2023 Annual Groundwater Monitoring Report

Monroe Power Plant Bottom Ash Impoundment
Inactive Coal Combustion Residual Unit

3500 East Front Street
Monroe, Michigan

July 2023

Prepared For:

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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 CCR units that were inactive prior to April 17, 2018. 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 2023 monitoring period. The semiannual detection monitoring events for 2023 were completed in October 2022 and April 2023, 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 2023 reporting period are presented in this report.

A SSI for chloride was detected at one monitoring well, MW-9, during the April 2023 monitoring event and was verified by resampling.

According to §257.94(e), if the facility determines, pursuant to §257.93(h), that there is a SSI over background levels for one or more of the Appendix III constituents, the facility will, within 90 days of confirming a SSI, establish an assessment monitoring program or demonstrate that:

- A source other than the CCR unit caused the SSI, or
- The SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.

In response to the chloride SSI noted during the April 2023 monitoring event, DTE Electric is evaluating potential alternative sources for the SSI and will develop an Alternative Source Demonstration (ASD) if appropriate.

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 CCR units that were inactive prior to April 17, 2018. 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).

As documented in the *Annual Groundwater Monitoring Report for the Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit (2022 Annual Report)* (TRC, July 2022), covering the 2022 reporting period (July 1, 2021 through June 30, 2022) activities, DTE Electric reported that the total dissolved solids (TDS) concentration within groundwater at MW-14 was outside the established statistical background limit. As a result, an Alternate Source Demonstration (ASD) was performed pursuant to §257.94(e) and concluded that the SSI can be attributed to the variability in groundwater quality. Therefore, no SSI was associated with the MONPP BAI CCR unit in the 2022 reporting period and DTE Electric continued detection monitoring during the 2023 reporting period pursuant to §257.94 of the CCR Rule. The August 2022 ASD is provided in Appendix A.

TRC prepared this 2023 Annual Groundwater Monitoring Report (2023 Annual Report) for the MONPP BAI CCR unit on behalf of DTE Electric for the reporting period that extends from July 1, 2022 through June 30, 2023 and presents the monitoring results and the statistical evaluation of the detection monitoring parameters for the October 2022 and April 2023 semiannual groundwater monitoring events for the MONPP BAI Inactive CCR unit.

These events are the eighth and ninth detection monitoring events performed to comply with §257.94. The monitoring was performed in accordance with the *Groundwater Monitoring Work Plan Coal Combustion Residuals (CCR) Rule – Inactive Bottom Ash Basin DTE Monroe Plant* (Work Plan) (AECOM, September 2017) and statistically evaluated per the *Groundwater Statistical Evaluation Plan Coal Combustion Residuals (CCR) Rule – Inactive Bottom Ash Basin DTE Monroe Plant* (Stats Plan) (AECOM, April 2019, Revision 1 August 2019). As part of the statistical evaluation, the data collected during detection monitoring events are evaluated to identify statistically significant increases (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 for the BAI closure by CCR removal is ongoing.

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 with groundwater elevations ranging between approximately 572.6 and 575.6 feet above mean sea level (msl).

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 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. 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 (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 2023 monitoring period was performed October 10 and 11, 2022, 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 2022 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 3 and 4, 2023, 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 2023 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 2022 and April 2023 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 2022 and April 2023 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 2022 and April 2023 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 2022 event is estimated at 0.002 ft/ft using the inferred 575 foot contour line and groundwater elevations measured at MW-9, MW-11, and MW-13, 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 2023 event is estimated at 0.002 ft/ft using the 575 foot contour line and groundwater level elevations measured at MW-9, MW-11, and MW-13, 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 2022)

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 2022 Appendix III indicator parameters shows potential SSIs over background for:

- Fluoride at MW-9;
- Sulfate at MW-7S, and MW-14; and
- Total dissolved solids at MW-14.

The exceedances observed during the First Semiannual Event in October 2022 for fluoride at MW-9, and sulfate at MW-7S and MW-14, are not attributable to the CCR unit based on previous demonstrations of natural variability for these constituents at these locations (TRC, August 2021; TRC, September 2020; and TRC, February 2022; respectively). In addition, the total dissolved solids (TDS) exceedance at MW-14 is also attributed to natural variability based on the demonstration that was submitted to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) on August 25, 2022 (Appendix A). These ASDs continue to be applicable given the conditions in which the October 2022 exceedances for fluoride at MW-9, sulfate at MW-7S and MW-14, and TDS 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. Therefore, no verification resampling was performed.

3.3 Data Comparison to Background Limits – Second Semiannual Event (April 2023)

The data comparisons for the April 2023 groundwater monitoring event are presented on Table 4. Based on the statistical evaluation of the April 2023 Appendix III indicator parameters

potential SSIs were identified for the following:

- Boron at MW-2S, MW-10, and MW-11;
- Calcium at MW-3S; and
- Chloride at MW-9.

The boron exceedance at MW-10 and MW-11 during the second semiannual event in April 2023 is attributed to natural variation in local and regional groundwater quality and is not from a release from the CCR unit based on a previous demonstration (TRC, March 2021). This ASD continues to be applicable given the conditions in which the April 2023 exceedances for boron at MW-10 and MW-11 occurred, and the basis of attributing these concentrations to natural variability 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-3S for calcium, and at MW-9 for chloride as described in Section 3.4. There were no potential SSIs compared to background for fluoride, pH, sulfate, or TDS.

3.4 Verification Resampling – Second Semiannual Event (April 2023)

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 June 12, 2023, by TRC personnel for boron at MW-2S, calcium at MW-3S, and chloride at MW-9. 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 June 2023 verification sampling confirmed the SSI for chloride at monitoring well MW-9. Per §257.94(e), DTE Electric is in the process of evaluating potential alternate sources for the chloride SSI at MW-9.

4.0 Conclusions and Recommendations

SSIs over background limits from the October 2022 monitoring event were affirmed to be from an alternate source. For the April 2023 monitoring event, a SSI of chloride concentration was observed at one monitoring well location, MW-9, as verified by resampling. The source of the SSI is being further evaluated, and an ASD will be developed, if appropriate.

According to §257.94(e), in the event that the facility determines, pursuant to §257.93(h), that there is a SSI over background levels for one or more of the Appendix III constituents, the facility will, within 90 days of confirming a SSI, establish an assessment monitoring program or demonstrate that:

- A source other than the CCR unit caused the SSI, or
- The SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.

The owner or operator must complete a written demonstration (i.e., ASD), of the above within 90 days of confirming the SSI. Based on the outcome of the ASD the following steps will be taken:

- If a successful ASD is completed, a certification from a qualified professional engineer is required, and the CCR unit may continue with detection monitoring.
- If a successful ASD is not completed within the 90-day period, the owner or operator of the CCR unit must initiate an assessment monitoring program as required under §257.95. The facility must also include the ASD in the annual groundwater monitoring and corrective action report required by §257.90(e), in addition to the certification by a qualified professional engineer.

In response to the chloride SSI over the background limit noted during the April 2023 event, DTE Electric is evaluating whether a source other than the MONPP BAI Inactive CCR unit caused the SSI and will develop an ASD, if appropriate.

The next semiannual monitoring event at the MONPP BAI is scheduled for the fourth calendar quarter of 2023.

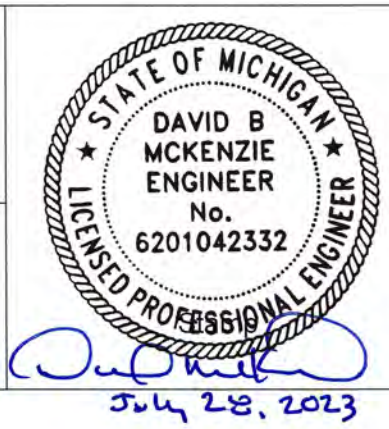
5.0 Groundwater Monitoring Report Certification

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, 2023	
Company: TRC Engineers Michigan, Inc.	Date: July 28, 2023	July 28, 2023

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 1 August 2019. 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. 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: 2020 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. August 2021. Alternative Source Demonstration: First Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit. Technical Memorandum to DTE Electric Company dated August 11, 2021.

TRC. February 2022. Alternate Source Demonstration: Second Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit. Technical Memorandum to DTE Electric Company dated February 24, 2022.

TRC. July 2022. 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 2022 to April 2023
Monroe Power Plant BAI Inactive CCR Unit – RCRA CCR Monitoring Program
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
10/10/2022	9.63	572.99	5.04	573.81	3.41	574.17	2.80	573.40	5.10	573.95	3.91	573.55	6.32	574.26	8.72	573.77	8.16	572.81	5.79	574.97	7.78	573.02
04/03/2023	7.50	575.12	5.10	573.75	3.72	573.86	1.91	574.29	4.63	574.42	3.00	574.46	6.75	573.83	8.62	573.87	7.25	573.72	5.50	575.26	7.06	573.74

Notes:

Elevations are reported in feet relative to the North American Vertical Datum of 1988.

ft BTOC - feet below top of casing

(1) - Measurement was collected on April 6, 2023.

NM - Not Measured.

Table 2
Summary of Field Parameters – October 2022 - April 2023
Monroe Power Plant BAI Inactive CCR Unit – RCRA CCR Monitoring Program
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	10/10/2022	2.58	-33.9	6.9	1,376	14.2	42.5
	4/3/2023	4.90	58.2	7.4	466	10.6	13.0
MW-2S	10/11/2022	1.19	-68.8	7.4	1,646	15.0	5.00
	4/4/2023	1.10	-87.7	7.6	1,570	12.9	6.22
	6/12/2023	1.20	-111.0	7.5	1,980	14.8	12.0
MW-3S	10/10/2022	1.42	-78.4	7.3	1,774	19.2	63.9
	4/3/2023	1.40	-77.9	7.4	1,766	15.6	60
	6/12/2023	0.45	-120.3	7.3	1,970	16.5	90
MW-7S	10/11/2022	1.58	50.3	7.1	1,301	16.5	1.37
	4/4/2023	6.20	25.4	7.6	538	12.9	7.77
MW-8S	10/11/2022	2.92	-73.7	7.2	1,733	12.8	1.43
	4/6/2023	1.33	-69.7	7.0	1,586	10.2	2.17
MW-9	10/10/2022	1.21	-58.8	6.9	1,172	16.4	2.28
	4/3/2023	1.20	-36.6	6.9	1,143	13.6	3.30
	6/12/2023	0.10	-169.3	6.9	1,410	15.2	15.0
MW-10	10/10/2022	1.24	-130.6	7.0	1,225	16.6	0.60
	4/3/2023	1.10	-140.2	7.1	1,162	13.8	2.54
MW-11	10/10/2022	1.40	-75.0	7.3	1,835	15.0	5.44
	4/4/2023	1.90	-37.0	7.3	1,655	11.0	11.0
MW-12	10/11/2022	1.26	-98.1	7.5	1,532	14.4	3.31
	4/4/2023	1.80	-49.5	7.6	1,465	12.5	8.21
MW-13	10/11/2022	1.23	-82.2	6.9	701	14.2	0.89
	4/4/2023	0.90	-90.4	7.1	668	12.2	6.22
MW-14	10/10/2022	1.30	-89.9	7.0	2,088	14.6	3.65
	4/3/2023	1.20	-99.2	7.1	1,828	12.0	3.03
MW-15	10/11/2022	1.07	-111.8	7.2	1,027	17.9	0.46
	4/4/2023	1.00	-107.8	7.3	928	14.2	2.57

Notes:
mg/L -Milligrams per Liter.
mV - Millivolts.
SU - Standard Units.
umhos/cm - Micromhos per centimeter.
°C - Degrees Celsius.
NTU - Nephelometric Turbidity Unit

Table 3
Comparison of Appendix III Parameter Results to Background Limits – October 2022
Monroe Power Plant BAI Inactive CCR Unit – RCRA CCR Monitoring Program
Monroe, Michigan

Sample Location:		MW-1S		MW-2S		MW-3S		MW-7S		MW-9		MW-10	
Sample Date:		10/10/2022	PL	10/11/2022	PL	10/10/2022	PL	10/11/2022	PL	10/10/2022	PL	10/10/2022	PL
Constituent	Unit	Data		Data		Data		Data		Data		Data	
Appendix III													
Boron	ug/L	630	870	930	1,000	770	980	740	1,400	500	640	520	530
Calcium	ug/L	250,000	370,000	230,000	270,000	210,000	540,000	230,000	380,000	170,000	190,000	160,000	170,000
Chloride	mg/L	120	170	11	14	13	15	52	110	47	59	55	80
Fluoride	mg/L	0.25	0.47	0.74	0.89	0.85	0.98	0.83	1.6	**0.62**[(2)]	0.56	0.53	0.68
pH, Field	su	6.9	6.5 - 8.7	7.4	7.0 - 8.5	7.3	6.9 - 7.9	7.1	6.0 - 8.1	6.9	6.0 - 7.0	7.0	6.6 - 7.5
Sulfate	mg/L	89	850	1,300	1,600	1,200	1,400	**610**[(1)]	590	< 1	12	2.8	19
Total Dissolved Solids	mg/L	1,000	1,600	1,700	2,000	2,200	2,300	1,100	2,000	760	810	820	840

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).
(1) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: 2020 First Semiannual Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated September 21, 2020.
(2) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: First Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated August 11, 2021.
(3) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: Second Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated February 24, 2022.
(4) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: First Semiannual 2022 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated August 25, 2022.

Table 3
Comparison of Appendix III Parameter Results to Background Limits – October 2022
Monroe Power Plant BAI Inactive CCR Unit – RCRA CCR Monitoring Program
Monroe, Michigan

Sample Location:		MW-11		MW-12		MW-13		MW-14		MW-15	
Sample Date:		10/10/2022	PL	10/11/2022	PL	10/11/2022	PL	10/10/2022	PL	10/11/2022	PL
Constituent	Unit	Data		Data		Data		Data		Data	
Appendix III											
Boron	ug/L	840	920	1,000	1,100	< 100	100	1,400	1,700	2,500	2,800
Calcium	ug/L	240,000	330,000	180,000	210,000	120,000	140,000	290,000	310,000	130,000	150,000
Chloride	mg/L	16	18	11	13	99	120	300	310	110	150
Fluoride	mg/L	0.95	1.2	0.87	0.91	0.4	0.51	0.42	0.57	0.48	0.64
pH, Field	su	7.3	6.9 - 7.5	7.5	7.4 - 7.9	6.9	6.2 - 7.7	7.0	6.8 - 7.3	7.2	6.9 - 7.4
Sulfate	mg/L	1,400	1,500	1,200	1,300	< 1	1.0	**490**[3]	430	< 1	1.0
Total Dissolved Solids	mg/L	2,100	2,100	1,600	1,800	490	1,100	**1,800**[4]	1,700	620	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).
(1) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: 2020 First Semiannual Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated September 21, 2020.
(2) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: First Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated August 11, 2021.
(3) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: Second Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated February 24, 2022.
(4) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: First Semiannual 2022 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated August 25, 2022.

Table 4
Comparison of Appendix III Parameter Results to Background Limits – April and June 2023
Monroe Power Plant BAI Inactive CCR Unit – RCRA CCR Monitoring Program
Monroe, Michigan

Sample Location:		MW-1S		MW-2S			MW-3S			MW-7S		MW-9		
Sample Date:		4/3/2023	PL	4/4/2023	6/12/2023	PL	4/3/2023	6/12/2023	PL	4/4/2023	PL	4/3/2023	6/12/2023	PL
Constituent	Unit	Data		Data			Data			Data		Data		
Appendix III														
Boron	ug/L	200	870	**1,100**	1,000	1,000	970	--	980	150	1,400	580	--	640
Calcium	ug/L	100,000	370,000	230,000	--	270,000	**550,000**	280,000	540,000	97,000	380,000	170,000	--	190,000
Chloride	mg/L	9.4	170	11	--	14	12	--	15	7.9	110	**62**	**69**	**59**
Fluoride	mg/L	0.14	0.47	0.61	--	0.89	0.71	--	0.98	0.48	1.6	0.45	--	0.56
pH, Field	su	7.4	6.5 - 8.7	7.6	--	7.0 - 8.5	7.4	--	6.9 - 7.9	7.6	6.0 - 8.1	6.9	--	6.0 - 7.0
Sulfate	mg/L	99	850	1,300	--	1,600	1,200	--	1,400	270	590	< 1	--	12
Total Dissolved Solids	mg/L	400	1,600	1,800	--	2,000	1,800	--	2,300	500	2,000	760	--	810

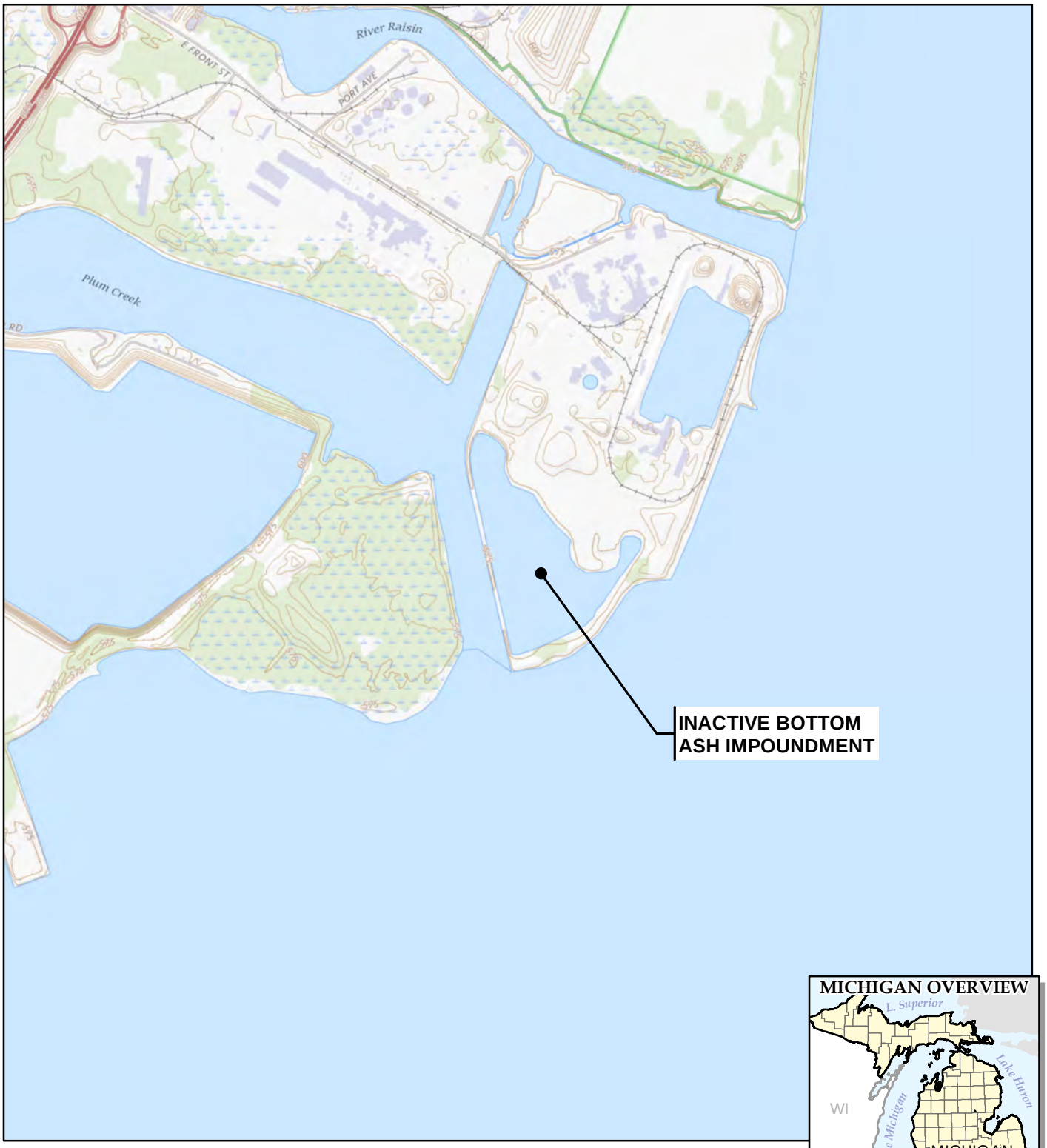
Notes:
ug/L - micrograms per liter.
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
-- = not analyzed
All metals were analyzed as total unless otherwise specified.
Bold font indicates an exceedance of the Prediction Limit (PL).
RESULT Shading and bold font indicates a confirmed exceedance of the Prediction Limit (PL).
(1) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: 2020 Second Semiannual Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated March 18, 2021.

Table 4
Comparison of Appendix III Parameter Results to Background Limits – April and June 2023
Monroe Power Plant BAI Inactive CCR Unit – RCRA CCR Monitoring Program
Monroe, Michigan

Sample Location:		MW-10		MW-11		MW-12		MW-13		MW-14		MW-15	
Sample Date:		4/3/2023	PL	4/4/2023	PL	4/4/2023	PL	4/4/2023	PL	4/3/2023	PL	4/4/2023	PL
Constituent	Unit	Data		Data		Data		Data		Data		Data	
Appendix III													
Boron	ug/L	**560**[(1)]	530	**940**[(1)]	920	1,000	1,100	< 100	100	1,600	1,700	2,700	2,800
Calcium	ug/L	150,000	170,000	240,000	330,000	170,000	210,000	120,000	140,000	270,000	310,000	140,000	150,000
Chloride	mg/L	56	80	15	18	9.7	13	95	120	260	310	110	150
Fluoride	mg/L	0.4	0.68	0.8	1.2	0.71	0.91	0.3	0.51	0.29	0.57	0.45	0.64
pH, Field	su	7.1	6.6 - 7.5	7.3	6.9 - 7.5	7.6	7.4 - 7.9	7.1	6.2 - 7.7	7.1	6.8 - 7.3	7.3	6.9 - 7.4
Sulfate	mg/L	11	19	1,400	1,500	1,100	1,300	< 1	1.0	400	430	< 1	1.0
Total Dissolved Solids	mg/L	800	840	1,900	2,100	1,600	1,800	530	1,100	1,600	1,700	650	770

Notes:
ug/L - micrograms per liter.
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
-- = not analyzed
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 Alternative Source Demonstration: 2020 Second Semiannual Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated March 18, 2021.

Figures



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

1 " = 2,000 '
1:24,000

0 2,000 4,000
FEET

TRC

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:	B. YELEN
APPROVED BY:	V. BUENING
DATE:	JULY 2023
PROJ. NO.:	518728.0006.0000
FILE:	Oct2022_518728.0006-001.mxd

FIGURE 1

S:\1-PROJECTS\DTE_Energy\MonroeMI_PP\413591_0006_Area15\Oct2022_518728.0006-001.mxd -- Saved By: EDOUMA on 5/30/2023, 09:59:28 AM

Plot Date: 5/30/2023, 09:56:52 AM by EDOUMA -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\DTE_Energy\MonroeMI_PP\413591_0006_Area15\Oct2022_518728.0006-002.mxd

Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0

TRC - GIS

LEGEND

- CCR PROGRAM MONITORING WELL
- INVESTIGATION MONITORING WELL (STATIC WATER LEVELS ONLY)
- UNIT SEPARATION BERM
- APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH IMPOUNDMENT
- APPROXIMATE PLANT BOUNDARY

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, (MARCH 2021).

N

1 " = 700 '
1:8,400

0 700 1,400
FEET

TRC
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. ADAIR
CHECKED BY:	B. YELEN
APPROVED BY:	V. BUENING
DATE:	JULY 2023
PROJ. NO.:	518728.006.0000
FILE:	Oct2022_518728.0006-002.mxd

FIGURE 2

Plot Date: 1/12/2023, 09:50:48 AM by AADAIR -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\DTE_Energy\MonroeMI_PP\413591_0006_Area15\Oct2022_461816.0006-004.mxd

Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0

TRC - GIS

Port Ave
McmillanSt
E Front St
River Raisin
Discharge Canal
Plum Creek
Lake Erie
573'
574'
575'
MW-15 (573.02)
MW-14 (574.97)
MW-4S (NM)
MW-7S (573.40)
MW-9 (573.95)
MW-10 (573.55)
MW-1S (572.99)
MW-13 (572.81)
MW-3S (574.17)
Lake Erie Surface Water Elevation (572.16)
MW-2S (573.81)
MW-12 (573.77)
MW-11 (574.26)

LEGEND

- MONITORING WELL
- GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- UNIT SEPARATION BERM
- APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH BASIN
- APPROXIMATE PLANT BOUNDARY

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, MARCH 2021.
2. LAKE ERIE SURFACE WATER ELEVATION MEASURED AT NOAA GAUGING STATION 9063090 NEAR THE DTE FERMI POWER PLANT, NEWPORT, MICHIGAN.

N

1 " = 700 '
1:8,400

0 700 1,400 FEET

TRC
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:
GROUNDWATER CONTOUR MAP
OCTOBER 2022

DRAWN BY:	A. ADAIR
CHECKED BY:	B. YELEN
APPROVED BY:	BUENING
DATE:	JANUARY 2023
PROJ. NO.:	461816.0006
FILE:	Oct2022_461816.0006-004.mxd

FIGURE 3

Plot Date: 7/21/2023, 12:09:44 PM by AADAIR -- LAYOUT: ANSI B (11"x17")
Path: T:\1-PROJECTS\DTE Energy\MonroeMI_PP\413591_0006_Area15\Apr2023_461816.0006-004.mxd
Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0
TRC - GIS

LEGEND

- MONITORING WELL
- GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- UNIT SEPARATION BERM
- APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH BASIN
- APPROXIMATE PLANT BOUNDARY

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, MARCH 2021.
2. LAKE ERIE SURFACE WATER ELEVATION MEASURED AT NOAA GAUGING STATION 9063090 NEAR THE DTE FERMI POWER PLANT, NEWPORT, MICHIGAN.

N

1 " = 700 '
1:8,400

0 700 1,400 FEET

TRC
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:
GROUNDWATER CONTOUR MAP
APRIL 2023

DRAWN BY:	A. ADAIR
CHECKED BY:	B. YELEN
APPROVED BY:	BUENING
DATE:	JULY 2023
PROJ. NO.:	461816.0006
FILE:	Apr2023_461816.0006-004.mxd

FIGURE 4

Appendix A
August 2022 Alternative Source Demonstration

1540 Eisenhower Pl.
Ann Arbor, MI 48108

T 734.971.7080
TRCcompanies.com

August 25, 2022

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: First Semiannual 2022 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 *First Semiannual 2022 Groundwater Monitoring Report* for the Site (TRC, July 2022), the statistical evaluation of the April 2022 detection monitoring indicator parameters indicated potential statistically significant increases (SSIs) for:

Total dissolved solids (TDS) at MW-14 (1,800 mg/L with a PL of 1,700 mg/L).

Verification resampling for TDS at MW-14 from the April 2022 event was conducted on June 1, 2022 by TRC personnel. The verification result for TDS at MW-14 (1,800 mg/L) was slightly above the PL (1,700 mg/L); therefore, the initial SSI for TDS at MW-14 is confirmed (Table 1).

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 TDS SSI at MW-14 identified in the April 2022 detection monitoring event. The results of this ASD show that the TDS SSI at MW-14 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 (the variability in the presence of the sand unit aquifer across the site and the strong confined hydraulic pressure in the sand unit aquifer), in addition to other supporting lines of evidence that the aquifer is unaffected by the CCR unit (such as the consistency in concentrations of water quality data). 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. 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 TDS at MW-14 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 June 2022 verification resampling confirmed the TDS exceedance at MW-14 (Table 1). The following discussion presents the ASD for the confirmed prediction limit exceedance.

Total Dissolved Solids at MW-14

The SSI of TDS in the groundwater at MW-14, shown on Table 1, is due to upgradient groundwater quality and not the release of CCR constituents from the MONPP BAI CCR unit. The lines of evidence provided in support of this conclusion are as follows:

Upgradient/Side gradient groundwater quality – Monitoring well MW-14 is positioned hydraulically side gradient of groundwater flow on the northeast side of the MONPP BAI Inactive CCR unit as shown on Figures 3 through 6. The MONPP BAI Inactive CCR unit is located on the southern end of a peninsula where groundwater within the underlying sand unit aquifer generally flows outward toward the adjacent surface water bodies. In the area of monitoring well MW-14, groundwater flow is east/southeast toward Lake Erie and monitoring well MW-1S, perpendicular to the contour lines on Figures 3 through 6. Based on the location of monitoring well MW-14 relative to the CCR unit and groundwater flow direction consistently to the east-southeast, the groundwater chemistry is representative of the groundwater coming from the area just north and up-/side gradient of the CCR unit. As such, the SSI at MW-14 is not attributed to the CCR unit.

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 TDS SSI observed at MW-14 is slightly above the prediction limit as shown in (Figure 7). Similar changes are observed from this past event at multiple other wells across the site well network both hydraulically downgradient and offsite, such as the downgradient wells MW-2S and offsite monitoring well MW-8S, shown on the Figure 8 time-series plot. This shows the subtle variability is occurring at a broader more-regional scale rather than a localized area, further indicating temporal changes. The short duration of the background data collection timeline limits the ability of the statistical analysis to capture the natural temporal trends in the groundwater quality at the MONPP BAI. This limited temporal variability can only be corrected with the collection of additional groundwater data, and the inclusion of the additional data in the background data set updated in the future.

Spatial variability in groundwater quality – TDS concentrations vary considerably across the MONPP BAI well network. The TDS concentrations observed in the MONPP BAI well network between 2017 and 2022 ranged from 410 mg/L to 2,200 mg/L. The TDS concentrations observed at MW-14 (1,800 mg/L) during the April 2022 detection monitoring event and the June 2022 verification event are only slightly above the prediction limit (1,700 mg/L) and are well within the range of 410 mg/L to 2,200 mg/L observed across the entire monitoring network (Figure 8).

Offsite groundwater chemistry at MW-8S – Offsite monitoring well MW-8S is screened in similar strata to MW-14 and is not hydraulically connected to groundwater beneath the MONPP BAI Inactive CCR unit. Therefore, groundwater quality at MW-8S provides insight into local background groundwater quality and can be used to evaluate TDS concentrations observed at MW-14. Monitoring well MW-8S is located west of the MONPP BAI Inactive CCR unit, on the opposite side of the discharge channel. Based on historical site modifications that changed the underlying lithology beneath the discharge channel, groundwater in the area of monitoring well MW-8S is not hydraulically connected to groundwater in the vicinity of the MONPP BAI Inactive CCR unit. Historical groundwater data from MW-8S shows TDS concentrations ranged from 2,040 to 2,200 mg/L from 2017 through 2022, compared to 770 mg/L to 1,800 mg/L measured at MW-14 from 2017 through 2022 (Figure 8). This demonstrates that the TDS concentrations at monitoring well MW-14 are below background for the area, and as mentioned above, has the potential to be influenced by additional sources for TDS outside of the CCR unit.

Regional groundwater quality – Groundwater in the region surrounding the MONPP BAI shows variability in TDS concentrations. Regional United States Geological Survey (USGS) monitoring wells in Monroe County show a range of TDS concentrations from 155 mg/L to 2,920 mg/L (USGS 2016). The SSI concentration of TDS measured in MW-14 during both the April 2022 detection monitoring event and the June 2022 verification event was 1,800 mg/L. These TDS concentrations at MW-14 are well within the range of regional variation near the MONPP BAI Inactive 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 TDS SSI from the first semiannual 2022 groundwater monitoring event is due to variability of background groundwater quality and is not due to a release of CCR 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 23, 2023	STATE OF MICHIGAN DAVID B MCKENZIE ENGINEER No. 6201042332 LICENSED PROFESSIONAL ENGINEER SEAL
Company: TRC Engineers Michigan, Inc.	Date: August 25, 2022	August 25, 2022

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 Verification Sampling Results to Background Limits – April and June 2022
Figure 1	Site Location Map
Figure 2	Well Location Map
Figure 3	Groundwater Contour Map October 2020
Figure 4	Groundwater Contour Map April 2021
Figure 5	Groundwater Contour Map October 2021
Figure 6	Groundwater Contour Map April 2022
Figure 7	MW-14 TDS Time Series
Figure 8	TDS Time Series
Appendix A	References
Appendix B	USGS Historical TDS Analytical Data

Table

Table 1
Comparison of Verification Sampling Results to Background Limits – April and June 2022
Monroe Power Plant BAI Inactive CCR Unit
Monroe, Michigan

Sample Location:		MW-1S		MW-2S		MW-3S		MW-7S		MW-9	
Sample Date:		4/4/2022	PL	4/5/2022	PL	4/4/2022	PL	4/5/2022	PL	4/4/2022	PL
Constituent	Unit	Data		Data		Data		Data		Data	
Appendix III											
Boron	ug/L	460	870	1,000	1,000	690	980	170	1,400	550	640
Calcium	ug/L	220,000	370,000	250,000	270,000	260,000	540,000	200,000	380,000	190,000	190,000
Chloride	mg/L	84	170	11	14	13	15	19	110	41	59
Fluoride	mg/L	0.20	0.47	0.73	0.89	0.76	0.98	0.77	1.6	**0.63**(3)	0.56
pH, Field	su	6.9	6.5 - 8.7	7.4	7.0 - 8.5	7.5	6.9 - 7.9	7.3	6.0 - 8.1	7.0	6.2 - 7.0
Sulfate	mg/L	110	850	1,300	1,600	1,100	1,400	540	590	< 1.0	12
Total Dissolved Solids	mg/L	860	1,600	1,900	2,000	1,500	2,300	920	2,000	730	810

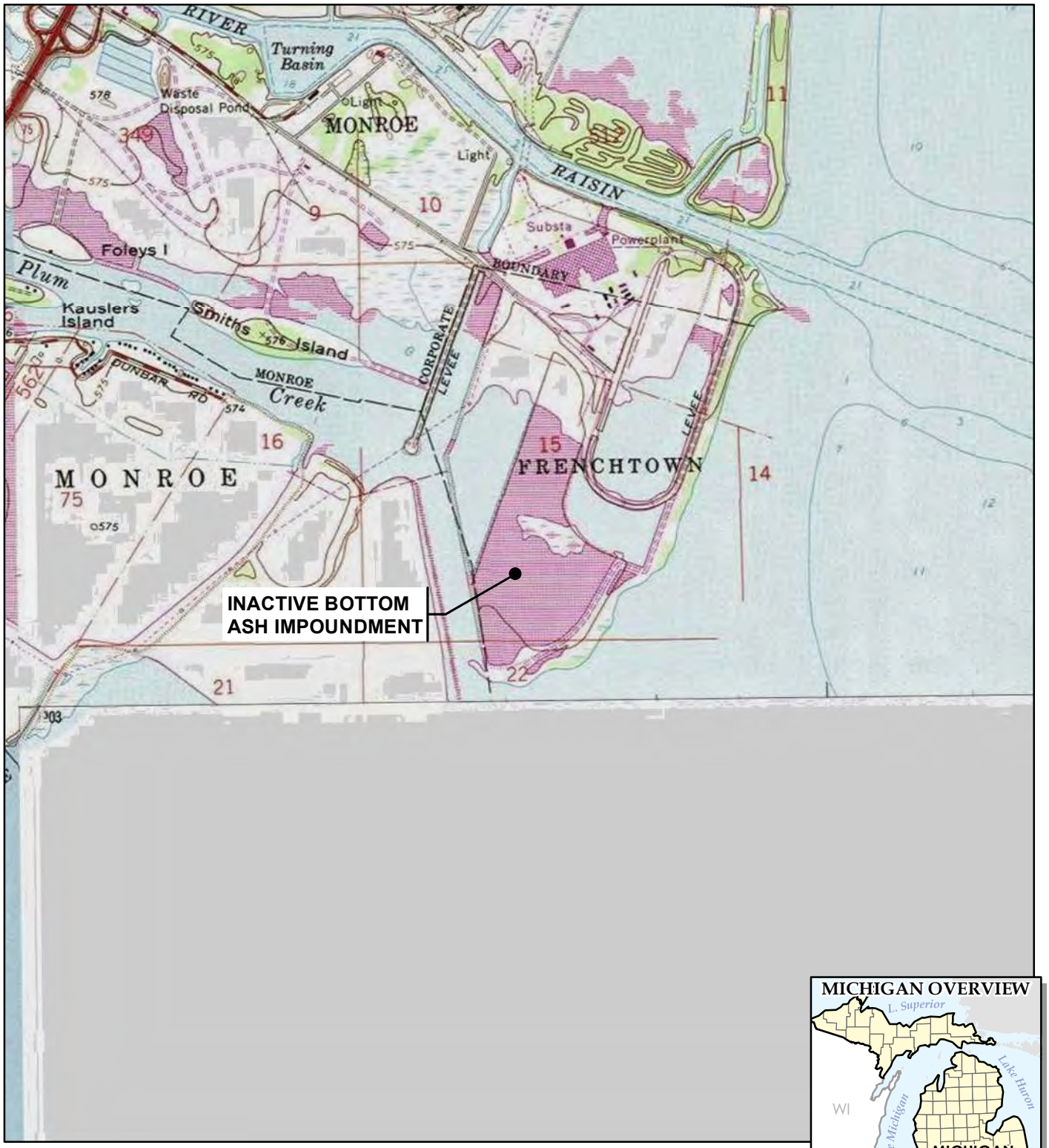
Notes:
ug/L - micrograms per liter.
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
-- = not analyzed
All metals were analyzed as total unless otherwise specified.
Bold font indicates an exceedance of the Prediction Limit (PL).
RESULT Shading and bold font indicates a comfirmed exceedance of the Prediction Limit (PL).
(1) Results shown for verification sampling performed on June 1, 2022.
(2) Exceedance was determined to be from an alternate source in the Alternate Source Demonstration: Second Semiannual 2020 Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated March 18, 2021.
(3) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: First Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated August 11, 2021.
(4) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: Second Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated February 24, 2022.

Table 1
Comparison of Verification Sampling Results to Background Limits – April and June 2022
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:		4/4/2022	6/1/2022[1]	PL	4/5/2022	PL	4/4/2022	PL	4/4/2022	PL	4/4/2022	6/1/2022[1]	PL	4/5/2022	6/1/2022[1]	PL
Constituent	Unit	Data	Data		Data		Data		Data		Data	Data		Data	Data	
Appendix III																
Boron	ug/L	**600**[2]	--	530	**930**[2]	920	1,100	1,100	< 100	100	1,500	--	1,700	**2,900**	2,500	2,800
Calcium	ug/L	**180,000**	150,000	170,000	270,000	330,000	200,000	210,000	140,000	140,000	**330,000**	290,000	310,000	140,000	--	150,000
Chloride	mg/L	54	--	80	16	18	10	13	95	120	300	--	310	110	--	150
Fluoride	mg/L	0.54	--	0.68	0.92	1.2	0.83	0.91	0.39	0.51	0.40	--	0.57	0.56	--	0.64
pH, Field	su	7.2	--	6.6 - 7.5	7.2	6.9 - 7.5	7.5	7.4 - 7.9	7.0	6.2 - 7.7	7.1	--	6.8 - 7.3	7.2	--	6.9 - 7.4
Sulfate	mg/L	4.1	--	19	1,400	1,500	1,100	1,300	< 1.0	1.0	**480**[4]	--	430	< 1.0	--	1.0
Total Dissolved Solids	mg/L	770	--	840	2,000	2,100	1,700	1,800	510	1,100	**1,800**	**1,800**	1,700	630	--	770

Notes:
ug/L - micrograms per liter.
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
-- = not analyzed
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 comfirmed exceedance of the Prediction Limit (PL).
(1) Results shown for verification sampling performed on June 1, 2022.
(2) Exceedance was determined to be from an alternate source in the Alternate Source Demonstration: Second Semiannual 2020 Detection Monitoring Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated March 18, 2021.
(3) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: First Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated August 11, 2021.
(4) Exceedance was determined to be from an alternate source in the Alternative Source Demonstration: Second Semiannual 2021 Groundwater Sampling Event Monroe Power Plant Bottom Ash Impoundment Inactive Coal Combustion Residual Unit dated February 24, 2022.

Figures



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

1 " = 2,000 '
1:24,000

0 2,000 4,000 FEET

TRC
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:	B. YELEN
APPROVED BY:	V. BUENING
DATE:	JULY 2022
PROJ. NO.:	461816.0006.0000
FILE:	461816.0006-001.mxd

FIGURE 1

S:\1-PROJECTS\DTE_Energy\MonroeMI_PP\413591_0006_Area15\461816.0006-001.mxd -- Saved By: AADAIR on 6/20/2022, 13:26:21 PM

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Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0
TRC - GIS

LEGEND

- CCR PROGRAM MONITORING WELL
- INVESTIGATION MONITORING WELL (STATIC WATER LEVELS ONLY)
- UNIT SEPARATION BERM
- APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH IMPOUNDMENT
- APPROXIMATE PLANT BOUNDARY

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, MARCH, 2021.

N

1 " = 700 '
1:8,400

0 700 1,400 FEET

TRC
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. ADAIR
CHECKED BY:	B. YELEN
APPROVED BY:	V. BUENING
DATE:	JULY 2022
PROJ. NO.:	461816.0006.0000
FILE:	461816.0006-002.mxd

FIGURE 2

Plot Date: 7/28/2021, 14:43:30 PM by AADAIR -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0
TRC - GIS

Port Ave
Mcmillan St
E Front St
River Raisin
Discharge Canal
Plum Creek
Lake Erie
574'
575'
MW-15 (573.87)
MW-7S (574.03)
MW-9 (574.17)
MW-10 (574.13)
MW-3S (574.47)
MW-11 (574.73)
MW-12 (574.74)
MW-2S (574.66)
MW-13 (573.75)
MW-1S (573.49)
MW-4S (NM)
MW-14 (574.89)
Lake Erie Surface Water Elevation (573.14)

LEGEND

- MONITORING WELL
- GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- UNIT SEPARATION BERM
- APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH BASIN
- APPROXIMATE PLANT BOUNDARY

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, APRIL 2018.
2. LAKE ERIE SURFACE WATER ELEVATION MEASURED AT NOAA GAUGING STATION 9063090 NEAR THE DTE FERMI POWER PLANT, NEWPORT, MICHIGAN.

0 700 1,400 FEET
1 " = 700 '
1:8,400
N

TRC
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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:
GROUNDWATER CONTOUR MAP
OCTOBER 2020

DRAWN BY:	A. ADAIR
CHECKED BY:	B. YELEN
APPROVED BY:	BUENING
DATE:	JULY 2021
PROJ. NO.:	413591.0006
FILE:	413591.0006-005_GWContoursOct20.mxd

FIGURE 3

Plot Date: 7/28/2021, 14:06:08 PM by AADAIR -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0
TRC - GIS

LEGEND

- MONITORING WELL
- GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- UNIT SEPARATION BERM
- APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH BASIN
- APPROXIMATE PLANT BOUNDARY

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, APRIL 2018.
2. LAKE ERIE SURFACE WATER ELEVATION MEASURED AT NOAA GAUGING STATION 9063090 NEAR THE DTE FERMI POWER PLANT, NEWPORT, MICHIGAN.

0 700 1,400 FEET

1 " = 700 '

1:8,400

N

TRC
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:

GROUNDWATER CONTOUR MAP
APRIL 2021

DRAWN BY:	A. ADAIR
CHECKED BY:	B. YELEN
APPROVED BY:	V. BUENING
DATE:	JULY 2021
PROJ. NO.:	413591.0006
FILE:	413591.0006-006B_GWContoursApril21.mxd

FIGURE 4

Plot Date: 1/27/2022, 10:03:43 AM by AFOJTIK -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0
TRC - GIS

LEGEND

- MONITORING WELL
- GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- UNIT SEPARATION BERM
- APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH BASIN
- APPROXIMATE PLANT BOUNDARY

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, MARCH 2021.
2. LAKE ERIE SURFACE WATER ELEVATION MEASURED AT NOAA GAUGING STATION 9063090 NEAR THE DTE FERMI POWER PLANT, NEWPORT, MICHIGAN.

0 700 1,400 FEET

1 " = 700 '

1:8,400

N

TRC
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:
GROUNDWATER CONTOUR MAP
OCTOBER 2021

DRAWN BY:	A. FOJTIK
CHECKED BY:	B. YELEN
APPROVED BY:	V. BUENING
DATE:	JANUARY 2022
PROJ. NO.:	413591.0006
FILE:	413591.0006-006B_GWContoursOct21.mxd

FIGURE 5

Plot Date: 7/27/2022, 15:30:23 PM by RSUEMNICHT -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0
TRC - GIS

LEGEND

- MONITORING WELL
- GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- UNIT SEPARATION BERM
- APPROXIMATE BOUNDARY OF INACTIVE BOTTOM ASH BASIN
- APPROXIMATE PLANT BOUNDARY

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, MARCH 2021.
2. LAKE ERIE SURFACE WATER ELEVATION MEASURED AT NOAA GAUGING STATION 9063090 NEAR THE DTE FERMI POWER PLANT, NEWPORT, MICHIGAN.

N

1 " = 700 '
1:8,400

0 700 1,400 FEET

TRC
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:
GROUNDWATER CONTOUR MAP
APRIL 2022

DRAWN BY:	A. ADAIR
CHECKED BY:	B. YELEN
APPROVED BY:	BUENING
DATE:	JULY 2022
PROJ. NO.:	461816.0006
FILE:	461816.0006-004.mxd

FIGURE 6

Figure 7
DTE Monroe Power Plant Bottom Ash Impoundment Inactive CCR Unit
MW-14 Total Dissolved Solids Time Series

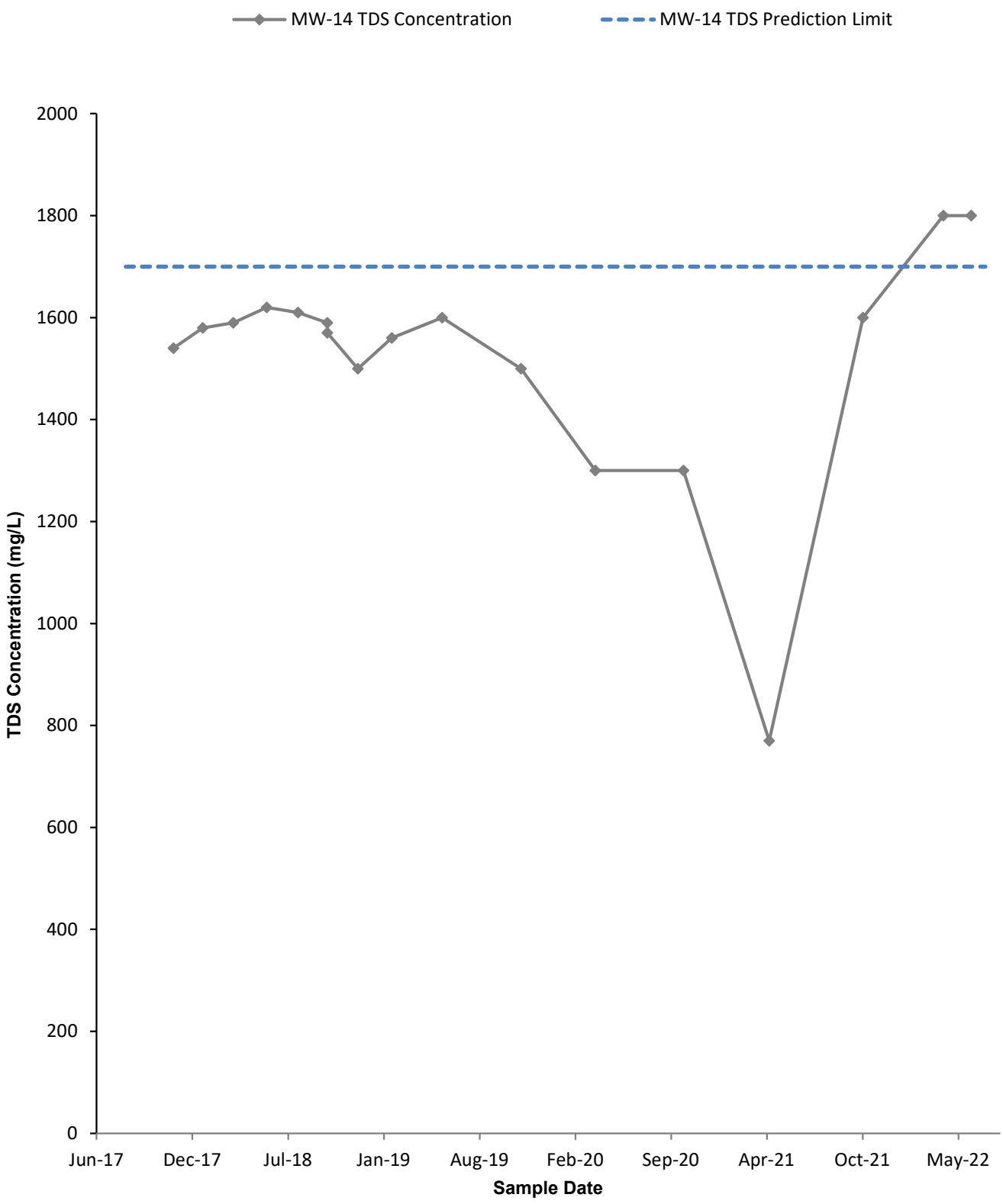
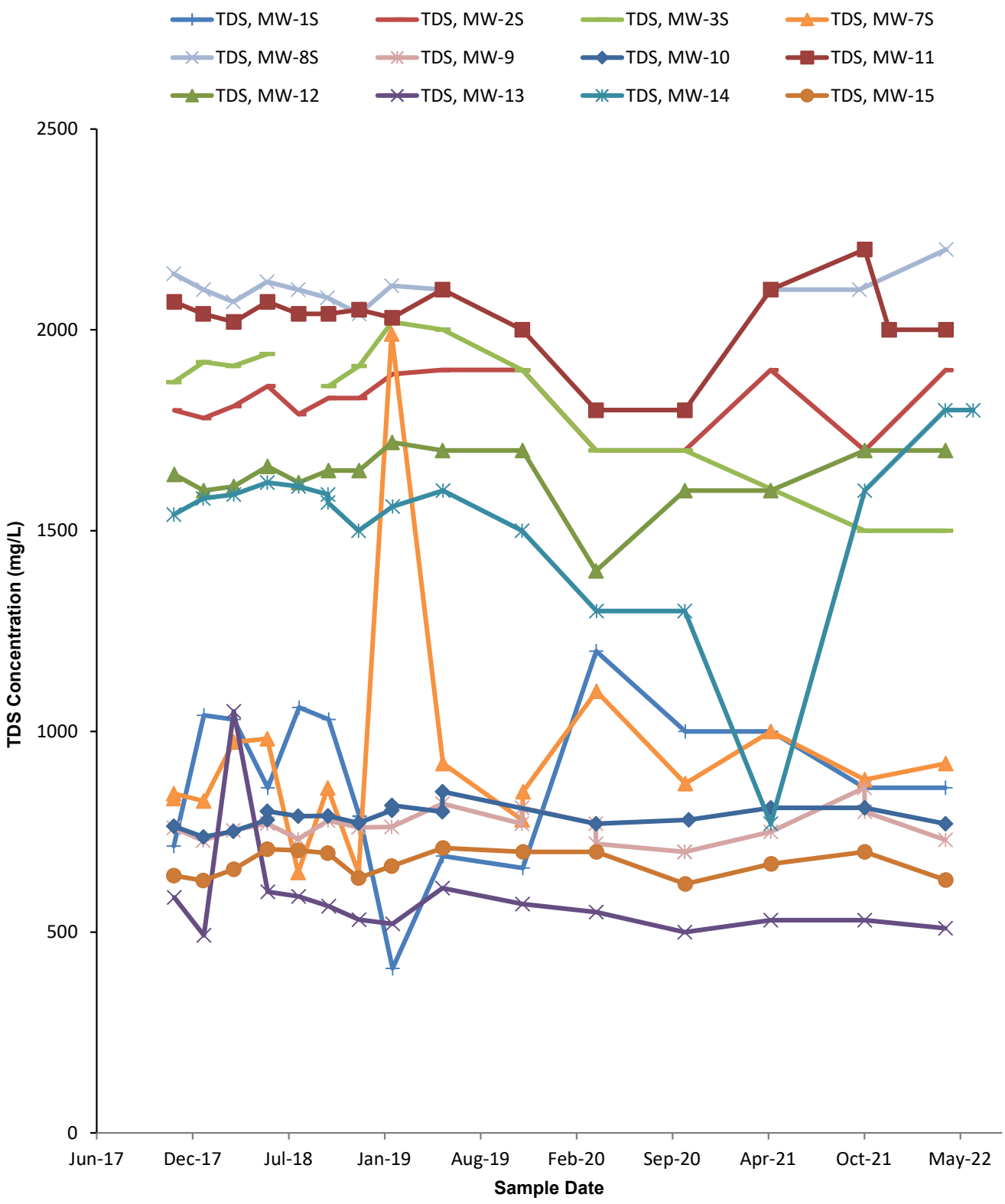


Figure 8
DTE Monroe Power Plant Bottom Ash Impoundment Inactive CCR Unit
Total Dissolved Solids Time Series



NOTE: Anomalous data point for MW-3S (7,620 mg/L) omitted from data series.

Appendix A
References

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, 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. July 2022. First Semiannual 2022 Groundwater Monitoring Report prepared for the DTE Electric Company Monroe Power Plant Bottom Ash Impoundment Coal Combustion Residual Units, 3500 East Front Street, Monroe, Michigan. 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.

U.S. Geological Survey. 2016. National Water Information System data available on the World Wide Web (USGS Water Data for the Nation), accessed August 1, 2022, at URL http://waterdata.usgs.gov/nwis/qwdata.

Appendix B
USGS Historical Total Dissolved Solids Analytical Data

Monitoring Location Identifier	Sample Date	Analyte	Result	Unit
USGS-415344083422201	3/1/1961	Total dissolved solids	474	mg/l
USGS-415344083422201	3/1/1961	Total dissolved solids	429	mg/l
USGS-420445083405601	10/31/1967	Total dissolved solids	394	mg/l
USGS-420432083410601	10/31/1967	Total dissolved solids	484	mg/l
USGS-420452083410101	10/31/1967	Total dissolved solids	364	mg/l
USGS-420459083405401	10/31/1967	Total dissolved solids	406	mg/l
USGS-415344083422101	8/18/1971	Total dissolved solids	509	mg/l
USGS-415344083422101	8/18/1971	Total dissolved solids	475	mg/l
USGS-415950083232001	8/19/1971	Total dissolved solids	457	mg/l
USGS-415950083232001	8/19/1971	Total dissolved solids	417	mg/l
USGS-420300083223001	8/19/1971	Total dissolved solids	1,250	mg/l
USGS-420300083223001	8/19/1971	Total dissolved solids	1,130	mg/l
USGS-420040083302001	8/19/1971	Total dissolved solids	1,010	mg/l
USGS-420040083302001	8/19/1971	Total dissolved solids	901	mg/l
USGS-420320083354001	8/19/1971	Total dissolved solids	157	mg/l
USGS-420320083354001	8/19/1971	Total dissolved solids	155	mg/l
USGS-415115083291001	8/19/1971	Total dissolved solids	714	mg/l
USGS-415115083291001	8/19/1971	Total dissolved solids	643	mg/l
USGS-415206083414401	8/9/1979	Total dissolved solids	306	mg/l
USGS-415206083414401	8/9/1979	Total dissolved solids	253	mg/l
USGS-415206083414401	12/11/1984	Total dissolved solids	305	mg/l
USGS-415206083414401	12/11/1984	Total dissolved solids	258	mg/l
USGS-415435083342601	8/29/1986	Total dissolved solids	670	mg/l
USGS-415435083342601	8/29/1986	Total dissolved solids	781	mg/l
USGS-415753083413601	9/3/1986	Total dissolved solids	635	mg/l
USGS-415753083413601	9/3/1986	Total dissolved solids	654	mg/l
USGS-415305083234501	9/3/1986	Total dissolved solids	1,970	mg/l
USGS-415305083234501	9/3/1986	Total dissolved solids	1,870	mg/l
USGS-420019083311201	8/29/1986	Total dissolved solids	767	mg/l
USGS-414829083345601	10/29/1991	Total dissolved solids	738	mg/l
USGS-414829083345601	10/29/1991	Total dissolved solids	692	mg/l
USGS-414731083450101	10/29/1991	Total dissolved solids	668	mg/l
USGS-414731083450101	10/29/1991	Total dissolved solids	647	mg/l
USGS-415839083221501	11/5/1991	Total dissolved solids	1,130	mg/l
USGS-415839083221501	11/5/1991	Total dissolved solids	1,120	mg/l
USGS-420314083225501	11/5/1991	Total dissolved solids	2,920	mg/l
USGS-420314083225501	11/5/1991	Total dissolved solids	2,700	mg/l
USGS-414452083385201	10/29/1991	Total dissolved solids	279	mg/l
USGS-414452083385201	10/29/1991	Total dissolved solids	282	mg/l
USGS-420325083440901	10/30/1991	Total dissolved solids	328	mg/l
USGS-420425083270001	11/5/1991	Total dissolved solids	1,960	mg/l
USGS-420425083270001	11/5/1991	Total dissolved solids	1,800	mg/l
USGS-415431083343201	10/30/1991	Total dissolved solids	798	mg/l
USGS-415431083343201	10/30/1991	Total dissolved solids	761	mg/l
USGS-420248083372601	11/4/1991	Total dissolved solids	287	mg/l
USGS-420248083372601	11/4/1991	Total dissolved solids	300	mg/l
USGS-420414083351501	11/4/1991	Total dissolved solids	207	mg/l
USGS-420414083351501	11/4/1991	Total dissolved solids	203	mg/l
USGS-420218083130401	4/27/1992	Total dissolved solids	1,800	mg/l
USGS-420218083130401	4/27/1992	Total dissolved solids	1,710	mg/l
USGS-420107083403201	4/28/1992	Total dissolved solids	722	mg/l
USGS-420107083403201	4/28/1992	Total dissolved solids	704	mg/l
USGS-414509083291001	4/28/1992	Total dissolved solids	1,470	mg/l
USGS-414509083291001	4/28/1992	Total dissolved solids	1,270	mg/l
USGS-415244083415201	4/29/1992	Total dissolved solids	354	mg/l
USGS-415244083415201	4/29/1992	Total dissolved solids	356	mg/l
USGS-415721083331601	4/28/1992	Total dissolved solids	307	mg/l
USGS-415721083331601	4/28/1992	Total dissolved solids	308	mg/l
USGS-420246083285901	5/20/1992	Total dissolved solids	1,310	mg/l

Monitoring Location Identifier	Sample Date	Analyte	Result	Unit
USGS-420246083285901	5/20/1992	Total dissolved solids	1,200	mg/l
USGS-414601083375801	4/28/1992	Total dissolved solids	210	mg/l
USGS-414601083375801	4/28/1992	Total dissolved solids	213	mg/l
USGS-415754083420901	5/19/1992	Total dissolved solids	646	mg/l
USGS-415754083420901	5/19/1992	Total dissolved solids	621	mg/l
USGS-420123083300001	5/5/1992	Total dissolved solids	912	mg/l
USGS-420123083300001	5/5/1992	Total dissolved solids	835	mg/l
USGS-420055083175601	4/27/1992	Total dissolved solids	2,430	mg/l
USGS-420055083175601	4/27/1992	Total dissolved solids	2,220	mg/l
USGS-414559083325501	5/6/1992	Total dissolved solids	485	mg/l
USGS-414559083325501	5/6/1992	Total dissolved solids	467	mg/l
USGS-415437083413001	1/23/1992	Total dissolved solids	244	mg/l
USGS-415437083413001	1/23/1992	Total dissolved solids	253	mg/l
USGS-415527083402001	1/23/1992	Total dissolved solids	244	mg/l
USGS-415527083402001	1/23/1992	Total dissolved solids	269	mg/l
USGS-414854083382201	5/19/1992	Total dissolved solids	858	mg/l
USGS-414854083382201	5/19/1992	Total dissolved solids	824	mg/l
USGS-415923083272101	4/28/1992	Total dissolved solids	437	mg/l
USGS-415923083272101	4/28/1992	Total dissolved solids	433	mg/l
USGS-415400083262801	5/20/1992	Total dissolved solids	2,130	mg/l
USGS-415400083262801	5/20/1992	Total dissolved solids	1,900	mg/l
USGS-414353083422801	5/19/1992	Total dissolved solids	500	mg/l
USGS-414353083422801	5/19/1992	Total dissolved solids	476	mg/l
USGS-415133083274801	1/23/1992	Total dissolved solids	451	mg/l
USGS-415133083274801	1/23/1992	Total dissolved solids	439	mg/l
USGS-415824083162901	5/6/1992	Total dissolved solids	1,040	mg/l
USGS-415824083162901	5/6/1992	Total dissolved solids	981	mg/l
USGS-415204083323101	5/19/1992	Total dissolved solids	1,940	mg/l
USGS-415204083323101	5/19/1992	Total dissolved solids	1,590	mg/l
USGS-415749083282001	5/7/1992	Total dissolved solids	2,010	mg/l
USGS-415749083282001	5/7/1992	Total dissolved solids	1,390	mg/l
USGS-415236083365401	1/23/1992	Total dissolved solids	470	mg/l
USGS-415236083365401	1/23/1992	Total dissolved solids	493	mg/l
USGS-415228083242401	5/6/1992	Total dissolved solids	2,090	mg/l
USGS-415228083242401	5/6/1992	Total dissolved solids	1,900	mg/l
USGS-420503083192101	5/5/1992	Total dissolved solids	2,180	mg/l
USGS-420503083192101	5/5/1992	Total dissolved solids	1,950	mg/l
USGS-415115083400201	4/29/1992	Total dissolved solids	393	mg/l
USGS-415115083400201	4/29/1992	Total dissolved solids	396	mg/l
USGS-414748083305501	4/28/1992	Total dissolved solids	1,960	mg/l
USGS-414748083305501	4/28/1992	Total dissolved solids	1,760	mg/l
USGS-415234083413801	4/29/1992	Total dissolved solids	283	mg/l
USGS-415234083413801	4/29/1992	Total dissolved solids	307	mg/l
USGS-415648083405601	1/23/1992	Total dissolved solids	1,560	mg/l
USGS-415648083405601	1/23/1992	Total dissolved solids	1,610	mg/l
USGS-415156083441501	4/29/1992	Total dissolved solids	360	mg/l
USGS-415156083441501	4/29/1992	Total dissolved solids	371	mg/l
USGS-420123083213801	5/6/1992	Total dissolved solids	1,180	mg/l
USGS-420123083213801	5/6/1992	Total dissolved solids	1,080	mg/l
USGS-415710083192501	4/28/1992	Total dissolved solids	2,370	mg/l
USGS-415710083192501	4/28/1992	Total dissolved solids	2,180	mg/l

Appendix B
Laboratory Reports

eurofins | Environment Testing

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-174588-1
Client Project/Site: CCR DTE Monroe Power Plant- BAI
Revision: 1

For:
TRC Environmental Corporation.
1540 Eisenhower Place
Ann Arbor, Michigan 48108-7080

Attn: Mr. Vincent Buening

Patrick O'Meara

Authorized for release by:
11/2/2022 3:09:21 PM
Patrick O'Meara, Manager of Project Management
(330)966-5725
Patrick.O'Meara@et.eurofinsus.com

Designee for

Kris Brooks, Project Manager II
(330)966-9790
Kris.Brooks@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Definitions/Glossary

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

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. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Job ID: 240-174588-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-174588-1
Revised

Additional Comments:
Revison 11/2/2022: Corrected sample IDs for samples 240-174888-6 and -8.

Receipt
The samples were received on 10/13/2022 @ 9:45 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 2.1°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.

Method Summary

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

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

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

Sample Summary

Client: TRC Environmental Corporation.
Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-174588-1	MW-1S_20221010	Water	10/10/22 15:12	10/13/22 09:45
240-174588-2	MW-2S_20221011	Water	10/11/22 09:20	10/13/22 09:45
240-174588-3	MW-3S_202201010	Water	10/10/22 13:01	10/13/22 09:45
240-174588-4	MW-7S_20221011	Water	10/11/22 12:38	10/13/22 09:45
240-174588-5	MW-9_20221010	Water	10/10/22 11:52	10/13/22 09:45
240-174588-6	MW-10_20221010	Water	10/10/22 10:54	10/13/22 09:45
240-174588-7	MW-11_20221010	Water	10/10/22 14:05	10/13/22 09:45
240-174588-8	MW-12_20221011	Water	10/11/22 10:09	10/13/22 09:45
240-174588-9	MW-13_20221011	Water	10/11/22 10:55	10/13/22 09:45
240-174588-10	MW-14_20221010	Water	10/10/22 16:00	10/13/22 09:45
240-174588-11	MW-15_20221011	Water	10/11/22 11:56	10/13/22 09:45
240-174588-12	MW-8S_20221011	Water	10/11/22 14:14	10/13/22 09:45

Detection Summary

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

Job ID: 240-174588-1

Client Sample ID: MW-1S_20221010 — Lab Sample ID: 240-174588-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	630		100	100	ug/L	1		6010B	Total Recoverable
Calcium	250000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	5400		100	100	ug/L	1		6020	Total Recoverable
Chloride	120		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.25		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	89		1.0	1.0	mg/L	1		9056A	Total/NA
Total Dissolved Solids	1000		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-2S_20221011 — Lab Sample ID: 240-174588-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	930		100	100	ug/L	1		6010B	Total Recoverable
Calcium	230000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	2500		100	100	ug/L	1		6020	Total Recoverable
Chloride	11		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.74		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1300		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1700		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-3S_202201010 — Lab Sample ID: 240-174588-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	770		100	100	ug/L	1		6010B	Total Recoverable
Calcium	210000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	2400		100	100	ug/L	1		6020	Total Recoverable
Chloride	13		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.85		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1200		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	2200		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-7S_20221011 — Lab Sample ID: 240-174588-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	740		100	100	ug/L	1		6010B	Total Recoverable
Calcium	230000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	270		100	100	ug/L	1		6020	Total Recoverable
Chloride	52		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.83		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	610		5.0	5.0	mg/L	5		9056A	Total/NA
Total Dissolved Solids	1100		20	20	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-9_20221010 Lab Sample ID: 240-174588-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	500		100	100	ug/L	1		6010B	Total Recoverable
Calcium	170000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	2800		100	100	ug/L	1		6020	Total Recoverable
Chloride	47		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.62		0.050	0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	760		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-10_20221010 Lab Sample ID: 240-174588-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	520		100	100	ug/L	1		6010B	Total Recoverable
Calcium	160000		1000	1000	ug/L	1		6020	Total Recoverable
Chloride	55		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.53		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	2.8		1.0	1.0	mg/L	1		9056A	Total/NA
Total Dissolved Solids	820		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-11_20221010 Lab Sample ID: 240-174588-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	840		100	100	ug/L	1		6010B	Total Recoverable
Calcium	240000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	2700		100	100	ug/L	1		6020	Total Recoverable
Chloride	16		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.95		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1400		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	2100		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-12_20221011 Lab Sample ID: 240-174588-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1000		100	100	ug/L	1		6010B	Total Recoverable
Calcium	180000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	3400		100	100	ug/L	1		6020	Total Recoverable
Chloride	11		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.87		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1200		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1600		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-13_20221011 Lab Sample ID: 240-174588-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	120000		1000	1000	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-13_20221011 (Continued) — Lab Sample ID: 240-174588-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	9800		100	100	ug/L	1		6020	Total Recoverable
Chloride	99		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.40		0.050	0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	490		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-14_20221010 — Lab Sample ID: 240-174588-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	100	ug/L	1		6010B	Total Recoverable
Calcium	290000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	7600		100	100	ug/L	1		6020	Total Recoverable
Chloride	300		10	10	mg/L	10		9056A	Total/NA
Fluoride	0.42		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	490		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1800		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-15_20221011 — Lab Sample ID: 240-174588-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2500		100	100	ug/L	1		6010B	Total Recoverable
Calcium	130000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	8900		100	100	ug/L	1		6020	Total Recoverable
Chloride	110		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.48		0.050	0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	620		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-8S_20221011 — Lab Sample ID: 240-174588-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	400		100	100	ug/L	1		6010B	Total Recoverable
Calcium	310000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	5100		100	100	ug/L	1		6020	Total Recoverable
Chloride	15		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	1.4		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1500		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	2000		20	20	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: TRC Environmental Corporation.
Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-1S_20221010
Lab Sample ID: 240-174588-1

Date Collected: 10/10/22 15:12
Matrix: Water
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	630		100	100	ug/L		10/14/22 12:00	10/19/22 03:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	250000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:30	1
Iron	5400		100	100	ug/L		10/14/22 12:00	10/17/22 22:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	120		1.0	1.0	mg/L			10/26/22 00:33	1
Fluoride (SW846 9056A)	0.25		0.050	0.050	mg/L			10/26/22 00:33	1
Sulfate (SW846 9056A)	89		1.0	1.0	mg/L			10/26/22 00:33	1
Total Dissolved Solids (SM 2540C)	1000		20	20	mg/L			10/14/22 09:50	1

Client Sample Results

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-2S_20221011 Lab Sample ID: 240-174588-2

Date Collected: 10/11/22 09:20 **Matrix: Water**
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	930		100	100	ug/L		10/14/22 12:00	10/19/22 03:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	230000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:32	1
Iron	2500		100	100	ug/L		10/14/22 12:00	10/17/22 22:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	11		1.0	1.0	mg/L			10/26/22 01:17	1
Fluoride (SW846 9056A)	0.74		0.050	0.050	mg/L			10/26/22 01:17	1
Sulfate (SW846 9056A)	1300		10	10	mg/L			10/26/22 01:38	10
Total Dissolved Solids (SM 2540C)	1700		20	20	mg/L			10/17/22 10:08	1

Client Sample Results

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-3S_202201010 Lab Sample ID: 240-174588-3

Date Collected: 10/10/22 13:01 **Matrix: Water**
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	770		100	100	ug/L		10/14/22 12:00	10/19/22 04:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	210000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:35	1
Iron	2400		100	100	ug/L		10/14/22 12:00	10/17/22 22:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	13		1.0	1.0	mg/L			10/26/22 02:00	1
Fluoride (SW846 9056A)	0.85		0.050	0.050	mg/L			10/26/22 02:00	1
Sulfate (SW846 9056A)	1200		10	10	mg/L			10/26/22 02:22	10
Total Dissolved Solids (SM 2540C)	2200		20	20	mg/L			10/14/22 09:50	1

Client Sample Results

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-7S_20221011 Lab Sample ID: 240-174588-4

Date Collected: 10/11/22 12:38 **Matrix: Water**
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	740		100	100	ug/L		10/14/22 12:00	10/19/22 04:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	230000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:37	1
Iron	270		100	100	ug/L		10/14/22 12:00	10/17/22 22:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	52		1.0	1.0	mg/L			10/26/22 02:43	1
Fluoride (SW846 9056A)	0.83		0.050	0.050	mg/L			10/26/22 02:43	1
Sulfate (SW846 9056A)	610		5.0	5.0	mg/L			10/26/22 03:05	5
Total Dissolved Solids (SM 2540C)	1100		20	20	mg/L			10/17/22 10:05	1

Client: TRC Environmental Corporation.
Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-9_20221010
Lab Sample ID: 240-174588-5
Date Collected: 10/10/22 11:52
Matrix: Water
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	500		100	100	ug/L		10/14/22 12:00	10/19/22 04:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	170000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:40	1
Iron	2800		100	100	ug/L		10/14/22 12:00	10/17/22 22:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	47		1.0	1.0	mg/L			10/26/22 04:10	1
Fluoride (SW846 9056A)	0.62		0.050	0.050	mg/L			10/26/22 04:10	1
Sulfate (SW846 9056A)	1.0	U	1.0	1.0	mg/L			10/26/22 04:10	1
Total Dissolved Solids (SM 2540C)	760		10	10	mg/L			10/14/22 09:50	1

Client Sample Results

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-10_20221010 Lab Sample ID: 240-174588-6

Date Collected: 10/10/22 10:54 **Matrix: Water**
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	520		100	100	ug/L		10/14/22 12:00	10/19/22 04:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	160000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:42	1
Iron	100	U	100	100	ug/L		10/14/22 12:00	10/17/22 22:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	55		1.0	1.0	mg/L			10/26/22 04:54	1
Fluoride (SW846 9056A)	0.53		0.050	0.050	mg/L			10/26/22 04:54	1
Sulfate (SW846 9056A)	2.8		1.0	1.0	mg/L			10/26/22 04:54	1
Total Dissolved Solids (SM 2540C)	820		10	10	mg/L			10/14/22 09:50	1

Client Sample Results

Client: TRC Environmental Corporation.
Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-11_20221010
Lab Sample ID: 240-174588-7
Date Collected: 10/10/22 14:05
Matrix: Water
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	840		100	100	ug/L		10/14/22 12:00	10/19/22 04:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	240000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:45	1
Iron	2700		100	100	ug/L		10/14/22 12:00	10/17/22 22:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	16		1.0	1.0	mg/L			10/26/22 05:37	1
Fluoride (SW846 9056A)	0.95		0.050	0.050	mg/L			10/26/22 05:37	1
Sulfate (SW846 9056A)	1400		10	10	mg/L			10/26/22 05:59	10
Total Dissolved Solids (SM 2540C)	2100		20	20	mg/L			10/14/22 09:50	1

Client Sample Results

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-12_20221011 **Lab Sample ID: 240-174588-8**
Date Collected: 10/11/22 10:09 **Matrix: Water**
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1000		100	100	ug/L		10/14/22 12:00	10/19/22 04:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	180000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:47	1
Iron	3400		100	100	ug/L		10/14/22 12:00	10/17/22 22:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	11		1.0	1.0	mg/L			10/26/22 06:20	1
Fluoride (SW846 9056A)	0.87		0.050	0.050	mg/L			10/26/22 06:20	1
Sulfate (SW846 9056A)	1200		10	10	mg/L			10/26/22 06:42	10
Total Dissolved Solids (SM 2540C)	1600		20	20	mg/L			10/17/22 10:05	1

Client Sample Results

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-13_20221011 **Lab Sample ID: 240-174588-9**
Date Collected: 10/11/22 10:55 **Matrix: Water**
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	100	ug/L		10/14/22 12:00	10/19/22 04:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**120000**		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:50	1
Iron	**9800**		100	100	ug/L		10/14/22 12:00	10/17/22 22:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	**99**		1.0	1.0	mg/L			10/26/22 07:04	1
Fluoride (SW846 9056A)	**0.40**		0.050	0.050	mg/L			10/26/22 07:04	1
Sulfate (SW846 9056A)	1.0	U	1.0	1.0	mg/L			10/26/22 07:04	1
Total Dissolved Solids (SM 2540C)	**490**		10	10	mg/L			10/17/22 10:10	1

Client Sample Results

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-14_20221010 Lab Sample ID: 240-174588-10

Date Collected: 10/10/22 16:00 **Matrix: Water**
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	100	ug/L		10/14/22 12:00	10/19/22 04:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	290000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:52	1
Iron	7600		100	100	ug/L		10/14/22 12:00	10/17/22 22:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	300		10	10	mg/L			10/25/22 22:01	10
Fluoride (SW846 9056A)	0.42		0.050	0.050	mg/L			10/25/22 20:56	1
Sulfate (SW846 9056A)	490		10	10	mg/L			10/25/22 22:01	10
Total Dissolved Solids (SM 2540C)	1800		20	20	mg/L			10/14/22 09:50	1

Client Sample Results

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-15_20221011 Lab Sample ID: 240-174588-11

Date Collected: 10/11/22 11:56 **Matrix: Water**
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2500		100	100	ug/L		10/14/22 12:00	10/19/22 04:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:59	1
Iron	8900		100	100	ug/L		10/14/22 12:00	10/17/22 22:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	110		1.0	1.0	mg/L			10/25/22 20:12	1
Fluoride (SW846 9056A)	0.48		0.050	0.050	mg/L			10/25/22 20:12	1
Sulfate (SW846 9056A)	1.0	U	1.0	1.0	mg/L			10/25/22 20:12	1
Total Dissolved Solids (SM 2540C)	620		10	10	mg/L			10/17/22 10:10	1

Client: TRC Environmental Corporation.
Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Client Sample ID: MW-8S_20221011
Lab Sample ID: 240-174588-12
Date Collected: 10/11/22 14:14
Matrix: Water
Date Received: 10/13/22 09:45

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	400		100	100	ug/L		10/14/22 12:00	10/19/22 04:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	310000		1000	1000	ug/L		10/14/22 12:00	10/17/22 23:02	1
Iron	5100		100	100	ug/L		10/14/22 12:00	10/17/22 23:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	15		1.0	1.0	mg/L			10/25/22 19:29	1
Fluoride (SW846 9056A)	1.4		0.050	0.050	mg/L			10/25/22 19:29	1
Sulfate (SW846 9056A)	1500		10	10	mg/L			10/25/22 19:51	10
Total Dissolved Solids (SM 2540C)	2000		20	20	mg/L			10/17/22 10:05	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-547165/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 547695 — **Prep Batch: 547165**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	100	ug/L		10/14/22 12:00	10/19/22 02:45	1

Lab Sample ID: LCS 240-547165/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 547695 — **Prep Batch: 547165**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	955		ug/L		96	80 - 120

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-547165/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 547508 — **Prep Batch: 547165**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	1000	ug/L		10/14/22 12:00	10/17/22 21:46	1
Iron	100	U	100	100	ug/L		10/14/22 12:00	10/17/22 21:46	1

Lab Sample ID: LCS 240-547165/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 547508 — **Prep Batch: 547165**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23400		ug/L		94	80 - 120
Iron	5000	4860		ug/L		97	80 - 120

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-548501/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548501

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	1.0	mg/L			10/25/22 08:59	1
Fluoride	0.050	U	0.050	0.050	mg/L			10/25/22 08:59	1
Sulfate	1.0	U	1.0	1.0	mg/L			10/25/22 08:59	1

Lab Sample ID: LCS 240-548501/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548501

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	52.9		mg/L		106	90 - 110

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

Lab Sample ID: MB 240-548508/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548508

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	1.0	mg/L			10/25/22 23:50	1
Fluoride	0.050	U	0.050	0.050	mg/L			10/25/22 23:50	1
Sulfate	1.0	U	1.0	1.0	mg/L			10/25/22 23:50	1

Lab Sample ID: LCS 240-548508/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.8		mg/L		102	90 - 110
Fluoride	2.50	2.65		mg/L		106	90 - 110
Sulfate	50.0	53.1		mg/L		106	90 - 110

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

Lab Sample ID: MB 240-547111/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547111

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	10	mg/L			10/14/22 09:50	1

Lab Sample ID: LCS 240-547111/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	493	470		mg/L		95	80 - 120

Lab Sample ID: 240-174588-1 DU — **Client Sample ID: MW-1S_20221010**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547111

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1000		1010		mg/L		0.2	20

Lab Sample ID: 240-174588-10 DU — **Client Sample ID: MW-14_20221010**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547111

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1800		1760		mg/L		1	20

Lab Sample ID: MB 240-547339/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	10	mg/L			10/17/22 10:05	1

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

Lab Sample ID: LCS 240-547339/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	493	485		mg/L		98	80 - 120

Lab Sample ID: MB 240-547340/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1.0	U	1.0	1.0	mg/L			10/17/22 10:08	1

Lab Sample ID: LCS 240-547340/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	493	431		mg/L		87	80 - 120

Lab Sample ID: MB 240-547342/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547342

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1.0	U	1.0	1.0	mg/L			10/17/22 10:10	1

Lab Sample ID: LCS 240-547342/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547342

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	493	474		mg/L		96	80 - 120

Lab Sample ID: 240-174588-9 DU — **Client Sample ID: MW-13_20221011**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547342

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	490		496		mg/L		2	20

Lab Sample ID: 240-174588-11 DU — **Client Sample ID: MW-15_20221011**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547342

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	620		622		mg/L		1	20

Metals

Prep Batch: 547165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-1	MW-1S_20221010	Total Recoverable	Water	3005A	
240-174588-2	MW-2S_20221011	Total Recoverable	Water	3005A	
240-174588-3	MW-3S_202201010	Total Recoverable	Water	3005A	
240-174588-4	MW-7S_20221011	Total Recoverable	Water	3005A	
240-174588-5	MW-9_20221010	Total Recoverable	Water	3005A	
240-174588-6	MW-10_20221010	Total Recoverable	Water	3005A	
240-174588-7	MW-11_20221010	Total Recoverable	Water	3005A	
240-174588-8	MW-12_20221011	Total Recoverable	Water	3005A	
240-174588-9	MW-13_20221011	Total Recoverable	Water	3005A	
240-174588-10	MW-14_20221010	Total Recoverable	Water	3005A	
240-174588-11	MW-15_20221011	Total Recoverable	Water	3005A	
240-174588-12	MW-8S_20221011	Total Recoverable	Water	3005A	
MB 240-547165/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-547165/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-547165/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 547508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-1	MW-1S_20221010	Total Recoverable	Water	6020	547165
240-174588-2	MW-2S_20221011	Total Recoverable	Water	6020	547165
240-174588-3	MW-3S_202201010	Total Recoverable	Water	6020	547165
240-174588-4	MW-7S_20221011	Total Recoverable	Water	6020	547165
240-174588-5	MW-9_20221010	Total Recoverable	Water	6020	547165
240-174588-6	MW-10_20221010	Total Recoverable	Water	6020	547165
240-174588-7	MW-11_20221010	Total Recoverable	Water	6020	547165
240-174588-8	MW-12_20221011	Total Recoverable	Water	6020	547165
240-174588-9	MW-13_20221011	Total Recoverable	Water	6020	547165
240-174588-10	MW-14_20221010	Total Recoverable	Water	6020	547165
240-174588-11	MW-15_20221011	Total Recoverable	Water	6020	547165
240-174588-12	MW-8S_20221011	Total Recoverable	Water	6020	547165
MB 240-547165/1-A	Method Blank	Total Recoverable	Water	6020	547165
LCS 240-547165/3-A	Lab Control Sample	Total Recoverable	Water	6020	547165

Analysis Batch: 547695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-1	MW-1S_20221010	Total Recoverable	Water	6010B	547165
240-174588-2	MW-2S_20221011	Total Recoverable	Water	6010B	547165
240-174588-3	MW-3S_202201010	Total Recoverable	Water	6010B	547165
240-174588-4	MW-7S_20221011	Total Recoverable	Water	6010B	547165
240-174588-5	MW-9_20221010	Total Recoverable	Water	6010B	547165
240-174588-6	MW-10_20221010	Total Recoverable	Water	6010B	547165
240-174588-7	MW-11_20221010	Total Recoverable	Water	6010B	547165
240-174588-8	MW-12_20221011	Total Recoverable	Water	6010B	547165
240-174588-9	MW-13_20221011	Total Recoverable	Water	6010B	547165
240-174588-10	MW-14_20221010	Total Recoverable	Water	6010B	547165
240-174588-11	MW-15_20221011	Total Recoverable	Water	6010B	547165
240-174588-12	MW-8S_20221011	Total Recoverable	Water	6010B	547165
MB 240-547165/1-A	Method Blank	Total Recoverable	Water	6010B	547165
LCS 240-547165/2-A	Lab Control Sample	Total Recoverable	Water	6010B	547165

General Chemistry

Analysis Batch: 547111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-1	MW-1S_20221010	Total/NA	Water	SM 2540C	
240-174588-3	MW-3S_202201010	Total/NA	Water	SM 2540C	
240-174588-5	MW-9_20221010	Total/NA	Water	SM 2540C	
240-174588-6	MW-10_20221010	Total/NA	Water	SM 2540C	
240-174588-7	MW-11_20221010	Total/NA	Water	SM 2540C	
240-174588-10	MW-14_20221010	Total/NA	Water	SM 2540C	
MB 240-547111/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-547111/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-174588-1 DU	MW-1S_20221010	Total/NA	Water	SM 2540C	
240-174588-10 DU	MW-14_20221010	Total/NA	Water	SM 2540C	

Analysis Batch: 547339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-4	MW-7S_20221011	Total/NA	Water	SM 2540C	
240-174588-8	MW-12_20221011	Total/NA	Water	SM 2540C	
240-174588-12	MW-8S_20221011	Total/NA	Water	SM 2540C	
MB 240-547339/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-547339/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 547340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-2	MW-2S_20221011	Total/NA	Water	SM 2540C	
MB 240-547340/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-547340/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 547342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-9	MW-13_20221011	Total/NA	Water	SM 2540C	
240-174588-11	MW-15_20221011	Total/NA	Water	SM 2540C	
MB 240-547342/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-547342/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-174588-9 DU	MW-13_20221011	Total/NA	Water	SM 2540C	
240-174588-11 DU	MW-15_20221011	Total/NA	Water	SM 2540C	

Analysis Batch: 548501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-10	MW-14_20221010	Total/NA	Water	9056A	
240-174588-10	MW-14_20221010	Total/NA	Water	9056A	
240-174588-11	MW-15_20221011	Total/NA	Water	9056A	
240-174588-12	MW-8S_20221011	Total/NA	Water	9056A	
240-174588-12	MW-8S_20221011	Total/NA	Water	9056A	
MB 240-548501/3	Method Blank	Total/NA	Water	9056A	
LCS 240-548501/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 548508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-1	MW-1S_20221010	Total/NA	Water	9056A	
240-174588-2	MW-2S_20221011	Total/NA	Water	9056A	
240-174588-2	MW-2S_20221011	Total/NA	Water	9056A	
240-174588-3	MW-3S_202201010	Total/NA	Water	9056A	
240-174588-3	MW-3S_202201010	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 548508 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174588-4	MW-7S_20221011	Total/NA	Water	9056A	
240-174588-4	MW-7S_20221011	Total/NA	Water	9056A	
240-174588-5	MW-9_20221010	Total/NA	Water	9056A	
240-174588-6	MW-10_20221010	Total/NA	Water	9056A	
240-174588-7	MW-11_20221010	Total/NA	Water	9056A	
240-174588-7	MW-11_20221010	Total/NA	Water	9056A	
240-174588-8	MW-12_20221011	Total/NA	Water	9056A	
240-174588-8	MW-12_20221011	Total/NA	Water	9056A	
240-174588-9	MW-13_20221011	Total/NA	Water	9056A	
MB 240-548508/3	Method Blank	Total/NA	Water	9056A	
LCS 240-548508/4	Lab Control Sample	Total/NA	Water	9056A	

Lab Chronicle

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

Job ID: 240-174588-1

Client Sample ID: MW-1S_20221010

Lab Sample ID: 240-174588-1

Date Collected: 10/10/22 15:12

Matrix: Water

Date Received: 10/13/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 03:52
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:30
Total/NA	Analysis	9056A		1	548508	JWW	EET CAN	10/26/22 00:33
Total/NA	Analysis	SM 2540C		1	547111	MS	EET CAN	10/14/22 09:50

Client Sample ID: MW-2S_20221011

Lab Sample ID: 240-174588-2

Date Collected: 10/11/22 09:20

Matrix: Water

Date Received: 10/13/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 03:56
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:32
Total/NA	Analysis	9056A		1	548508	JWW	EET CAN	10/26/22 01:17
Total/NA	Analysis	9056A		10	548508	JWW	EET CAN	10/26/22 01:38
Total/NA	Analysis	SM 2540C		1	547340	MS	EET CAN	10/17/22 10:08

Client Sample ID: MW-3S_202201010

Lab Sample ID: 240-174588-3

Date Collected: 10/10/22 13:01

Matrix: Water

Date Received: 10/13/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:01
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:35
Total/NA	Analysis	9056A		1	548508	JWW	EET CAN	10/26/22 02:00
Total/NA	Analysis	9056A		10	548508	JWW	EET CAN	10/26/22 02:22
Total/NA	Analysis	SM 2540C		1	547111	MS	EET CAN	10/14/22 09:50

Client Sample ID: MW-7S_20221011

Lab Sample ID: 240-174588-4

Date Collected: 10/11/22 12:38

Matrix: Water

Date Received: 10/13/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:05
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:37
Total/NA	Analysis	9056A		1	548508	JWW	EET CAN	10/26/22 02:43
Total/NA	Analysis	9056A		5	548508	JWW	EET CAN	10/26/22 03:05

Lab Chronicle

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

Job ID: 240-174588-1

Client Sample ID: MW-7S_20221011

Lab Sample ID: 240-174588-4

Date Collected: 10/11/22 12:38

Matrix: Water

Date Received: 10/13/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	547339	MS	EET CAN	10/17/22 10:05

Client Sample ID: MW-9_20221010

Lab Sample ID: 240-174588-5

Date Collected: 10/10/22 11:52

Matrix: Water

Date Received: 10/13/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:09
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:40
Total/NA	Analysis	9056A		1	548508	JWW	EET CAN	10/26/22 04:10
Total/NA	Analysis	SM 2540C		1	547111	MS	EET CAN	10/14/22 09:50

Client Sample ID: MW-10_20221010

Lab Sample ID: 240-174588-6

Date Collected: 10/10/22 10:54

Matrix: Water

Date Received: 10/13/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:13
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:42
Total/NA	Analysis	9056A		1	548508	JWW	EET CAN	10/26/22 04:54
Total/NA	Analysis	SM 2540C		1	547111	MS	EET CAN	10/14/22 09:50

Client Sample ID: MW-11_20221010

Lab Sample ID: 240-174588-7

Date Collected: 10/10/22 14:05

Matrix: Water

Date Received: 10/13/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:26
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:45
Total/NA	Analysis	9056A		1	548508	JWW	EET CAN	10/26/22 05:37
Total/NA	Analysis	9056A		10	548508	JWW	EET CAN	10/26/22 05:59
Total/NA	Analysis	SM 2540C		1	547111	MS	EET CAN	10/14/22 09:50

Lab Chronicle

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

Job ID: 240-174588-1

Client Sample ID: MW-12_20221011
Date Collected: 10/11/22 10:09
Date Received: 10/13/22 09:45

Lab Sample ID: 240-174588-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:30
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:47
Total/NA	Analysis	9056A		1	548508	JWW	EET CAN	10/26/22 06:20
Total/NA	Analysis	9056A		10	548508	JWW	EET CAN	10/26/22 06:42
Total/NA	Analysis	SM 2540C		1	547339	MS	EET CAN	10/17/22 10:05

Client Sample ID: MW-13_20221011
Date Collected: 10/11/22 10:55
Date Received: 10/13/22 09:45

Lab Sample ID: 240-174588-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:34
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:50
Total/NA	Analysis	9056A		1	548508	JWW	EET CAN	10/26/22 07:04
Total/NA	Analysis	SM 2540C		1	547342	MS	EET CAN	10/17/22 10:10

Client Sample ID: MW-14_20221010
Date Collected: 10/10/22 16:00
Date Received: 10/13/22 09:45

Lab Sample ID: 240-174588-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:38
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:52
Total/NA	Analysis	9056A		1	548501	JWW	EET CAN	10/25/22 20:56
Total/NA	Analysis	9056A		10	548501	JWW	EET CAN	10/25/22 22:01
Total/NA	Analysis	SM 2540C		1	547111	MS	EET CAN	10/14/22 09:50

Client Sample ID: MW-15_20221011
Date Collected: 10/11/22 11:56
Date Received: 10/13/22 09:45

Lab Sample ID: 240-174588-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:43
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:59
Total/NA	Analysis	9056A		1	548501	JWW	EET CAN	10/25/22 20:12
Total/NA	Analysis	SM 2540C		1	547342	MS	EET CAN	10/17/22 10:10

Lab Chronicle

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

Job ID: 240-174588-1

Client Sample ID: MW-8S_20221011

Date Collected: 10/11/22 14:14
Date Received: 10/13/22 09:45

Lab Sample ID: 240-174588-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:47
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 23:02
Total/NA	Analysis	9056A		1	548501	JWW	EET CAN	10/25/22 19:29
Total/NA	Analysis	9056A		10	548501	JWW	EET CAN	10/25/22 19:51
Total/NA	Analysis	SM 2540C		1	547339	MS	EET CAN	10/17/22 10:05

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation. Job ID: 240-174588-1
Project/Site: CCR DTE Monroe Power Plant- BAI

Laboratory: Eurofins Canton

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	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins

Gen Coord

Client Information	Sampler: Henry Schmeltz	Lab PM: Brooks, Kris M	Carrier Tracking No(s)	COC No: 240-99750-33351.1
Client Contact: Mr. Vincent Buening	Phone: 734 646 5328	E-Mail: Kris.Brooks@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: TRC Environmental Corporation.	PWSID:			Job #:
Address: 1540 Eisenhower Place	Due Date Requested:			
City: Ann Arbor	TAT Requested (days): Standard			
State, Zip: MI, 48108-7080	Compliance Project: Δ ~~Yes~~ Δ No			
Phone: 313-971-7080(Tel) 313-971-9022(Fax)	PO #: ~~164689~~ 179973			
Email: vbuening@trccompanies.com	WO #: 254222.0001			
Project Name: CCR DTE Monroe Power Plant Bottom Ash Im	Project #: 24016830			
Site: Monroe PP BAI	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd - TDS	6010B, 6020	9056A_28D - Chloride, Fluoride and Sulfate	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	D	N		
MW-1S_20221010	10/10/22	1512	G	Water	N	N	X	X	X		
MW-2S_20221011	10/11/22	920	G	Water	N	N	X	X	X		
MW-3S_20221010	10/10/22	1301	G	Water	N	N	X	X	X		
MW-7S_20221011	10/11/22	1238	G	Water	N	N	X	X	X		
MW-9_20221010	10/10/22	1152	G	Water	N	N	X	X	X		
MW-10_20221010	10/10/22	1054	G	Water	N	N	X	X	X		
MW-11_20221010	10/10/22	1405	G	Water	N	N	X	X	X		
MW-12_20221011	10/11/22	1009	G	Water	N	N	X	X	X		
MW-13_20221011	10/11/22	1055	G	Water	N	N	X	X	X		
MW-14_20221010	10/10/22	1600	G	Water	N	N	X	X	X		
MW-15_20221011	10/11/22	1156	G	Water	N	N	X	X	X		

240-174588 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Henry Schmeltz	10/11/22 1830	TRC		10/12/22 1120	FEDEX
2		10/12/22 1200			10-13-22 9:48	DHL
3	Relinquished by	Date/Time	Company	Received by:	Date/Time.	Company

Custody Seals Intact: Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Page 33 of 36

(Rev. 1)

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins

Client Information	Sampler: Henry Schwerdt	Lab PM: Brooks, Kris M	Carrier Tracking No(s):	COC No: 240-99750-33351.2
Client Contact: Mr. Vincent Buening	Phone: 734 646 5328	E-Mail: Kris.Brooks@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: TRC Environmental Corporation.	PWSID:			Job #:
Address: 1540 Eisenhower Place	Due Date Requested:			
City: Ann Arbor	TAT Requested (days): Standard			
State, Zip: MI, 48108-7080	Compliance Project: (Δ Yes) Δ No			
Phone: 313-971-7080(Tel) 313-971-9022(Fax)	PO #: 164689 179873			
Email: vbuening@trccompanies.com	WO #: 254222.0001			
Project Name: CCR DTE Monroe Power Plant Bottom Ash Im	Project #: 24016830			
Site: Monroe PP MW-8s	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd - TDS	6010B, 6020	9056A_28D - Chloride, Fluoride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:		N	N	D	N			
~~DUP-01~~ MW-8s-20221011	10/11/22	1414	G	Water	N	N	X	X			
				~~Water~~							
				~~Water~~							

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

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Henry Schwerdt	10/11/22 1830	TRC		10/12/22 1120	ETA
2		10/12/22 1200	ETA		10-13-22 0942	ETA
3		Date/Time	Company		Date/Time	Company

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

Ver: 06/08/2021

Eurofins - Canton Sample Receipt Form/Narrative **Login # : 174588**
Barberton Facility

Client ERC Site Name _____ Cooler unpacked by: Chanel

Cooler Received on 10-13-22 Opened on 10-13-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # FX 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# IR-13 (CF +0.7 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF 0.0°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	No
-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
-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 (Y(N)) and sample type of grab/comp(Y/N)?		
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# HC286797
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

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

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: _____

WI-NC-099

Login # : _____

Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-13 IR-15	2.7	2.7	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15	2.1	2.1	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

eurofins | Environment Testing

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-174593-1
Client Project/Site: CCR DTE Monroe Power Plant BAI

For:
TRC Environmental Corporation.
1540 Eisenhower Place
Ann Arbor, Michigan 48108-7080

Attn: Mr. Vincent Buening

Patrick O'Meara

Authorized for release by:
10/27/2022 8:17:44 PM
Patrick O'Meara, Manager of Project Management
(330)966-5725
Patrick.O'Meara@et.eurofinsus.com

Designee for

Kris Brooks, Project Manager II
(330)966-9790
Kris.Brooks@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: TRC Environmental Corporation. Job ID: 240-174593-1
Project/Site: CCR DTE Monroe Power Plant BAI

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

Job ID: 240-174593-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-174593-1

Receipt
The sample was received on 10/13/2022 @ 3:32 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.1°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.

Method Summary

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

Job ID: 240-174593-1

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

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 CAN = Eurofins Canton, 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: 240-174593-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-174593-1	DUP-01-20221010	Water	10/10/22 00:00	10/13/22 15:32

Detection Summary

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

Job ID: 240-174593-1

Client Sample ID: DUP-01-20221010 — Lab Sample ID: 240-174593-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	500		100	100	ug/L	1		6010B	Total Recoverable
Calcium	150000		1000	1000	ug/L	1		6020	Total Recoverable
Chloride	55		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.46		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	2.8		1.0	1.0	mg/L	1		9056A	Total/NA
Total Dissolved Solids	820		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 240-174593-1

Client Sample ID: DUP-01-20221010

Date Collected: 10/10/22 00:00
Date Received: 10/13/22 15:32

Lab Sample ID: 240-174593-1

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	500		100	100	ug/L		10/14/22 12:00	10/19/22 03:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000		1000	1000	ug/L		10/14/22 12:00	10/17/22 22:20	1
Iron	100	U	100	100	ug/L		10/14/22 12:00	10/17/22 22:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	55		1.0	1.0	mg/L			10/25/22 18:02	1
Fluoride (SW846 9056A)	0.46		0.050	0.050	mg/L			10/25/22 18:02	1
Sulfate (SW846 9056A)	2.8		1.0	1.0	mg/L			10/25/22 18:02	1
Total Dissolved Solids (SM 2540C)	820		10	10	mg/L			10/14/22 09:50	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-547165/1-A
Matrix: Water
Analysis Batch: 547695

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 547165

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	100	ug/L		10/14/22 12:00	10/19/22 02:45	1

Lab Sample ID: LCS 240-547165/2-A
Matrix: Water
Analysis Batch: 547695

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 547165

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	955		ug/L		96	80 - 120

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-547165/1-A
Matrix: Water
Analysis Batch: 547508

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 547165

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	1000	ug/L		10/14/22 12:00	10/17/22 21:46	1
Iron	100	U	100	100	ug/L		10/14/22 12:00	10/17/22 21:46	1

Lab Sample ID: LCS 240-547165/3-A
Matrix: Water
Analysis Batch: 547508

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 547165

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23400		ug/L		94	80 - 120
Iron	5000	4860		ug/L		97	80 - 120

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-548501/3
Matrix: Water
Analysis Batch: 548501

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	1.0	mg/L			10/25/22 08:59	1
Fluoride	0.050	U	0.050	0.050	mg/L			10/25/22 08:59	1
Sulfate	1.0	U	1.0	1.0	mg/L			10/25/22 08:59	1

Lab Sample ID: LCS 240-548501/4
Matrix: Water
Analysis Batch: 548501

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	52.9		mg/L		106	90 - 110

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

Job ID: 240-174593-1

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

Lab Sample ID: MB 240-547111/1
Matrix: Water
Analysis Batch: 547111

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	10	mg/L			10/14/22 09:50	1

Lab Sample ID: LCS 240-547111/2
Matrix: Water
Analysis Batch: 547111

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	493	470		mg/L		95	80 - 120

QC Association Summary

Client: TRC Environmental Corporation. Job ID: 240-174593-1
Project/Site: CCR DTE Monroe Power Plant BAI

Metals

Prep Batch: 547165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174593-1	DUP-01-20221010	Total Recoverable	Water	3005A	
MB 240-547165/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-547165/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-547165/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 547508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174593-1	DUP-01-20221010	Total Recoverable	Water	6020	547165
MB 240-547165/1-A	Method Blank	Total Recoverable	Water	6020	547165
LCS 240-547165/3-A	Lab Control Sample	Total Recoverable	Water	6020	547165

Analysis Batch: 547695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174593-1	DUP-01-20221010	Total Recoverable	Water	6010B	547165
MB 240-547165/1-A	Method Blank	Total Recoverable	Water	6010B	547165
LCS 240-547165/2-A	Lab Control Sample	Total Recoverable	Water	6010B	547165

General Chemistry

Analysis Batch: 547111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174593-1	DUP-01-20221010	Total/NA	Water	SM 2540C	
MB 240-547111/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-547111/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 548501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174593-1	DUP-01-20221010	Total/NA	Water	9056A	
MB 240-548501/3	Method Blank	Total/NA	Water	9056A	
LCS 240-548501/4	Lab Control Sample	Total/NA	Water	9056A	

Lab Chronicle

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

Job ID: 240-174593-1

Client Sample ID: DUP-01-20221010

Date Collected: 10/10/22 00:00
Date Received: 10/13/22 15:32

Lab Sample ID: 240-174593-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 03:44
Total Recoverable	Prep	3005A			547165	SHB	EET CAN	10/14/22 12:00
Total Recoverable	Analysis	6020		1	547508	DSH	EET CAN	10/17/22 22:20
Total/NA	Analysis	9056A		1	548501	JWW	EET CAN	10/25/22 18:02
Total/NA	Analysis	SM 2540C		1	547111	MS	EET CAN	10/14/22 09:50

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation. Job ID: 240-174593-1
Project/Site: CCR DTE Monroe Power Plant BAI

Laboratory: Eurofins Canton

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	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

MICHIGAN 190

Chain of Custody Record

MICHIGAN 190

eurofins

Client Information	Sampler: Henry Schmidt	Lab PM: Brooks, Kris M	Carrier Tracking No(s):	COC No: 240-99750-33351.2
Client Contact: Mr. Vincent Buening	Phone: 734 646 5328	E-Mail: Kris.Brooks@et.eurofinsus.com	State of Origin	Page: Page 2 of 2
Company: TRC Environmental Corporation.	PWSID:			Job #:
Address: 1540 Eisenhower Place	Due Date Requested:			
City: Ann Arbor	TAT Requested (days): Standard			
State, Zip: MI, 48108-7080	Compliance Project: (Yes) Δ No			
Phone: 313-971-7080(Tel) 313-971-9022(Fax)	PO #: ~~164089~~ 179973			
Email: vbuening@trccompanies.com	WO #: 254222.0001			
Project Name: CCR DTE Monroe Power Plant Bottom Ash Im	Project #: 24016830			
Site: Monroe PP BAI	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd - TDS	6010B, 6020	9056A_28D - Chloride, Fluoride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N		
DUP-01 ~ 20221010	10/10/22	—	G	Water	N	N	X	X	X		
				~~Water~~							
				~~Water~~							

240-174593 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Henry Schmidt	10/11/22 1830	TRC		10/12/22 1120	
2		10/12/22 1200	FEDEX		10-13-22 9:48	ET
3		Date/Time	Company	Received by	Date/Time	Company

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

Ver: 06/08/2021

Page 14 of 16

10/27/2022

Eurofins - Canton Sample Receipt Form/Narrative **Login # :** 174593
Barberton Facility

Client ERC Site Name _____ Cooler unpacked by: Charah

Cooler Received on 10-13-22 Opened on 10-13-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # TX 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# IR-13 (CF +0.7 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF 0.0°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	No
-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
-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 (Y/N) and sample type of grab/comp(Y/N)?		
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# HC286797
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

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

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: _____

WI-NC-099

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservative Added (mls)	Lot #
DUP-01-20221010	240-174593-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/27/2023 3:48:21 AM

JOB DESCRIPTION

CCR DTE Monroe Power Plant BAI

JOB NUMBER

240-183172-1

Eurofins Canton
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
4/27/2023 3:48:21 AM

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

Table of Contents

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. Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-183172-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-183172-1

Receipt
The samples were received on 4/7/2023 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 1.8°C and 2.4°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.

Method Summary

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

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

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

Sample Summary

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183172-1	MW-1S	Water	04/03/23 15:10	04/07/23 08:00
240-183172-2	MW-2S	Water	04/04/23 11:02	04/07/23 08:00
240-183172-3	MW-3S	Water	04/03/23 13:28	04/07/23 08:00
240-183172-4	MW-7S	Water	04/04/23 15:20	04/07/23 08:00
240-183172-5	MW-9	Water	04/03/23 10:38	04/07/23 08:00
240-183172-6	MW-10	Water	04/03/23 11:28	04/07/23 08:00
240-183172-7	MW-11	Water	04/04/23 09:55	04/07/23 08:00
240-183172-8	MW-12	Water	04/04/23 11:53	04/07/23 08:00
240-183172-9	MW-13	Water	04/04/23 13:01	04/07/23 08:00
240-183172-10	MW-14	Water	04/03/23 16:05	04/07/23 08:00
240-183172-11	DUP-01	Water	04/03/23 00:00	04/07/23 08:00

Detection Summary

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-1S — Lab Sample ID: 240-183172-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	200		100	100	ug/L	1		6010B	Total Recoverable
Calcium	100000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	5200		100	100	ug/L	1		6020	Total Recoverable
Chloride	9.4		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.14		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	99		1.0	1.0	mg/L	1		9056A	Total/NA
Total Dissolved Solids	400		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-2S — Lab Sample ID: 240-183172-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	100	ug/L	1		6010B	Total Recoverable
Calcium	230000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	2500		100	100	ug/L	1		6020	Total Recoverable
Chloride	11		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.61		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1300		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1800		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-3S — Lab Sample ID: 240-183172-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	970		100	100	ug/L	1		6010B	Total Recoverable
Calcium	550000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	69000		100	100	ug/L	1		6020	Total Recoverable
Chloride	12		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.71		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1200		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1800		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-7S — Lab Sample ID: 240-183172-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	150		100	100	ug/L	1		6010B	Total Recoverable
Calcium	97000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	360		100	100	ug/L	1		6020	Total Recoverable
Chloride	7.9		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.48		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	270		2.0	2.0	mg/L	2		9056A	Total/NA
Total Dissolved Solids	500		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-9 — Lab Sample ID: 240-183172-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	580		100	100	ug/L	1		6010B	Total Recoverable
Calcium	170000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	2900		100	100	ug/L	1		6020	Total Recoverable
Chloride	62		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.45		0.050	0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	760		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 240-183172-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	560		100	100	ug/L	1		6010B	Total Recoverable
Calcium	150000		1000	1000	ug/L	1		6020	Total Recoverable
Chloride	56		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.40		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	11		1.0	1.0	mg/L	1		9056A	Total/NA
Total Dissolved Solids	800		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-11 — Lab Sample ID: 240-183172-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	940		100	100	ug/L	1		6010B	Total Recoverable
Calcium	240000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	2100		100	100	ug/L	1		6020	Total Recoverable
Chloride	15		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.80		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1400		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1900		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 240-183172-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1000		100	100	ug/L	1		6010B	Total Recoverable
Calcium	170000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	1300		100	100	ug/L	1		6020	Total Recoverable
Chloride	9.7		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.71		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1100		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1600		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-13 — Lab Sample ID: 240-183172-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	120000		1000	1000	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-13 (Continued) — Lab Sample ID: 240-183172-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	9300		100	100	ug/L	1		6020	Total Recoverable
Chloride	95		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.30		0.050	0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	530		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-14 — Lab Sample ID: 240-183172-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1600		100	100	ug/L	1		6010B	Total Recoverable
Calcium	270000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	6700		100	100	ug/L	1		6020	Total Recoverable
Chloride	260		10	10	mg/L	10		9056A	Total/NA
Fluoride	0.29		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	400		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1600		20	20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-183172-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	600		100	100	ug/L	1		6010B	Total Recoverable
Calcium	180000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	3100		100	100	ug/L	1		6020	Total Recoverable
Chloride	62		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.43		0.050	0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	780		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-1S
Lab Sample ID: 240-183172-1
Date Collected: 04/03/23 15:10
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	200		100	100	ug/L		04/10/23 14:00	04/11/23 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	1000	ug/L		04/10/23 14:00	04/11/23 23:33	1
Iron	5200		100	100	ug/L		04/10/23 14:00	04/12/23 19:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	9.4		1.0	1.0	mg/L			04/22/23 07:34	1
Fluoride (SW846 9056A)	0.14		0.050	0.050	mg/L			04/22/23 07:34	1
Sulfate (SW846 9056A)	99		1.0	1.0	mg/L			04/22/23 07:34	1
Total Dissolved Solids (SM 2540C)	400		10	10	mg/L			04/10/23 10:10	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-2S
Lab Sample ID: 240-183172-2
Date Collected: 04/04/23 11:02
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1100		100	100	ug/L		04/10/23 14:00	04/11/23 16:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	230000		1000	1000	ug/L		04/10/23 14:00	04/11/23 23:36	1
Iron	2500		100	100	ug/L		04/10/23 14:00	04/12/23 19:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	11		1.0	1.0	mg/L			04/22/23 07:56	1
Fluoride (SW846 9056A)	0.61		0.050	0.050	mg/L			04/22/23 07:56	1
Sulfate (SW846 9056A)	1300		10	10	mg/L			04/22/23 08:17	10
Total Dissolved Solids (SM 2540C)	1800		20	20	mg/L			04/11/23 09:48	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-3S
Lab Sample ID: 240-183172-3
Date Collected: 04/03/23 13:28
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	970		100	100	ug/L		04/10/23 14:00	04/11/23 16:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	550000		1000	1000	ug/L		04/10/23 14:00	04/11/23 23:39	1
Iron	69000		100	100	ug/L		04/10/23 14:00	04/12/23 19:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	12		1.0	1.0	mg/L			04/22/23 09:22	1
Fluoride (SW846 9056A)	0.71		0.050	0.050	mg/L			04/22/23 09:22	1
Sulfate (SW846 9056A)	1200		10	10	mg/L			04/22/23 09:44	10
Total Dissolved Solids (SM 2540C)	1800		20	20	mg/L			04/10/23 10:10	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-7S
Lab Sample ID: 240-183172-4
Date Collected: 04/04/23 15:20
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	150		100	100	ug/L		04/10/23 14:00	04/11/23 16:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	97000		1000	1000	ug/L		04/10/23 14:00	04/11/23 23:42	1
Iron	360		100	100	ug/L		04/10/23 14:00	04/12/23 19:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	7.9		1.0	1.0	mg/L			04/22/23 10:06	1
Fluoride (SW846 9056A)	0.48		0.050	0.050	mg/L			04/22/23 10:06	1
Sulfate (SW846 9056A)	270		2.0	2.0	mg/L			04/25/23 11:03	2
Total Dissolved Solids (SM 2540C)	500		10	10	mg/L			04/11/23 09:48	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-9
Lab Sample ID: 240-183172-5
Date Collected: 04/03/23 10:38
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	580		100	100	ug/L		04/10/23 14:00	04/11/23 16:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	170000		1000	1000	ug/L		04/10/23 14:00	04/11/23 23:45	1
Iron	2900		100	100	ug/L		04/10/23 14:00	04/12/23 20:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	62		1.0	1.0	mg/L			04/22/23 10:27	1
Fluoride (SW846 9056A)	0.45		0.050	0.050	mg/L			04/22/23 10:27	1
Sulfate (SW846 9056A)	1.0	U	1.0	1.0	mg/L			04/22/23 10:27	1
Total Dissolved Solids (SM 2540C)	760		10	10	mg/L			04/10/23 10:10	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-10
Lab Sample ID: 240-183172-6
Date Collected: 04/03/23 11:28
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	560		100	100	ug/L		04/10/23 14:00	04/11/23 16:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000		1000	1000	ug/L		04/10/23 14:00	04/11/23 23:48	1
Iron	100	U	100	100	ug/L		04/10/23 14:00	04/12/23 20:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	56		1.0	1.0	mg/L			04/22/23 11:11	1
Fluoride (SW846 9056A)	0.40		0.050	0.050	mg/L			04/22/23 11:11	1
Sulfate (SW846 9056A)	11		1.0	1.0	mg/L			04/22/23 11:11	1
Total Dissolved Solids (SM 2540C)	800		10	10	mg/L			04/10/23 10:10	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-11
Lab Sample ID: 240-183172-7
Date Collected: 04/04/23 09:55
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	940		100	100	ug/L		04/10/23 14:00	04/11/23 17:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	240000		1000	1000	ug/L		04/10/23 14:00	04/11/23 23:51	1
Iron	2100		100	100	ug/L		04/10/23 14:00	04/12/23 20:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	15		1.0	1.0	mg/L			04/22/23 11:54	1
Fluoride (SW846 9056A)	0.80		0.050	0.050	mg/L			04/22/23 11:54	1
Sulfate (SW846 9056A)	1400		10	10	mg/L			04/22/23 12:16	10
Total Dissolved Solids (SM 2540C)	1900		20	20	mg/L			04/11/23 09:48	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-12
Lab Sample ID: 240-183172-8
Date Collected: 04/04/23 11:53
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1000		100	100	ug/L		04/10/23 14:00	04/11/23 17:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	170000		1000	1000	ug/L		04/10/23 14:00	04/11/23 23:54	1
Iron	1300		100	100	ug/L		04/10/23 14:00	04/12/23 20:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	9.7		1.0	1.0	mg/L			04/22/23 12:38	1
Fluoride (SW846 9056A)	0.71		0.050	0.050	mg/L			04/22/23 12:38	1
Sulfate (SW846 9056A)	1100		10	10	mg/L			04/22/23 13:43	10
Total Dissolved Solids (SM 2540C)	1600		20	20	mg/L			04/11/23 09:48	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-13
Lab Sample ID: 240-183172-9
Date Collected: 04/04/23 13:01
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	100	ug/L		04/10/23 14:00	04/11/23 17:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**120000**		1000	1000	ug/L		04/10/23 14:00	04/11/23 23:57	1
Iron	**9300**		100	100	ug/L		04/10/23 14:00	04/12/23 20:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	**95**		1.0	1.0	mg/L			04/22/23 14:04	1
Fluoride (SW846 9056A)	**0.30**		0.050	0.050	mg/L			04/22/23 14:04	1
Sulfate (SW846 9056A)	1.0	U	1.0	1.0	mg/L			04/22/23 14:04	1
Total Dissolved Solids (SM 2540C)	**530**		10	10	mg/L			04/11/23 09:48	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-14
Lab Sample ID: 240-183172-10
Date Collected: 04/03/23 16:05
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1600		100	100	ug/L		04/10/23 14:00	04/11/23 17:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	270000		1000	1000	ug/L		04/10/23 14:00	04/12/23 00:06	1
Iron	6700		100	100	ug/L		04/10/23 14:00	04/12/23 20:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	260		10	10	mg/L			04/22/23 15:09	10
Fluoride (SW846 9056A)	0.29		0.050	0.050	mg/L			04/22/23 14:48	1
Sulfate (SW846 9056A)	400		10	10	mg/L			04/22/23 15:09	10
Total Dissolved Solids (SM 2540C)	1600		20	20	mg/L			04/10/23 10:10	1

Client: TRC Environmental Corporation.
Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: DUP-01
Lab Sample ID: 240-183172-11
Date Collected: 04/03/23 00:00
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	600		100	100	ug/L		04/10/23 14:00	04/11/23 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	180000		1000	1000	ug/L		04/10/23 14:00	04/12/23 00:08	1
Iron	3100		100	100	ug/L		04/10/23 14:00	04/12/23 20:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	62		1.0	1.0	mg/L			04/22/23 15:31	1
Fluoride (SW846 9056A)	0.43		0.050	0.050	mg/L			04/22/23 15:31	1
Sulfate (SW846 9056A)	1.0	U	1.0	1.0	mg/L			04/22/23 15:31	1
Total Dissolved Solids (SM 2540C)	780		10	10	mg/L			04/10/23 10:10	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-568713/1-A
Matrix: Water
Analysis Batch: 568985

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 568713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	100	ug/L		04/10/23 14:00	04/11/23 15:44	1

Lab Sample ID: LCS 240-568713/2-A
Matrix: Water
Analysis Batch: 568985

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 568713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1070		ug/L		107	80 - 120

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-568713/1-A
Matrix: Water
Analysis Batch: 569003

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 568713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	1000	ug/L		04/10/23 14:00	04/11/23 23:05	1

Lab Sample ID: MB 240-568713/1-A
Matrix: Water
Analysis Batch: 569177

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 568713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	U	100	100	ug/L		04/10/23 14:00	04/12/23 19:36	1

Lab Sample ID: LCS 240-568713/3-A
Matrix: Water
Analysis Batch: 569003

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 568713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	22900		ug/L		91	80 - 120

Lab Sample ID: LCS 240-568713/3-A
Matrix: Water
Analysis Batch: 569177

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 568713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	5000	4890		ug/L		98	80 - 120

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-570011/3
Matrix: Water
Analysis Batch: 570011

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	1.0	mg/L			04/22/23 05:02	1
Fluoride	0.050	U	0.050	0.050	mg/L			04/22/23 05:02	1
Sulfate	1.0	U	1.0	1.0	mg/L			04/22/23 05:02	1

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

Lab Sample ID: LCS 240-570011/4
Matrix: Water
Analysis Batch: 570011

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	48.8		mg/L		98	90 - 110
Fluoride	2.50	2.49		mg/L		99	90 - 110
Sulfate	50.0	49.8		mg/L		100	90 - 110

Lab Sample ID: MB 240-570645/3
Matrix: Water
Analysis Batch: 570645

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	1.0	mg/L			04/24/23 13:19	1
Fluoride	0.050	U	0.050	0.050	mg/L			04/24/23 13:19	1
Sulfate	1.0	U	1.0	1.0	mg/L			04/24/23 13:19	1

Lab Sample ID: LCS 240-570645/4
Matrix: Water
Analysis Batch: 570645

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	2.58		mg/L		103	90 - 110
Sulfate	50.0	51.4		mg/L		103	90 - 110

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

Lab Sample ID: MB 240-568696/1
Matrix: Water
Analysis Batch: 568696

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	10	mg/L			04/10/23 10:10	1

Lab Sample ID: LCS 240-568696/2
Matrix: Water
Analysis Batch: 568696

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	580	543		mg/L		94	80 - 120

Lab Sample ID: MB 240-568879/1
Matrix: Water
Analysis Batch: 568879

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	10	mg/L			04/11/23 09:48	1

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

Lab Sample ID: LCS 240-568879/2
Matrix: Water
Analysis Batch: 568879

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			580	543		mg/L		94	80 - 120		

Lab Sample ID: 240-183172-9 DU
Matrix: Water
Analysis Batch: 568879

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	530			542		mg/L				5	20

Metals

Prep Batch: 568713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-1	MW-1S	Total Recoverable	Water	3005A	
240-183172-2	MW-2S	Total Recoverable	Water	3005A	
240-183172-3	MW-3S	Total Recoverable	Water	3005A	
240-183172-4	MW-7S	Total Recoverable	Water	3005A	
240-183172-5	MW-9	Total Recoverable	Water	3005A	
240-183172-6	MW-10	Total Recoverable	Water	3005A	
240-183172-7	MW-11	Total Recoverable	Water	3005A	
240-183172-8	MW-12	Total Recoverable	Water	3005A	
240-183172-9	MW-13	Total Recoverable	Water	3005A	
240-183172-10	MW-14	Total Recoverable	Water	3005A	
240-183172-11	DUP-01	Total Recoverable	Water	3005A	
MB 240-568713/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-568713/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-568713/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 568985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-1	MW-1S	Total Recoverable	Water	6010B	568713
240-183172-2	MW-2S	Total Recoverable	Water	6010B	568713
240-183172-3	MW-3S	Total Recoverable	Water	6010B	568713
240-183172-4	MW-7S	Total Recoverable	Water	6010B	568713
240-183172-5	MW-9	Total Recoverable	Water	6010B	568713
240-183172-6	MW-10	Total Recoverable	Water	6010B	568713
240-183172-7	MW-11	Total Recoverable	Water	6010B	568713
240-183172-8	MW-12	Total Recoverable	Water	6010B	568713
240-183172-9	MW-13	Total Recoverable	Water	6010B	568713
240-183172-10	MW-14	Total Recoverable	Water	6010B	568713
240-183172-11	DUP-01	Total Recoverable	Water	6010B	568713
MB 240-568713/1-A	Method Blank	Total Recoverable	Water	6010B	568713
LCS 240-568713/2-A	Lab Control Sample	Total Recoverable	Water	6010B	568713

Analysis Batch: 569003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-1	MW-1S	Total Recoverable	Water	6020	568713
240-183172-2	MW-2S	Total Recoverable	Water	6020	568713
240-183172-3	MW-3S	Total Recoverable	Water	6020	568713
240-183172-4	MW-7S	Total Recoverable	Water	6020	568713
240-183172-5	MW-9	Total Recoverable	Water	6020	568713
240-183172-6	MW-10	Total Recoverable	Water	6020	568713
240-183172-7	MW-11	Total Recoverable	Water	6020	568713
240-183172-8	MW-12	Total Recoverable	Water	6020	568713
240-183172-9	MW-13	Total Recoverable	Water	6020	568713
240-183172-10	MW-14	Total Recoverable	Water	6020	568713
240-183172-11	DUP-01	Total Recoverable	Water	6020	568713
MB 240-568713/1-A	Method Blank	Total Recoverable	Water	6020	568713
LCS 240-568713/3-A	Lab Control Sample	Total Recoverable	Water	6020	568713

Analysis Batch: 569177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-1	MW-1S	Total Recoverable	Water	6020	568713
240-183172-2	MW-2S	Total Recoverable	Water	6020	568713

Metals (Continued)

Analysis Batch: 569177 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-3	MW-3S	Total Recoverable	Water	6020	568713
240-183172-4	MW-7S	Total Recoverable	Water	6020	568713
240-183172-5	MW-9	Total Recoverable	Water	6020	568713
240-183172-6	MW-10	Total Recoverable	Water	6020	568713
240-183172-7	MW-11	Total Recoverable	Water	6020	568713
240-183172-8	MW-12	Total Recoverable	Water	6020	568713
240-183172-9	MW-13	Total Recoverable	Water	6020	568713
240-183172-10	MW-14	Total Recoverable	Water	6020	568713
240-183172-11	DUP-01	Total Recoverable	Water	6020	568713
MB 240-568713/1-A	Method Blank	Total Recoverable	Water	6020	568713
LCS 240-568713/3-A	Lab Control Sample	Total Recoverable	Water	6020	568713

General Chemistry

Analysis Batch: 568696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-1	MW-1S	Total/NA	Water	SM 2540C	
240-183172-3	MW-3S	Total/NA	Water	SM 2540C	
240-183172-5	MW-9	Total/NA	Water	SM 2540C	
240-183172-6	MW-10	Total/NA	Water	SM 2540C	
240-183172-10	MW-14	Total/NA	Water	SM 2540C	
240-183172-11	DUP-01	Total/NA	Water	SM 2540C	
MB 240-568696/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-568696/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 568879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-2	MW-2S	Total/NA	Water	SM 2540C	
240-183172-4	MW-7S	Total/NA	Water	SM 2540C	
240-183172-7	MW-11	Total/NA	Water	SM 2540C	
240-183172-8	MW-12	Total/NA	Water	SM 2540C	
240-183172-9	MW-13	Total/NA	Water	SM 2540C	
MB 240-568879/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-568879/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-183172-9 DU	MW-13	Total/NA	Water	SM 2540C	

Analysis Batch: 570011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-1	MW-1S	Total/NA	Water	9056A	
240-183172-2	MW-2S	Total/NA	Water	9056A	
240-183172-2	MW-2S	Total/NA	Water	9056A	
240-183172-3	MW-3S	Total/NA	Water	9056A	
240-183172-3	MW-3S	Total/NA	Water	9056A	
240-183172-4	MW-7S	Total/NA	Water	9056A	
240-183172-5	MW-9	Total/NA	Water	9056A	
240-183172-6	MW-10	Total/NA	Water	9056A	
240-183172-7	MW-11	Total/NA	Water	9056A	
240-183172-7	MW-11	Total/NA	Water	9056A	
240-183172-8	MW-12	Total/NA	Water	9056A	
240-183172-8	MW-12	Total/NA	Water	9056A	
240-183172-9	MW-13	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 570011 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-10	MW-14	Total/NA	Water	9056A	
240-183172-10	MW-14	Total/NA	Water	9056A	
240-183172-11	DUP-01	Total/NA	Water	9056A	
MB 240-570011/3	Method Blank	Total/NA	Water	9056A	
LCS 240-570011/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 570645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183172-4	MW-7S	Total/NA	Water	9056A	
MB 240-570645/3	Method Blank	Total/NA	Water	9056A	
LCS 240-570645/4	Lab Control Sample	Total/NA	Water	9056A	

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-1S — Lab Sample ID: 240-183172-1

Date Collected: 04/03/23 15:10 — **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 16:26
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 23:33
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 19:42
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 07:34
Total/NA	Analysis	SM 2540C		1	568696	MS	EET CAN	04/10/23 10:10

Client Sample ID: MW-2S — Lab Sample ID: 240-183172-2

Date Collected: 04/04/23 11:02 — **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 16:30
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 23:36
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 19:45
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 07:56
Total/NA	Analysis	9056A		10	570011	JMB	EET CAN	04/22/23 08:17
Total/NA	Analysis	SM 2540C		1	568879	MS	EET CAN	04/11/23 09:48

Client Sample ID: MW-3S — Lab Sample ID: 240-183172-3

Date Collected: 04/03/23 13:28 — **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 16:35
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 23:39
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 19:48
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 09:22
Total/NA	Analysis	9056A		10	570011	JMB	EET CAN	04/22/23 09:44
Total/NA	Analysis	SM 2540C		1	568696	MS	EET CAN	04/10/23 10:10

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-7S — Lab Sample ID: 240-183172-4

Date Collected: 04/04/23 15:20 **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 16:47
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 23:42
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 19:51
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 10:06
Total/NA	Analysis	9056A		2	570645	JMB	EET CAN	04/25/23 11:03
Total/NA	Analysis	SM 2540C		1	568879	MS	EET CAN	04/11/23 09:48

Client Sample ID: MW-9 — Lab Sample ID: 240-183172-5

Date Collected: 04/03/23 10:38 **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 16:52
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 23:45
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 20:00
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 10:27
Total/NA	Analysis	SM 2540C		1	568696	MS	EET CAN	04/10/23 10:10

Client Sample ID: MW-10 — Lab Sample ID: 240-183172-6

Date Collected: 04/03/23 11:28 **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 16:56
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 23:48
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 20:03
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 11:11
Total/NA	Analysis	SM 2540C		1	568696	MS	EET CAN	04/10/23 10:10

Client Sample ID: MW-11 — Lab Sample ID: 240-183172-7

Date Collected: 04/04/23 09:55 **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 17:00

Client Sample ID: MW-11 — Lab Sample ID: 240-183172-7

Date Collected: 04/04/23 09:55 — **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 23:51
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 20:05
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 11:54
Total/NA	Analysis	9056A		10	570011	JMB	EET CAN	04/22/23 12:16
Total/NA	Analysis	SM 2540C		1	568879	MS	EET CAN	04/11/23 09:48

Client Sample ID: MW-12 — Lab Sample ID: 240-183172-8

Date Collected: 04/04/23 11:53 — **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 17:05
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 23:54
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 20:08
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 12:38
Total/NA	Analysis	9056A		10	570011	JMB	EET CAN	04/22/23 13:43
Total/NA	Analysis	SM 2540C		1	568879	MS	EET CAN	04/11/23 09:48

Client Sample ID: MW-13 — Lab Sample ID: 240-183172-9

Date Collected: 04/04/23 13:01 — **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 17:09
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 23:57
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 20:11
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 14:04
Total/NA	Analysis	SM 2540C		1	568879	MS	EET CAN	04/11/23 09:48

Client Sample ID: MW-14 — Lab Sample ID: 240-183172-10

Date Collected: 04/03/23 16:05 — **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 17:13

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-14 — Lab Sample ID: 240-183172-10

Date Collected: 04/03/23 16:05 — **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/12/23 00:06
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 20:14
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 14:48
Total/NA	Analysis	9056A		10	570011	JMB	EET CAN	04/22/23 15:09
Total/NA	Analysis	SM 2540C		1	568696	MS	EET CAN	04/10/23 10:10

Client Sample ID: DUP-01 — Lab Sample ID: 240-183172-11

Date Collected: 04/03/23 00:00 — **Matrix: Water**
Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 17:18
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/12/23 00:08
Total Recoverable	Prep	3005A			568713	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 20:17
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 15:31
Total/NA	Analysis	SM 2540C		1	568696	MS	EET CAN	04/10/23 10:10

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation. Job ID: 240-183172-1
Project/Site: CCR DTE Monroe Power Plant BAI

Laboratory: Eurofins Canton

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	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190

MICHIGAN 190

Chain of Custody Record

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Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Phone (330) 497-9396 Phone (330) 497-0772

Client Information	Sampler: Henry Schwedt	Lab PM: Brooks, Kris M	Carrier Tracking No(s):	COC No: 240-106110-33351.1
Client Contact: Mr. Vincent Buening	Phone: 734 646 5328	E-Mail: Kris.Brooks@et.eurofinsus.com	State of Origin: MI	Page: Page 1 of 1
Company: TRC Environmental Corporation.	PWSID:			Job #:
Address: 1540 Eisenhower Place	Due Date Requested:			
City: Ann Arbor	TAT Requested (days):			
State, Zip: MI, 48108-7080	Compliance Project: Δ Yes Δ No			
Phone: 313-971-7080(Tel) 313-971-9022(Fax)	PO #: 164689			
Email: vbuening@trccompanies.com	WO #: 518728.0001.0000			
Project Name: CCR DTE Monroe Power Plant BAI	Project #: 24016830			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd - TDS	6010B Boron, 6020 Calcium, Iron	9056A_28D - Chloride, Fluoride and Sulfate	Total Number of containers	Special Instructions/Note:
MW-1S	4/3/23	1510	G	Water	N	N	X	X	X		
MW-2S	4/4/23	1102	G	Water	N	N	X	X	X		
MW-3S	4/3/23	1328	G	Water	Y	N	X	X	X		Please HOLD filtered metals pending results of unfiltered metals
MW-7S	4/4/23	1520	G	Water	N	N	X	X	X		
MW-9	4/3/23	1038	G	Water	N	N	X	X	X		
MW-10	4/3/23	1128	G	Water	N	N	X	X	X		
MW-11	4/4/23	955	G	Water	N	N	X	X	X		
MW-12	4/4/23	1153	G	Water	N	N	X	X	X		
MW-13	4/4/23	1301	G	Water	N	N	X	X	X		
MW-14	4/3/23	1605	G	Water	N	N	X	X	X		
DUP-01	4/3/23	—	G	Water	N	N	X	X	X		

240-183172 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by: Henry Schwedt	Date/Time: 4/4/23 1730	Company: TRC	Received by: Rachel Staroga	Date/Time: 4/4/23 1730	Company: TRC
Relinquished by:	Date/Time: 4/6/23 1130	Company: TRC	Received by:	Date/Time: 4/6/23 1131	Company: ET
Relinquished by:	Date/Time: 4/6/23 1131	Company: ET	Received by:	Date/Time: 4-7-23 8:00	Company: GXML

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

Ver: 01/16/2019

Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 22	1.8	1.8	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 22	2.4	2.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
				☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

183172

Eurofins - Canton Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client TrC environmental Site Name _____ Cooler unpacked by: Mandaly-Blue

Cooler Received on 4-7-23 Opened on 4-7-23

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off Eurofins Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # eltnc 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 # _____ (CF _____ °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____	(Yes)	No
-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)
-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 (Y/N), and sample type of grab/comp (Y/N)?	(Y)	(N) (Y)
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# HC203864
14. Were VOAs on the COC?	Yes	(No)
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No (NA)
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	(No)
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

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

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

MW-35 received An filtered nitric with no tests to log on C.O.C used instructions in ready to log.

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: _____

WI-NC-099

Login Container Summary Report

240-183172

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservative Added (mls)	Lot #
MW-1S	240-183172-C-1	Plastic 500ml - with Nitric Acid	<2			
MW-2S	240-183172-C-2	Plastic 500ml - with Nitric Acid	<2			
MW-3S	240-183172-C-3	Plastic 500ml - with Nitric Acid	<2			
MW-3S	240-183172-D-3	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-7S	240-183172-C-4	Plastic 500ml - with Nitric Acid	<2			
MW-9	240-183172-C-5	Plastic 500ml - with Nitric Acid	<2			
MW-10	240-183172-C-6	Plastic 500ml - with Nitric Acid	<2			
MW-11	240-183172-C-7	Plastic 500ml - with Nitric Acid	<2			
MW-12	240-183172-C-8	Plastic 500ml - with Nitric Acid	<2			
MW-13	240-183172-C-9	Plastic 500ml - with Nitric Acid	<2			
MW-14	240-183172-C-10	Plastic 500ml - with Nitric Acid	<2			
DUP-01	240-183172-C-11	Plastic 500ml - with Nitric Acid	<2			

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/24/2023 8:57:55 PM

JOB DESCRIPTION

CCR DTE Monroe Power Plant BAI

JOB NUMBER

240-183170-1

Eurofins Canton
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
4/24/2023 8:57:55 PM

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

Table of Contents

Definitions/Glossary

Client: TRC Environmental Corporation. Job ID: 240-183170-1
Project/Site: CCR DTE Monroe Power Plant BAI

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

Job ID: 240-183170-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-183170-1

Receipt

The sample was received on 4/7/2023 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8°C and 2.4°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.

Method Summary

Client: TRC Environmental Corporation.
Job ID: 240-183170-1
Project/Site: CCR DTE Monroe Power Plant BAI

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

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

Sample Summary

Client: TRC Environmental Corporation.
Job ID: 240-183170-1
Project/Site: CCR DTE Monroe Power Plant BAI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183170-1	MW-15	Water	04/04/23 16:03	04/07/23 08:00

Detection Summary

Client: TRC Environmental Corporation.
Job ID: 240-183170-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-15
Lab Sample ID: 240-183170-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2700		100	100	ug/L	1		6010B	Total Recoverable
Calcium	140000		1000	1000	ug/L	1		6020	Total Recoverable
Iron	9800		100	100	ug/L	1		6020	Total Recoverable
Chloride	110		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.45		0.050	0.050	mg/L	1		9056A	Total/NA
Total Dissolved Solids	650		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: TRC Environmental Corporation.
Job ID: 240-183170-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-15
Lab Sample ID: 240-183170-1
Date Collected: 04/04/23 16:03
Matrix: Water
Date Received: 04/07/23 08:00

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2700		100	100	ug/L		04/10/23 14:00	04/11/23 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		1000	1000	ug/L		04/10/23 14:00	04/11/23 22:01	1
Iron	9800		100	100	ug/L		04/10/23 14:00	04/12/23 18:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	110		1.0	1.0	mg/L			04/22/23 05:46	1
Fluoride (SW846 9056A)	0.45		0.050	0.050	mg/L			04/22/23 05:46	1
Sulfate (SW846 9056A)	1.0	U	1.0	1.0	mg/L			04/22/23 05:46	1
Total Dissolved Solids (SM 2540C)	650		10	10	mg/L			04/11/23 09:48	1

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

Job ID: 240-183170-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-568709/1-A
Matrix: Water
Analysis Batch: 568985

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 568709

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	100	ug/L		04/10/23 14:00	04/11/23 18:01	1

Lab Sample ID: LCS 240-568709/2-A
Matrix: Water
Analysis Batch: 568985

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 568709

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1070		ug/L		107	80 - 120

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-568709/1-A
Matrix: Water
Analysis Batch: 569003

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 568709

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	1000	ug/L		04/10/23 14:00	04/11/23 21:29	1

Lab Sample ID: MB 240-568709/1-A
Matrix: Water
Analysis Batch: 569177

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 568709

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	U	100	100	ug/L		04/10/23 14:00	04/12/23 18:50	1

Lab Sample ID: LCS 240-568709/3-A
Matrix: Water
Analysis Batch: 569003

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 568709

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	22800		ug/L		91	80 - 120

Lab Sample ID: LCS 240-568709/3-A
Matrix: Water
Analysis Batch: 569177

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 568709

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	5000	5240		ug/L		105	80 - 120

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-570011/3
Matrix: Water
Analysis Batch: 570011

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	1.0	mg/L			04/22/23 05:02	1
Fluoride	0.050	U	0.050	0.050	mg/L			04/22/23 05:02	1
Sulfate	1.0	U	1.0	1.0	mg/L			04/22/23 05:02	1

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

Lab Sample ID: LCS 240-570011/4
Matrix: Water
Analysis Batch: 570011

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	48.8		mg/L		98	90 - 110
Fluoride	2.50	2.49		mg/L		99	90 - 110
Sulfate	50.0	49.8		mg/L		100	90 - 110

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

Lab Sample ID: MB 240-568879/1
Matrix: Water
Analysis Batch: 568879

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	10	mg/L			04/11/23 09:48	1

Lab Sample ID: LCS 240-568879/2
Matrix: Water
Analysis Batch: 568879

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	580	543		mg/L		94	80 - 120

QC Association Summary

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

Job ID: 240-183170-1

Metals

Prep Batch: 568709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183170-1	MW-15	Total Recoverable	Water	3005A	
MB 240-568709/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-568709/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-568709/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 568985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183170-1	MW-15	Total Recoverable	Water	6010B	568709
MB 240-568709/1-A	Method Blank	Total Recoverable	Water	6010B	568709
LCS 240-568709/2-A	Lab Control Sample	Total Recoverable	Water	6010B	568709

Analysis Batch: 569003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183170-1	MW-15	Total Recoverable	Water	6020	568709
MB 240-568709/1-A	Method Blank	Total Recoverable	Water	6020	568709
LCS 240-568709/3-A	Lab Control Sample	Total Recoverable	Water	6020	568709

Analysis Batch: 569177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183170-1	MW-15	Total Recoverable	Water	6020	568709
MB 240-568709/1-A	Method Blank	Total Recoverable	Water	6020	568709
LCS 240-568709/3-A	Lab Control Sample	Total Recoverable	Water	6020	568709

General Chemistry

Analysis Batch: 568879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183170-1	MW-15	Total/NA	Water	SM 2540C	
MB 240-568879/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-568879/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 570011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183170-1	MW-15	Total/NA	Water	9056A	
MB 240-570011/3	Method Blank	Total/NA	Water	9056A	
LCS 240-570011/4	Lab Control Sample	Total/NA	Water	9056A	

Lab Chronicle

Client: TRC Environmental Corporation.
Job ID: 240-183170-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-15
Lab Sample ID: 240-183170-1

Date Collected: 04/04/23 16:03
Matrix: Water

Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568709	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6010B		1	568985	AJC	EET CAN	04/11/23 18:44
Total Recoverable	Prep	3005A			568709	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569003	RKT	EET CAN	04/11/23 22:01
Total Recoverable	Prep	3005A			568709	MRL	EET CAN	04/10/23 14:00
Total Recoverable	Analysis	6020		1	569177	RKT	EET CAN	04/12/23 18:56
Total/NA	Analysis	9056A		1	570011	JMB	EET CAN	04/22/23 05:46
Total/NA	Analysis	SM 2540C		1	568879	MS	EET CAN	04/11/23 09:48

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation. Job ID: 240-183170-1
Project/Site: CCR DTE Monroe Power Plant BAI

Laboratory: Eurofins Canton

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	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Phone (330) 497-9396 Phone (330) 497-0772

MICHIGAN 190

Chain of Custody Record

MICHIGAN 190

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Client Information	Sampler: Henry Schmidt	Lab PM: Brooks, Kris M	Carrier Tracking No(s):	COC No: 240-106110-33351.1
Client Contact: Mr. Vincent Buening	Phone: 734 645 5328	E-Mail: Kris.Brooks@et.eurofinsus.com	State of Origin: MI	Page: Page 1 of 1
Company: TRC Environmental Corporation.	PWSID:			Job #:
Address: 1540 Eisenhower Place	Due Date Requested:			
City: Ann Arbor	TAT Requested (days):			
State, Zip: MI, 48108-7080	Compliance Project: Δ Yes Δ No			
Phone: 313-971-7080(Tel) 313-971-9022(Fax)	PO #: 164689			
Email: vbuening@trccompanies.com	WO #: 518728.0001.0000			
Project Name: CCR DTE Monroe Power Plant BAI	Project #: 24016830			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd - TDS	6010B Boron, 6020 Calcium, Iron	9056A_28D - Chloride, Fluoride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	3D	N	X	
~~MW-1S~~ MW-15	4/4/23		G	Water	N	N	X	X	X		
~~MW-2S~~				Water							
~~MW-3S~~				Water							
~~MW-7S~~				Water							
~~MW-9~~				Water							
~~MW-10~~				Water							
~~MW-11~~				Water							
~~MW-12~~				Water							
~~MW-13~~				Water							
MW-14				Water							

240-183170 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Henry Schmidt	4/4/23 1730	TRC	TRC Storage	4/4/23 1730	TRC
	4/6/23 1130	TRC	Jen Hall	4/6/23 1131	ETH
Jen Hall	4/6/23 1131		Mandahy Blu	4-7-23 8:00	eurofins

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

Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

183170

Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client TRC environmental Site Name _____ Cooler unpacked by: Mandaly-Black
Cooler Received on 4-7-23 Opened on 4-7-23
FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off Eurofins Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # eltrc 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 # _____ (CF _____ °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____	(Yes)	No
-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)
-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 (Y/N), and sample type of grab/comp (Y/N)?	(Y)	(Y)
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# HC203864
14. Were VOAs on the COC?	Yes	(No)
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No (NA)
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	(No)
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

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

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

No Sample Time on C.O.C Used Times Listed on Samples

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: _____

WI-NC-099

Login # : ____________

Eurofins - Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	**IR Gun # (Circle)**	**Observed Temp °C**	**Corrected Temp °C**	**Coolant (Circle)**
EC Client Box Other	IR GUN #: 22	1.8	1.8	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 22	2.4	2.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ______			Wet Ice Blue Ice Dry Ice Water None
			☐ See Temperature Excursion Form	

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservative Added (mls)	Lot #
MW-15	240-183170-C-1	Plastic 500ml - with Nitric Acid	<2			

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/20/2023 10:48:33 AM

JOB DESCRIPTION

CCR DTE Monroe Power Plant BAI

JOB NUMBER

240-187053-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

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

Authorization

Generated
6/20/2023 10:48:33 AM

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

Table of Contents

Definitions/Glossary

Client: TRC Environmental Corporation. Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

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.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Job ID: 240-187053-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative
240-187053-1

Receipt
The samples were received on 6/15/2023 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 0.3°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.

Method Summary

Client: TRC Environmental Corporation.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

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: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-187053-1	MW-2S	Water	06/12/23 11:10	06/15/23 08:00
240-187053-2	MW-3S	Water	06/12/23 10:30	06/15/23 08:00
240-187053-3	MW-9	Water	06/12/23 12:15	06/15/23 08:00
240-187053-4	DUP-02	Water	06/12/23 00:00	06/15/23 08:00
240-187053-5	DUP-03	Water	06/12/23 00:00	06/15/23 08:00
240-187053-6	DUP-01	Water	06/12/23 00:00	06/15/23 08:00

Detection Summary

Client: TRC Environmental Corporation.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-2S — Lab Sample ID: 240-187053-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1000		100	57	ug/L	1		6010D	Total Recoverable

Client Sample ID: MW-3S — Lab Sample ID: 240-187053-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	280000		1000	250	ug/L	1		6020B	Total Recoverable

Client Sample ID: MW-9 — Lab Sample ID: 240-187053-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	69		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.47		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-02 — Lab Sample ID: 240-187053-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	870		100	57	ug/L	1		6010D	Total Recoverable
Calcium	270000		1000	250	ug/L	1		6020B	Total Recoverable

Client Sample ID: DUP-03 — Lab Sample ID: 240-187053-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	69		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.47		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-187053-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1000		100	57	ug/L	1		6010D	Total Recoverable
Calcium	240000		1000	250	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client: TRC Environmental Corporation.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-2S
Lab Sample ID: 240-187053-1
Date Collected: 06/12/23 11:10
Matrix: Water
Date Received: 06/15/23 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1000		100	57	ug/L		06/16/23 14:00	06/17/23 23:02	1

Client: TRC Environmental Corporation.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-3S
Lab Sample ID: 240-187053-2
Date Collected: 06/12/23 10:30
Matrix: Water
Date Received: 06/15/23 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	280000		1000	250	ug/L		06/16/23 14:00	06/19/23 13:49	1

Client: TRC Environmental Corporation.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-9
Lab Sample ID: 240-187053-3
Date Collected: 06/12/23 12:15
Matrix: Water
Date Received: 06/15/23 08:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0-1993 R2.1)	**69**		1.0	0.13	mg/L			06/16/23 14:11	1
Fluoride (EPA 300.0-1993 R2.1)	**0.47**		0.050	0.024	mg/L			06/16/23 14:11	1
Sulfate (EPA 300.0-1993 R2.1)	1.0	U	1.0	0.35	mg/L			06/16/23 14:11	1

Client: TRC Environmental Corporation.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: DUP-02
Lab Sample ID: 240-187053-4
Date Collected: 06/12/23 00:00
Matrix: Water
Date Received: 06/15/23 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	870		100	57	ug/L		06/16/23 14:00	06/17/23 21:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	270000		1000	250	ug/L		06/16/23 14:00	06/19/23 16:28	1

Client: TRC Environmental Corporation.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: DUP-03
Lab Sample ID: 240-187053-5
Date Collected: 06/12/23 00:00
Matrix: Water
Date Received: 06/15/23 08:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0-1993 R2.1)	**69**		1.0	0.13	mg/L			06/16/23 14:59	1
Fluoride (EPA 300.0-1993 R2.1)	**0.47**		0.050	0.024	mg/L			06/16/23 14:59	1
Sulfate (EPA 300.0-1993 R2.1)	1.0	U	1.0	0.35	mg/L			06/16/23 14:59	1

Client: TRC Environmental Corporation.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: DUP-01
Lab Sample ID: 240-187053-6
Date Collected: 06/12/23 00:00
Matrix: Water
Date Received: 06/15/23 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1000		100	57	ug/L		06/16/23 14:00	06/17/23 21:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	240000		1000	250	ug/L		06/16/23 14:00	06/19/23 16:31	1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-577444/1-A
Matrix: Water
Analysis Batch: 577602

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	57	ug/L		06/16/23 14:00	06/17/23 21:24	1

Lab Sample ID: LCS 240-577444/2-A
Matrix: Water
Analysis Batch: 577602

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1070		ug/L		107	80 - 120

Lab Sample ID: MB 240-577485/1-A
Matrix: Water
Analysis Batch: 577602

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	57	ug/L		06/16/23 14:00	06/17/23 19:45	1

Lab Sample ID: LCS 240-577485/2-A
Matrix: Water
Analysis Batch: 577602

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577485

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

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-577457/1-A
Matrix: Water
Analysis Batch: 577815

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577457

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	250	ug/L		06/16/23 14:00	06/19/23 12:14	1

Lab Sample ID: LCS 240-577457/2-A
Matrix: Water
Analysis Batch: 577815

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577457

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24700		ug/L		99	80 - 120

Lab Sample ID: MB 240-577485/1-A
Matrix: Water
Analysis Batch: 577815

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000	250	ug/L		06/16/23 14:00	06/19/23 15:36	1

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

Lab Sample ID: LCS 240-577485/3-A
Matrix: Water
Analysis Batch: 577815

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	25400		ug/L		102	80 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-577518/3
Matrix: Water
Analysis Batch: 577518

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	0.13	mg/L			06/16/23 10:32	1
Fluoride	0.050	U	0.050	0.024	mg/L			06/16/23 10:32	1
Sulfate	1.0	U	1.0	0.35	mg/L			06/16/23 10:32	1

Lab Sample ID: LCS 240-577518/4
Matrix: Water
Analysis Batch: 577518

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	51.8		mg/L		104	90 - 110
Fluoride	2.50	2.68		mg/L		107	90 - 110
Sulfate	50.0	53.8		mg/L		108	90 - 110

Metals

Prep Batch: 577444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187053-1	MW-2S	Total Recoverable	Water	3005A	
MB 240-577444/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577444/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 577457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187053-2	MW-3S	Total Recoverable	Water	3005A	
MB 240-577457/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577457/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 577485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187053-4	DUP-02	Total Recoverable	Water	3005A	
240-187053-6	DUP-01	Total Recoverable	Water	3005A	
MB 240-577485/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577485/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-577485/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 577602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187053-1	MW-2S	Total Recoverable	Water	6010D	577444
240-187053-4	DUP-02	Total Recoverable	Water	6010D	577485
240-187053-6	DUP-01	Total Recoverable	Water	6010D	577485
MB 240-577444/1-A	Method Blank	Total Recoverable	Water	6010D	577444
MB 240-577485/1-A	Method Blank	Total Recoverable	Water	6010D	577485
LCS 240-577444/2-A	Lab Control Sample	Total Recoverable	Water	6010D	577444
LCS 240-577485/2-A	Lab Control Sample	Total Recoverable	Water	6010D	577485

Analysis Batch: 577815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187053-2	MW-3S	Total Recoverable	Water	6020B	577457
240-187053-4	DUP-02	Total Recoverable	Water	6020B	577485
240-187053-6	DUP-01	Total Recoverable	Water	6020B	577485
MB 240-577457/1-A	Method Blank	Total Recoverable	Water	6020B	577457
MB 240-577485/1-A	Method Blank	Total Recoverable	Water	6020B	577485
LCS 240-577457/2-A	Lab Control Sample	Total Recoverable	Water	6020B	577457
LCS 240-577485/3-A	Lab Control Sample	Total Recoverable	Water	6020B	577485

General Chemistry

Analysis Batch: 577518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187053-3	MW-9	Total/NA	Water	300.0-1993 R2.1	
240-187053-5	DUP-03	Total/NA	Water	300.0-1993 R2.1	
MB 240-577518/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-577518/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

Client Sample ID: MW-2S — Lab Sample ID: 240-187053-1

Date Collected: 06/12/23 11:10 — **Matrix: Water**
Date Received: 06/15/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577444	BN	EET CLE	06/16/23 14:00
Total Recoverable	Analysis	6010D		1	577602	KLC	EET CLE	06/17/23 23:02

Client Sample ID: MW-3S — Lab Sample ID: 240-187053-2

Date Collected: 06/12/23 10:30 — **Matrix: Water**
Date Received: 06/15/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577457	BN	EET CLE	06/16/23 14:00
Total Recoverable	Analysis	6020B		1	577815	DSH	EET CLE	06/19/23 13:49

Client Sample ID: MW-9 — Lab Sample ID: 240-187053-3

Date Collected: 06/12/23 12:15 — **Matrix: Water**
Date Received: 06/15/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0-1993 R2.1		1	577518	JWW	EET CLE	06/16/23 14:11

Client Sample ID: DUP-02 — Lab Sample ID: 240-187053-4

Date Collected: 06/12/23 00:00 — **Matrix: Water**
Date Received: 06/15/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577485	BN	EET CLE	06/16/23 14:00
Total Recoverable	Analysis	6010D		1	577602	KLC	EET CLE	06/17/23 21:15
Total Recoverable	Prep	3005A			577485	BN	EET CLE	06/16/23 14:00
Total Recoverable	Analysis	6020B		1	577815	DSH	EET CLE	06/19/23 16:28

Client Sample ID: DUP-03 — Lab Sample ID: 240-187053-5

Date Collected: 06/12/23 00:00 — **Matrix: Water**
Date Received: 06/15/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0-1993 R2.1		1	577518	JWW	EET CLE	06/16/23 14:59

Client Sample ID: DUP-01 — Lab Sample ID: 240-187053-6

Date Collected: 06/12/23 00:00 — **Matrix: Water**
Date Received: 06/15/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577485	BN	EET CLE	06/16/23 14:00
Total Recoverable	Analysis	6010D		1	577602	KLC	EET CLE	06/17/23 21:19
Total Recoverable	Prep	3005A			577485	BN	EET CLE	06/16/23 14:00
Total Recoverable	Analysis	6020B		1	577815	DSH	EET CLE	06/19/23 16:31

Lab Chronicle

Client: TRC Environmental Corporation.
Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

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. Job ID: 240-187053-1
Project/Site: CCR DTE Monroe Power Plant BAI

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	02-27-24
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

Eurofins Canton
180 S. Van Buren Ave

Barberton, OH 44203-3543
phone 330.497.9396 fax 330.497.0772

MICHIGAN 190 0.3/0.3

Chain of Custody Record

MICHIGAN 190 eurofins | Environment Testing America

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

Eurofins Environment Testing America

COC No:

___1___ of ___1__ COCs

Client Contact	Project Manager: Vince Buening	Site Contact:	Date:
TRC Companies	Email: vbuening@trccompanies.com	Lab Contact: Kris Brooks	Carrier:
1540 Eisenhower Place	Tel/Fax: 734-904-3302		
Ann Arbor, MI 48108	**Analysis Turnaround Time**		
(734) 971-7080 Phone	☐ CALENDAR DAYS ☑ WORKING DAYS		
NA FAX	TAT if different from Below ___3___		
Project Name: DTE CCR MONPP BAI verification	☐ 2 weeks		
Site: DTE MONPP BAI	☐ 1 week		
P O # **199492**	☐ 2 days		
	☐ 1 day		

TALS Project #:

Sampler: JAVIER JASSO

For Lab Use Only:
Walk-in Client:
Lab Sampling:

Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Boron	Calcium	Chloride	Sample Specific Notes:
MW-2S	6/6/23	1110	G	GW	1	N	N	X			
MW-3S	"	1025	G	GW	1	N	N		X		
MW-9	"	1215	G	GW	1	N	N			X	
DUP-01	"		G	GW	1	N	N	X			
DUP-02	"		G	GW	1	N	N		X		
DUP-03	"		G	GW	1	N	N			X	

240-187053 Chain of Custody

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

4 4

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

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

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

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

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company	Date/Time		Company	Date/Time
Relinquished by:	TRC	6/6/23 1540	Received by:	TRC	6/6/23 1540
Relinquished by:	TRC	6/14/23 12:35	Received by:	FedEx	6/14/23 1235
Relinquished by:	FedEx	6/14/23 1800	Received in Laboratory by:	EETNC	6-15-23 800

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6/20/2023

Eurofins - Canton Sample Receipt Form/Narrative **Login # :** 187053
Barberton Facility

Client TRC Site Name

Cooler unpacked by: Nancy Ryan

Cooler Received on 6-15-23 Opened on 6-15-23

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off Eurofins Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

Eurofins Cooler # 5 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 # 22 (CF +0.0 °C) Observed Cooler Temp. 0.3 °C Corrected Cooler Temp. 0.3 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-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)
-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 (Y/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# 10BDH4321
14. Were VOAs on the COC?	Yes	(No)
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No (NA)
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	(No)
17. Was a LL Hg or Me Hg trip blank present?	Yes	(No)

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

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

NO Sample Dup-01 - have 2 bottle's marked Dup-02. Per Client Logged both Iron + calcium

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:

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservative Added (mls)	Lot #
MW-2S	240-187053-A-1	Plastic 250ml - with Nitric Acid	<2			
MW-3S	240-187053-A-2	Plastic 250ml - with Nitric Acid	<2			
MW-9	240-187053-A-3	Plastic 250ml - unpreserved				
DUP-2	240-187053-A-4	Plastic 250ml - with Nitric Acid	<2			
DUP-2	240-187053-B-4	Plastic 250ml - with Nitric Acid	<2			
DUP-3	240-187053-A-5	Plastic 250ml - unpreserved				

Appendix C
Data Quality Reviews

Laboratory Data Quality Review
Groundwater Monitoring Event October 2022
DTE Electric Company Monroe Power Plant Bottom Ash Impoundment

Groundwater samples were collected by TRC for the October 2022 sampling event. Samples were analyzed for anions, total recoverable metals, and total dissolved solids by Eurofins Environment Testing (Eurofins), located in Canton, Ohio. The laboratory analytical results are reported in laboratory report 240-174588-1 and 240-174593-1.

During the October 2022 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 or more of the following constituents:

Analyte Group	Method
Anions (Chloride, Fluoride, Sulfate)	SW846 9056A
Total Recoverable Boron	SW846 3005A/6010B
Total Recoverable Calcium and Iron	SW846 3005A/6020
Total Dissolved Solids	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 Methods 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, equipment blanks, and field blanks. Method blanks are used to assess potential contamination arising from laboratory sample preparation and/or analytical procedures. Field and 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;

- Percent recoveries for matrix spike (MS) and matrix spike duplicates (MSD), when performed on project samples. Percent recoveries are calculated for each analyte spiked and used to assess bias due to sample matrix effects;
- Data for laboratory duplicates, when performed on project samples. The laboratory duplicates are replicate analyses of one sample and are used to assess the precision of the analytical method;
- 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 and IV will be utilized for the purposes of an assessment monitoring program.
- Data are usable for the purposes of the assessment 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

- Target analytes were not detected in the method blanks.
- LCS recoveries for all target analytes were within laboratory control limits.
- MS/MSD analyses were not performed on a sample from this data set.
- Laboratory duplicate analyses were performed for TDS on samples MW-1S, MW-13, MW-14, and MW-15. The relative percent difference (RPD) met the acceptance criteria.
- DUP-01 corresponds with MW-10; RPDs between the parent and duplicate sample were within the QC limits.

Laboratory Data Quality Review
Groundwater Monitoring Event April 2023
DTE Electric Company Monroe Power Plant Bottom Ash Impoundment

Groundwater samples were collected by TRC for the April 2023 sampling event. Samples were analyzed for anions, total recoverable metals, and total dissolved solids by Eurofins-Test America Laboratories, Inc. (Eurofins-TA), located in Barberton, Ohio. The laboratory analytical results are reported in laboratory reports 240-183170-1, 240-183172-1, and 240-183222-1.

During the April 2023 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/6010B
Total Recoverable Calcium	SW846 3005A/6020
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.

- Appendix III constituents and 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

- 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 analysis was performed on sample MW-13 for TDS; the RPD was within the QC limit.
- DUP-01 corresponds with MW-9; RPDs between the parent and duplicate samples were within the QC limits.

Laboratory Data Quality Review
Groundwater Verification Event June 2023
DTE Electric Company Monroe Power Plant Bottom Ash Impoundment

Groundwater samples were collected by TRC for the June 2023 sampling event. Samples were analyzed for chloride and/or select total recoverable metals by Eurofins-Test America Laboratories, Inc. (Eurofins-TA), located in Barberton, Ohio. The laboratory analytical results are reported in laboratory report 240-187053-1(Revision 1).

During the June 2023 sampling event, a groundwater sample was collected from each of the following wells:

- MW-2S
- MW-3S
- MW-9

Each sample was analyzed for one the following constituents:

Analyte Group	Method
Chloride	EPA 300.0
Total Recoverable Boron	SW846 6010D
Total Recoverable Calcium	SW846 6020B

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.
- 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/MSD and laboratory duplicate analyses were not performed on a sample from this data set.
- DUP-01 corresponds with MW-2S, DUP-02 corresponds with MW-3S, and DUP-03 corresponds with MW-9; RPDs between the parent and duplicate samples were within the QC limits.