exceedances.

## Review Summary

The data quality objectives and laboratory completeness goals for the project were met, and the data are usable for their intended purpose. A summary of the data quality review, including non-conformances and issues identified in this evaluation are noted below.

- The reviewed Appendix III constituents will be utilized for the purposes of a detection monitoring program.
- Data are usable for the purposes of the detection monitoring program.
- When the data are evaluated through an assessment monitoring statistical program, findings below may be used to support the removal of outliers.

## QA/QC Sample Summary

- Sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancy was noted.
- The cooler temperature was between 0-6°C and acid was used for sample preservation, as applicable.
  - The samples were relinquished to the laboratory one day after collection. The field staff has stated during previous rounds of data review that when this occurs, samples are stored in coolers, on ice until shipment to the lab. There is no impact on data usability
- All preparation and analysis holding time requirements were met.
- Target analytes were not detected in the method blanks.
- A field blank and equipment blank were not submitted with this sample set.
- LCS recoveries for all target analytes were within laboratory control limits.
- MS and MSD analyses were not performed on a sample from this data set.
- A laboratory duplicate analysis was not performed on a sample from this data set.
- Samples DUP-01 and MW-7S, and samples DUP-02 and MW-9 were submitted as the field duplicate pairs with this data set; all criteria were met.
- The RLs met the project requirements and were deemed suitable for data usability.
- All dilution factors were listed as 1-fold.