

# **2022 Annual Groundwater Monitoring Report**

Monroe Power Plant Fly Ash Basin and Vertical Extension Landfill Coal Combustion Residual Units

January 2023

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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), as amended. The CCR Rule, which became effective on October 19, 2015 (with amendments in 2018 and 2020), applies to the DTE Electric Company (DTE Electric) Monroe Power Plant (MONPP) Coal Combustion Residual Fly Ash Basin and Vertical Extension Landfill (FAB & VEL) CCR units. Pursuant to the CCR Rule, no later than January 31, 2018, and annually thereafter, the owner or operator of a 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). On behalf of DTE Electric, TRC Engineers Michigan, Inc., the engineering entity of TRC, has prepared this Annual Groundwater Monitoring Report for calendar year 2021 activities at the MONPP FAB & VEL CCR units.

The MONPP FAB & VEL were operating under the detection monitoring program at the start of the 2022 annual reporting period and remained in the detection monitoring program through the end of the 2022 annual reporting period. The semiannual detection monitoring events for 2022 were completed in April and October 2022 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 Appendix III parameters to determine if concentrations in groundwater exceed prediction limits. Detection monitoring data that has been collected and evaluated under §257.90 through §257.98 in 2022 are presented in this report.

No SSIs over prediction limits were noted for the Appendix III constituents in the monitoring wells during the April and October 2022 monitoring events; therefore, detection monitoring will be continued at the MONPP FAB & VEL CCR units in accordance with §257.94. In addition, based on the artesian conditions, the low permeability of the laterally contiguous underlying natural soils, and the calculated time of travel for groundwater to flow vertically from the MONPP FAB & VEL to the uppermost aquifer, there is no reasonable probability for the uppermost aquifer to have been affected by CCR from FAB & VEL operations that began in 1975.



## 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), as amended. The CCR Rule, which became effective on October 19, 2015 (with amendments in 2018 and 2020), applies to the DTE Electric Company (DTE Electric) Monroe Power Plant (MONPP) Coal Combustion Residual Fly Ash Basin and Vertical Extension Landfill (FAB & VEL) CCR units. Pursuant to the CCR Rule, no later than January 31, 2018, and annually thereafter, the owner or operator of a 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). On behalf of DTE Electric, TRC Engineers Michigan, Inc., the engineering entity of TRC, has prepared this 2022 Annual Groundwater Monitoring Report for calendar year 2022 activities at the MONPP FAB & VEL CCR units (2022 Annual Report).

This 2022 Annual Report presents the monitoring results and the statistical evaluation of the detection monitoring parameters (Appendix III to Part 257 of the CCR Rule) for the April and October 2022 semiannual groundwater monitoring events for the MONPP FAB & VEL CCR units. Detection monitoring for these events continued to be performed in accordance with the CCR Groundwater Monitoring and Quality Assurance Project Plan – DTE Electric Company Monroe Power Plant Coal Combustion Residual Fly Ash Basin (QAPP) (TRC, August 2016; revised March 2017) and statistically evaluated per the Groundwater Statistical Evaluation Plan –Monroe Power Plant Coal Combustion Residual Fly Ash Basin (Stats Plan) (TRC, October 2017). As part of the statistical evaluation, the data collected during detection monitoring events are evaluated to identify SSIs of detection monitoring parameters compared to background levels.

Additional site characterization was completed in late 2020 and 2021, including additional soil borings, Cone Penetrometer Testing (CPT), soil sample collection for additional clay-rich soil laboratory hydraulic conductivity testing and additional slug testing (to measure the hydraulic conductivity of the uppermost aquifer in wells not previously tested) in support of the Preliminary Alternative Liner Demonstration (PALD) that was submitted to EPA on November 30, 2021 (Geosyntec 2021). The PALD concludes that there is no reasonable probability that water from FAB will cause releases to groundwater throughout the active life of the CCR unit at concentrations that will exceed the groundwater protection standard at the waste boundary.

#### 1.2 Site Overview

The MONPP FAB & VEL is located about one mile southwest of the MONPP in Section 16, Township 7 South, Range 9 East at 7955 East Dunbar Road, Monroe, Monroe County, Michigan (Figure 1). The MONPP FAB & VEL is bounded by Dunbar Road and Plum Creek to the north and northeast, Interstate 75 to the northwest, a 200-acre peninsula into Lake Erie to the east and southeast, Lake Erie to the south, and a large open field to the southwest (Figure 2).



The property has been used continuously for the operation of the MONPP FAB & VEL since approximately 1975 and is constructed over a natural clay-rich soil base. The MONPP FAB & VEL are owned by DTE Electric, and currently receive coal ash from DTE Electric's MONPP. The MONPP FAB & VEL are operated in accordance with Michigan Part 115 of the Natural Resources and Environmental Protection Act (NREPA), PA 451 of 1994, as amended, and are licensed as a Coal Ash Surface Impoundment and a Coal Ash Landfill under the current operating license number 9579.

#### 1.3 Geology/Hydrogeology

The MONPP FAB & VEL CCR units are located within 200 feet southwest of Plum Creek and immediately north of Lake Erie. The MONPP FAB & VEL CCR units uppermost aquifer consists of saturated limestone and a 5 to 10 foot thick layer of weathered limestone mixed with clay, sand, and/or gravel, both present beneath at least 14 to 34 feet of thick contiguous silty clay-rich soil that serves as a natural confining hydraulic barrier that isolates the underlying uppermost aquifer (TRC, 2017 and Geosyntec, 2021). The limestone bedrock aquifer is artesian in every location except MW-16-01, where the static water level was approximately 1 to 2 feet below ground surface (ft bgs).

Potentiometric groundwater elevation data from 2016 through 2022 suggest that there is horizontal groundwater flow potential within the upper aquifer unit generally to the northeast towards Plum Creek. The average hydraulic gradient to the northeast is on the order of 0.002 foot/foot along the eastern part of the MONPP FAB & VEL to 0.004 to 0.005 foot/foot in the center and northwestern part of the FAB & VEL, with an overall mean of 0.004 foot/foot in 2022.



## 2.0 Groundwater Monitoring

#### 2.1 Monitoring Well Network

A groundwater monitoring system has been established for the MONPP FAB & VEL CCR units as detailed in the Groundwater Monitoring System Summary Report – Monroe Power Plant Coal Combustion Residual Fly Ash Basin (GWMS Report) (TRC, October 2017). The detection monitoring well network for the MONPP FAB & VEL CCR units currently consists of seven monitoring wells that are screened in the uppermost aquifer. Monitoring wells MW-16-01 through MW-16-07 are located around the perimeter of the MONPP FAB & VEL CCR units and provide data on both background and downgradient groundwater quality that has not been affected by the CCR units (total of seven background/downgradient monitoring wells). The monitoring well locations are shown on Figure 2.

#### 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 QAPP. In addition to pH, the collected field parameters included dissolved oxygen, oxidation reduction potential, specific conductivity, temperature, and turbidity.

#### 2.2.1 Data Summary

The first semiannual groundwater detection monitoring event for 2022 was performed April 5 and 6, 2022 by TRC personnel and samples were analyzed by Eurofins Environment Testing America (Eurofins) in accordance with the QAPP. Static water elevation data were collected at all seven monitoring well locations. Groundwater samples were collected from the seven detection monitoring wells for the Appendix III indicator parameters and field parameters. A summary of the groundwater data collected during the April 2022 event is provided on Table 1 (static groundwater elevation data), Table 2 (field data), and Table 3 (analytical results).

The second semiannual groundwater detection monitoring event for 2022 was performed on October 11 and 12, 2022 by TRC personnel and samples were analyzed by Eurofins in accordance with the QAPP. Static water elevation data were collected at all seven monitoring well locations. Groundwater samples were collected from the seven 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 4 (analytical results). The laboratory analytical reports are included in Appendix A.

#### 2.2.2 Data Quality Review

Data from each round were evaluated for completeness, overall quality and usability, methodspecified 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 summarized in Appendix B.

#### 2.2.3 Groundwater Flow Rate and Direction

Groundwater elevation data collected during the April and October 2022 sampling events continue to show that groundwater within the uppermost aquifer generally flows to the northeast across the Site. Groundwater potentiometric surface elevations measured across the Site during the April and October 2022 sampling events are provided on Table 1 and were used to construct the 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 gradients throughout the MONPP FAB/VEL CCR unit during the April and October 2022 events was approximately 0.004 ft/ft in April 2022 and 0.003 ft/ft in October 2022. Using the average hydraulic conductivity of 14 feet/day (TRC, 2017 and Geosyntec, 2021) and an assumed effective porosity of 0.1, the estimated seepage velocity for the April and October 2022 events is 0.56 feet/day (approximately 200 feet/year) and 0.42 feet/day (approximately 150 feet/year), respectively.

The general flow rate and direction from both events are similar to that identified in previous monitoring rounds and continues to demonstrate that the monitoring wells are appropriately positioned to detect the presence of Appendix III parameters that could potentially migrate from the MONPP FAB & VEL CCR units.



#### 3.0 Statistical Evaluation

#### 3.1 Establishing Background Limits

As discussed in the Stats Plan, intrawell statistical methods for MONPP FAB & VEL were selected based on the geology and hydrogeology at the Site (primarily the presence of clay/hydraulic barrier and the hydraulic separation between the CCR units and underlying uppermost aquifer), in addition to other supporting lines of evidence that the aquifer is unaffected by the CCR units (such as the consistency in concentrations of water quality data). An intrawell statistical approach requires that each monitoring well doubles as a 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.

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 seven established detection monitoring wells (MW-16-01 through MW-16-07). The initial statistical evaluation of the background data is presented in the 2017 Annual Report (TRC, January 2018). 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 FAB & VEL CCR units by comparing concentrations in the detection monitoring wells to their respective background limits for each Appendix III indicator parameter. Prediction limits are periodically updated to reflect the additional data and additional temporal variability observed over time. The Appendix III prediction limits at MONPP FAB & VEL were updated in December 2021 to incorporate additional data since 2017 as presented in the December 15, 2021 Technical Memorandum, *Prediction Limit Update – DTE Electric Company, Monroe Power Plant Fly Ash Basin and Vertical Extension Landfill* (included as Appendix C in the 2021 Annual Groundwater Monitoring Report – DTE Electric Company, Sibley Quarry Landfill, Coal Combustion Residual Unit, TRC, January 2022).

# 3.2 Data Comparison to Background Limits – First 2022 Semiannual Event (April 2022)

The concentrations of the indicator parameters in each of the detection monitoring wells (MW-16-01 through MW-16-07) were compared to their respective statistical background limits calculated from the background data collected from each individual well (i.e., monitoring data from MW-16-01 is compared to the background limit developed using the background dataset from MW-16-01, and so forth). The comparisons for the April detection monitoring event are presented on Table 3. Based on the statistical evaluation of the April 2022 detection monitoring parameters, there were no SSIs compared to background for any of the constituents.

# 3.3 Data Comparison to Background Limits – Second 2022 Semiannual Event (October 2022)

The concentrations of the indicator parameters in each of the detection monitoring wells (MW-16-01 through MW-16-07) were compared to their respective statistical background limits calculated from the background data collected from each individual well (i.e., monitoring data



from MW-16-01 is compared to the background limit developed using the background dataset from MW-16-01, and so forth). The comparisons for the October detection monitoring event are presented on Table 4. Based on the statistical evaluation of the October 2022 detection monitoring parameters, there were no SSIs compared to background for any of the constituents.



#### 4.0 Conclusions and Recommendations

No SSIs over background limits were noted for the groundwater monitoring wells during the 2022 semiannual groundwater monitoring events; therefore, detection monitoring will be continued at the MONPP FAB & VEL in accordance with §257.94.

In addition, as discussed above, and in the GWMS Report, based on the artesian conditions, the low permeability of the laterally contiguous underlying natural soils, and the calculated time of travel for groundwater to flow vertically from the MONPP FAB & VEL to the uppermost aquifer, there is no reasonable probability for the uppermost aquifer to have been affected by CCR from FAB & VEL operations that began in 1975.

No corrective actions were performed in 2022. The next semiannual monitoring event at the MONPP FAB & VEL CCR units is scheduled for the second 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 Fly Ash Basin and Vertical Extension Landfill Monroe, Michigan

#### CERTIFICATION

I hereby certify that the annual groundwater and corrective action report presented within this document for the MONPP FAB & VEL CCR units 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).

Expiration Date:	TE OF MICH
December 17, 2023	DAVID B MCKENZIE * ENGINEER
Date:	6201042332
January 31, 2023	POFESSIONAL ENDON
	December 17, 2023  Date:



#### 6.0 References

- Geosyntec Consultants (Geosyntec). November 2021. Preliminary Alternative Liner Demonstration Fly Ash Basin Monroe Power Plant, DTE Electric Company Monroe Power Plant Fly Ash Basin and vertical Extension Landfill Coal Combustion Residuals Unit, 7955 East Dunbar Road, Monroe, Michigan.
- TRC. August 2016; Revised March 2017. CCR Groundwater Monitoring and Quality Assurance Project Plan DTE Electric Company Monroe Power Plant Coal Combustion Residual Fly Ash Basin, 7955 East Dunbar Road, Monroe, Michigan. Prepared for DTE Electric Company.
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- 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

#### Summary of Groundwater Elevation Data – April and October 2022 Monroe Power Plant Fly Ash Basin and Vertical Extension Landfill – RCRA CCR Monitoring Program Monroe, Michigan

Well ID	MW-	16-01	MW-16	6-02	MW-	16-03	MW-	16-04	MW-	16-05	MW-	16-06	MW-	16-07
Date Installed	2/17/	/2016	2/18/20	016	2/16/	/2016	2/15/	/2016	4/13	/2016	4/13/	2016	4/14	2016
TOC Elevation	581	1.74	581.8	31	579	9.95	585	5.54	580	0.42	581	1.94	578	3.40
Geologic Unit of Screened Interval	Silt/Limesto	ne Interface	Silt/Limestone	e Interface		Silty Clay e Interface	Silty Sand	and Gravel	Lime	stone	Gravel an	d Cobbles	Silt/Limesto	ne Interface
Screened Interval Elevation	530.9 t	o 525.9	526.4 to	521.4	540.3 t	o 535.3	541.6 t	o 536.6	540.51	o 535.5	534.2 t	o 529.2	540.4 t	o 535.4
Unit	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
04/06/2022	4.66 <sup>(1)</sup>	577.08	-2.82	584.63	-11.57	591.52	-16.52	602.06	-17.05	597.47	0.00	581.94	-6.74	585.14
10/11/2022	4.63	577.11	-0.88	582.69	-8.11	588.06	-10.02	595.56	-11.83	592.25	1.49	580.45	-4.66	583.06

#### Notes:

Negative depth to water measurement indicates artesian conditions, actual measured water level is above the top of casing.

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

ft BTOC - feet below top of casing

1) - Measurement was taken on April 5, 2022.

Table 2
Summary of Field Parameters – April and October 2022
Monroe Power Plant Fly Ash Basin and Vertical Extension Landfill – 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 (deg C)	Turbidity (NTU)
MW-16-01	4/6/2022	1.50	-176.5	7.3	2,397	10.00	2.75
10100-10-01	10/12/2022	1.59	64.2	7.1	1,802	14.00	2.05
MW-16-02	4/6/2022	1.00	-238.0	7.2	2,465	10.50	10.00
10100-10-02	10/12/2022	1.63	55.9	7.1	1,783	12.50	6.10
MW-16-03	4/6/2022	0.75	-280.5	7.2	2,522	11.50	10.00
10100-10-03	10/12/2022	1.10	38.1	7.0	1,813	12.20	2.68
MW-16-04	4/6/2022	0.78	-297.5	7.3	2,405	11.00	2.87
10100-10-04	10/12/2022	1.09	30.1	7.0	1,681	11.10	0.00
MW-16-05	4/6/2022	0.77	-782.5	7.2	2,361	11.80	19.85
10100-10-05	10/12/2022	1.13	32.1	7.0	1,684	11.80	0.61
MW-16-06	4/6/2022	0.80	-267.0	7.2	2,409	11.20	10.00
10100-10-00	10/12/2022	1.64	29.9	7.1	1,819	13.70	13.10
MW-16-07	4/6/2022	1.24	-62.4	6.9	1,849	11.70	3.48
10100-10-07	10/12/2022	1.07	33.2	7.0	1,689	12.30	0.53

#### 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 – April 2022

Monroe Power Plant Fly Ash Basin and Vertical Extension Landfill – RCRA CCR Monitoring Program Monroe, Michigan

S	ample Location:	MW-	16-01	MW-	16-02	MW-	16-03	MW-1	16-04	MW-	16-05	MW-	16-06	MW-	16-07
	Sample Date:	4/5/2022	DI	4/6/2022	PL	4/6/2022	PL	4/6/2022	PL	4/6/2022	PL	4/6/2022	DI	4/6/2022	PL
Constituent	Unit	Data	PL												
Appendix III															
Boron	ug/L	240	300	390	450	420	500	140	210	200	270	310	390	180	250
Calcium	ug/L	420,000	440,000	410,000	430,000	420,000	470,000	550,000	600,000	420,000	440,000	400,000	420,000	420,000	440,000
Chloride	mg/L	10	12	13	15	18	20	33	36	11	12	11	12	7.6	12
Fluoride	mg/L	1.6	1.8	1.4	1.7	1.4	1.7	0.95	1.1	1.4	1.6	1.5	1.7	1.4	1.7
pH, Field	su	7.3	6.9 - 8.6	7.2	6.9 - 7.3	7.2	6.7 - 7.3	7.3	7.0 - 7.5	7.2	6.9 - 7.7	7.2	7.0 - 7.3	6.9	6.9 - 7.4
Sulfate	mg/L	1,300	1,600	1,500	1,700	1,500	1,700	1,300	1,500	1,400	1,600	1,500	1,600	1,400	1,600
Total Dissolved Solid	s mg/L	2,000	2,200	2,100	2,300	2,100	2,400	1,900	2,300	2,000	2,200	2,100	2,300	2,000	2,200

#### 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.

Table 4

Comparison of Appendix III Parameter Results to Background Limits – October 2022

Monroe Power Plant Fly Ash Basin and Vertical Extension Landfill – RCRA CCR Monitoring Program

Monroe, Michigan

Sai	nple Location:	MW-1	16-01	MW-	16-02	MW-	16-03	MW-1	16-04	MW-	16-05	MW-1	6-06	MW-1	6-07
	Sample Date:	10/12/2022	PL	10/12/2022	DI	10/12/2022	PL	10/12/2022	DI	10/12/2022	DI	10/12/2022	DI	10/12/2022	PL
Constituent	Unit	Data	FL	Data	r L	Data	P.L.	Data	FL	Data	r L	Data	FL	Data	FL
Appendix III															
Boron	ug/L	250	300	360	450	420	500	160	210	220	270	320	390	190	250
Calcium	ug/L	380,000	440,000	350,000	430,000	380,000	470,000	510,000	600,000	390,000	440,000	380,000	420,000	390,000	440,000
Chloride	mg/L	10	12	13	15	18	20	34	36	11	12	11	12	7.6	12
Fluoride	mg/L	1.6	1.8	1.5	1.7	1.5	1.7	0.95	1.1	1.5	1.6	1.5	1.7	1.4	1.7
pH, Field	su	7.1	6.9 - 8.6	7.1	6.9 - 7.3	7.0	6.7 - 7.3	7.0	7.0 - 7.5	7.0	6.9 - 7.7	7.1	7.0 - 7.3	7.0	6.9 - 7.4
Sulfate	mg/L	1,400	1,600	1,500	1,700	1,500	1,700	1,400	1,500	1,400	1,600	1,400	1,600	1,400	1,600
Total Dissolved Solids	mg/L	2,000	2,200	2,100	2,300	2,100	2,400	2,100	2,300	2,000	2,200	2,100	2,300	2,200	2,200

#### Notes:

ug/L - micrograms per liter.

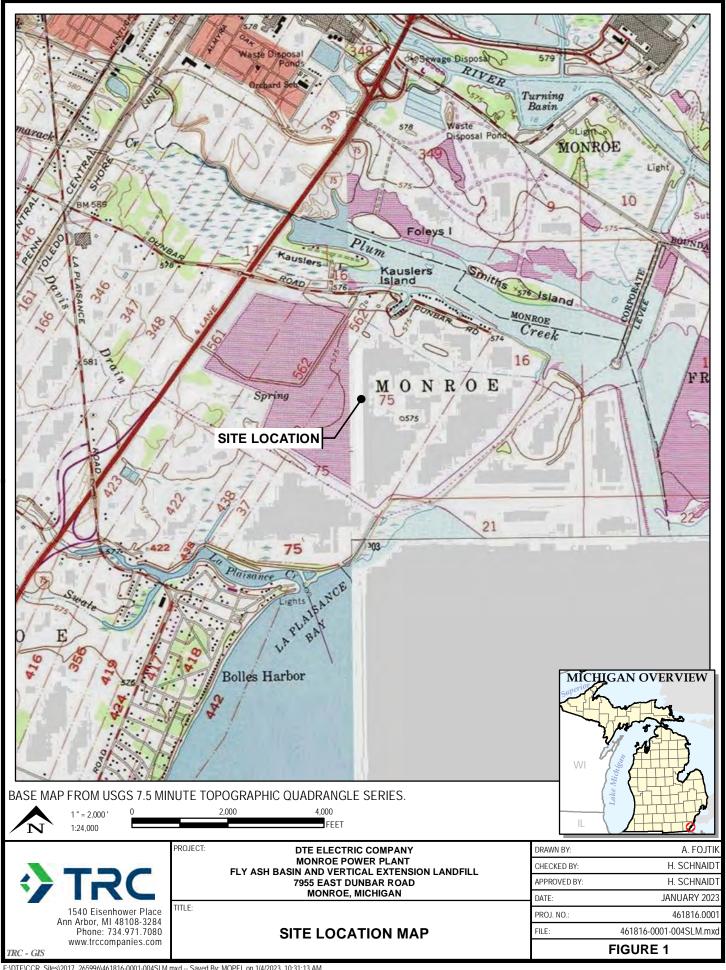
mg/L - milligrams per liter.

SU - standard units; pH is a field parameter.

All metals were analyzed as total unless otherwise specified.



## **Figures**





# **Appendix A Laboratory Reports**

## **ANALYTICAL REPORT**

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

Laboratory Job ID: 240-164756-1

Client Project/Site: CCR DTE Monroe Power FAB/VEL

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

Attn: Mr. Vincent Buening

Authorized for release by: 4/26/2022 6:43:25 PM

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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.

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## **Definitions/Glossary**

Client: TRC Environmental Corporation. Job ID: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

#### **Qualifiers**

M	eta	ls
••••		

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not
	applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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**

**EDL** 

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)

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) Method Detection Limit MDL

Estimated Detection Limit (Dioxin)

MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

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

Toxicity Equivalent Factor (Dioxin) **TEF** Toxicity Equivalent Quotient (Dioxin) **TEQ** 

TNTC Too Numerous To Count

**Eurofins Canton** 

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4/26/2022

#### **Case Narrative**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

Job ID: 240-164756-1

**Laboratory: Eurofins Canton** 

Narrative

Job Narrative 240-164756-1

#### Comments

The SW846 Method 6010D Metals (ICP) and SW-846 Method 6020B ICPMS analyses were performed at the Eurofins Cedar Falls laboratory.

#### Receipt

The samples were received on 4/8/2022 @ 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.2° C and 0.4° C.

#### Metals

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

#### **General Chemistry**

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

Job ID: 240-164756-1

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## **Method Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

Protocol Laboratory		
	Protocol	Laboratory

Job ID: 240-164756-1

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

#### **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:**

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396 TAL CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

## **Sample Summary**

Client: TRC Environmental Corporation. Job ID: 240-164756-1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Monroe Power FAB/VEL

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-164756-1	MW-16-01_20220405	Water	04/05/22 12:25	04/08/22 08:00
240-164756-2	MW-16-02_20220406	Water	04/06/22 14:11	04/08/22 08:00
240-164756-3	MW-16-03_20220406	Water	04/06/22 15:00	04/08/22 08:00
240-164756-4	MW-16-04_20220406	Water	04/06/22 16:43	04/08/22 08:00
240-164756-5	MW-16-05_20220406	Water	04/06/22 14:15	04/08/22 08:00
240-164756-6	MW-16-06_20220406	Water	04/06/22 13:05	04/08/22 08:00
240-164756-7	MW-16-07_20220406	Water	04/06/22 16:25	04/08/22 08:00
240-164756-8	DUP-01_20220406	Water	04/06/22 00:00	04/08/22 08:00
240-164756-9	MP-001F 20220406	Water	04/06/22 11:30	04/08/22 08:00

## **Detection Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

): 240-164756-1

Job ID: 240-164756-1

Client Sample ID: MW-1	6-01_20220405			Lab Sample ID:
Analyte	Result Qualifier	DI	MDI Unit	Dil Fac D Method

Analyte	Result C	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	240		100	56	ug/L	1	_	6010D	Total/NA
Calcium	420000		1000	190	ug/L	1		6020B	Total/NA
Iron	120		100	36	ug/L	1		6020B	Total/NA
Chloride	10		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	1.6		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1300		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	2000		20	20	mg/L	1		SM 2540C	Total/NA

#### Client Sample ID: MW-16-02\_20220406

Lab Sample ID: 240-1647	56-2
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Analyte	Result Qua	alifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	390	100	56	ug/L		_	6010D	Total/NA
Calcium	410000	1000	190	ug/L	1		6020B	Total/NA
Iron	390	100	36	ug/L	1		6020B	Total/NA
Chloride	13	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	2100	20	20	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-16-03\_20220406

## Lab Sample ID: 240-164756-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	420		100	56	ug/L	1	_	6010D	Total/NA
Calcium	420000		1000	190	ug/L	1		6020B	Total/NA
Iron	1000		100	36	ug/L	1		6020B	Total/NA
Chloride	18		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	2100		20	20	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-16-04\_20220406

## Lab Sample ID: 240-164756-4

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	140	100	56	ug/L	1	_	6010D	Total/NA
Calcium	550000	10000	1900	ug/L	10		6020B	Total/NA
Iron	43 J	100	36	ug/L	1		6020B	Total/NA
Chloride	33	1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.95	0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1300	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-16-05\_20220406

## Lab Sample ID: 240-164756-5

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	200	100	56	ug/L	1	_	6010D	Total/NA
Calcium	420000	10000	1900	ug/L	10		6020B	Total/NA
Iron	1100	100	36	ug/L	1		6020B	Total/NA
Chloride	11	1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	1.4	0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1400	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.

**Eurofins Canton** 

## **Detection Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

Client Sample ID: MW-16-06\_20220406

## Lab Sample ID: 240-164756-6

Lab Sample ID: 240-164756-7

Lab Sample ID: 240-164756-8

Lab Sample ID: 240-164756-9

Job ID: 240-164756-1

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Boron	310	100	56	ug/L	1	6010D	Total/NA
Calcium	400000	10000	1900	ug/L	10	6020B	Total/NA
Iron	650	100	36	ug/L	1	6020B	Total/NA
Chloride	11	1.0	1.0	mg/L	1	9056A	Total/NA
Fluoride	1.5	0.050	0.050	mg/L	1	9056A	Total/NA
Sulfate	1500	10	10	mg/L	10	9056A	Total/NA
Total Dissolved Solids	2100	20	20	ma/L	1	SM 2540C	Total/NA

## Client Sample ID: MW-16-07\_20220406

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Boron	180	100	56	ug/L	1	6010D	Total/NA
Calcium	420000	10000	1900	ug/L	10	6020B	Total/NA
Iron	790	100	36	ug/L	1	6020B	Total/NA
Chloride	7.6	1.0	1.0	mg/L	1	9056A	Total/NA
Fluoride	1.4	0.050	0.050	mg/L	1	9056A	Total/NA
Sulfate	1400	10	10	mg/L	10	9056A	Total/NA
Total Dissolved Solids	2000	20	20	ma/l		SM 2540C	Total/NA

## Client Sample ID: DUP-01\_20220406

Analyte	Result Qua	alifier RL	MDL	Unit	Dil Fac	D Method	Prep Type
Boron	430	100	56	ug/L	1	6010D	Total/NA
Calcium	380000	10000	1900	ug/L	10	6020B	Total/NA
Iron	1000	100	36	ug/L	1	6020B	Total/NA
Chloride	18	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	2200	20	20	mg/L	1	SM 2540C	Total/NA

## Client Sample ID: MP-001F\_20220406

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400	100	56	ug/L	1	_	6010D	Total/NA
Calcium	180000	10000	1900	ug/L	10		6020B	Total/NA
Iron	670	100	36	ug/L	1		6020B	Total/NA
Chloride	33	1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	0.56	0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	450	5.0	5.0	mg/L	5		9056A	Total/NA
Total Dissolved Solids	810	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: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

Client Sample ID: MW-16-01\_20220405 Lab Sample ID: 240-164756-1

Date Collected: 04/05/22 12:25 **Matrix: Water** 

Date Received: 04/08/22 08:00

Method: 6010D - Metals (IC	P)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	240		100	56	ug/L		04/15/22 09:00	04/18/22 14:50	1
- Method: 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	420000		1000	190	ug/L		04/14/22 09:00	04/22/22 21:48	1
Iron	120		100	36	ug/L		04/14/22 09:00	04/22/22 21:48	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride			1.0	1.0	mg/L			04/13/22 10:45	1
Fluoride	1.6		0.050	0.050	mg/L			04/13/22 10:45	1
Sulfate	1300		10	10	mg/L			04/13/22 12:25	10
<b>Total Dissolved Solids</b>	2000		20	20	mg/L			04/11/22 09:21	1

**Eurofins Canton** 

## **Client Sample Results**

Client: TRC Environmental Corporation. Job ID: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

Client Sample ID: MW-16-02\_20220406 Lab Sample ID: 240-164756-2

Date Collected: 04/06/22 14:11 **Matrix: Water** 

Date Received: 04/08/22 08:00

**Total Dissolved Solids** 

Method: 6010D - Metals (ICP) Analyte Boron	Result	Qualifier	RL 100		Unit ug/L	<u>D</u>	Prepared 04/15/22 09:00	Analyzed 04/18/22 14:52	Dil Fac
Method: 6020B - Metals (ICP/MS	5)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	410000		1000	190	ug/L		04/14/22 09:00	04/22/22 22:07	1
Iron	390		100	36	ug/L		04/14/22 09:00	04/22/22 22:07	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0	1.0	mg/L			04/14/22 21:47	1
Fluoride	1.4		0.050	0.050	mg/L			04/13/22 12:46	1
Sulfate	1500		10	10	mg/L			04/13/22 13:06	10

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2100

20 mg/L

04/11/22 09:21

## **Client Sample Results**

Client: TRC Environmental Corporation. Job ID: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

Client Sample ID: MW-16-03\_20220406 Lab Sample ID: 240-164756-3

Date Collected: 04/06/22 15:00 **Matrix: Water** 

Date Received: 04/08/22 08:00

Method: 6010D - Metals (IC	P)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	420		100	56	ug/L		04/15/22 09:00	04/18/22 14:54	1
Method: 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	420000		1000	190	ug/L		04/14/22 09:00	04/22/22 22:11	1
Iron	1000		100	36	ug/L		04/14/22 09:00	04/22/22 22:11	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		1.0	1.0	mg/L			04/13/22 13:26	1
Fluoride	1.4		0.050	0.050	mg/L			04/13/22 13:26	1
Sulfate	1500		10	10	mg/L			04/13/22 13:46	10
Total Dissolved Solids	2100		20	20	mg/L			04/11/22 09:21	1

**Eurofins Canton** 

Client: TRC Environmental Corporation. Job ID: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

Date Collected: 04/06/22 16:43 Matrix: Water

Date Received: 04/08/22 08:00

Method: 6010D - Metals (ICP)	)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	140		100	56	ug/L		04/15/22 09:00	04/18/22 15:00	1
- Method: 6020B - Metals (ICP)	/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	550000		10000	1900	ug/L		04/14/22 09:00	04/25/22 23:24	10
Iron	43	J	100	36	ug/L		04/14/22 09:00	04/22/22 22:31	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33		1.0	1.0	mg/L			04/13/22 14:06	1
Fluoride	0.95		0.050	0.050	mg/L			04/13/22 14:06	1
Sulfate	1300		10	10	mg/L			04/13/22 14:26	10
Total Dissolved Solids	1900		20	20	mg/L			04/12/22 07:26	1

**Eurofins Canton** 

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Client: TRC Environmental Corporation. Job ID: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

Date Collected: 04/06/22 14:15

Matrix: Water

Date Received: 04/08/22 08:00

Method: 6010D - Metals (IC	<b>(P</b> )								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	200		100	56	ug/L		04/15/22 09:00	04/18/22 15:04	1
- Method: 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	420000		10000	1900	ug/L		04/14/22 09:00	04/25/22 23:44	10
lron	1100		100	36	ug/L		04/14/22 09:00	04/22/22 22:35	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride			1.0	1.0	mg/L			04/13/22 14:46	1
Fluoride	1.4		0.050	0.050	mg/L			04/13/22 14:46	1
Sulfate	1400		10	10	mg/L			04/13/22 15:06	10
Total Dissolved Solids	2000		20	20	mg/L			04/12/22 07:26	1

Client: TRC Environmental Corporation. Job ID: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

Date Collected: 04/06/22 13:05 East Sample 15: 245 1547 65 5

Date Received: 04/08/22 08:00

Method: 6010D - Metals (IC	<b>P</b> )								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	310		100	56	ug/L		04/15/22 09:00	04/18/22 15:06	1
- Method: 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	400000		10000	1900	ug/L		04/14/22 09:00	04/25/22 23:48	10
Iron	650		100	36	ug/L		04/14/22 09:00	04/22/22 22:39	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride			1.0	1.0	mg/L			04/13/22 16:07	1
Fluoride	1.5		0.050	0.050	mg/L			04/13/22 16:07	1
Sulfate	1500		10	10	mg/L			04/13/22 16:27	10
<b>Total Dissolved Solids</b>	2100		20	20	mg/L			04/12/22 07:26	1

Client: TRC Environmental Corporation. Job ID: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

Client Sample ID: MW-16-07\_20220406 Lab Sample ID: 240-164756-7

Date Collected: 04/06/22 16:25 **Matrix: Water** 

Date Received: 04/08/22 08:00

Method: 6010D - Metals (ICF Analyte Boron	•	Qualifier	RL	MDL 56	Unit ug/L	<u>D</u>	Prepared 04/15/22 09:00	Analyzed 04/18/22 15:08	Dil Fac
			.00		g/ <u>-</u>		0 1, 10,22 00100	0 17 10722 10100	·
Method: 6020B - Metals (ICI	•								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	420000		10000	1900	ug/L		04/14/22 09:00	04/25/22 23:52	10
Iron	790		100	36	ug/L		04/14/22 09:00	04/22/22 22:43	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.6		1.0	1.0	mg/L			04/13/22 16:47	1
Fluoride	1.4		0.050	0.050	mg/L			04/13/22 16:47	1
Sulfate	1400		10	10	mg/L			04/13/22 17:07	10
Total Dissolved Solids	2000		20	20	mg/L			04/12/22 07:26	1

Client: TRC Environmental Corporation. Job ID: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

Date Collected: 04/06/22 00:00 Matrix: Water

Date Received: 04/08/22 08:00

**Total Dissolved Solids** 

Method: 6010D - Metals (IC	<b>P</b> )								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	430		100	56	ug/L		04/15/22 09:00	04/18/22 15:10	1
- Method: 6020B - Metals (IC	P/MS)								
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	380000		10000	1900	ug/L		04/14/22 09:00	04/25/22 23:56	10
Iron	1000		100	36	ug/L		04/14/22 09:00	04/22/22 22:46	1
- General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		1.0	1.0	mg/L			04/13/22 17:27	1
Fluoride	1.4		0.050	0.050	mg/L			04/13/22 17:27	1
Sulfate	1500		10	10	mg/L			04/13/22 17:47	10

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2200

20 mg/L

**Eurofins Canton** 

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04/12/22 07:26

13

Client: TRC Environmental Corporation. Job ID: 240-164756-1

Project/Site: CCR DTE Monroe Power FAB/VEL

Client Sample ID: MP-001F\_20220406 Lab Sample ID: 240-164756-9

Date Collected: 04/06/22 11:30 **Matrix: Water** 

Date Received: 04/08/22 08:00

Method: 6010D - Metals (IC	P)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	56	ug/L		04/15/22 09:00	04/18/22 15:12	1
- Method: 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	180000		10000	1900	ug/L		04/14/22 09:00	04/26/22 00:00	10
Iron	670		100	36	ug/L		04/14/22 09:00	04/22/22 22:50	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33		1.0	1.0	mg/L			04/13/22 18:07	1
Fluoride	0.56		0.050	0.050	mg/L			04/13/22 18:07	1
Sulfate	450		5.0	5.0	mg/L			04/13/22 18:28	5
Total Dissolved Solids	810		10	10	mg/L			04/12/22 07:26	1

Job ID: 240-164756-1

Prep Type: Total/NA **Prep Batch: 349919** 

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 310-349919/1-A

**Matrix: Water Analysis Batch: 350312** 

MB MB

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte Prepared 100 04/15/22 09:00 04/18/22 14:04 Boron 100 U ^+ 56 ug/L

LCS LCS

2020 ^+

DU DU

145

RL

1000

100

Spike

Added

2000

200

Spike

Added

2000

200

Result Qualifier

**MDL** Unit

36 ug/L

Unit

ug/L

ug/L

Unit

ug/L

ug/L

Unit

ug/L

ug/L

190 ug/L

LCS LCS

MS MS

MSD MSD

350

419000 4

337

Result Qualifier

1900

209

Result Qualifier

Result Qualifier

Unit

ug/L

Spike

Added

Sample Sample

140

Result Qualifier

MB MB Result Qualifier

1000 U

100 U

Sample Sample

420000

Result Qualifier

2000

Lab Sample ID: LCS 310-349919/2-A

**Matrix: Water** 

**Analysis Batch: 350312** 

Analyte Boron

Lab Sample ID: 240-164756-4 DU

**Matrix: Water** 

**Analysis Batch: 350312** 

Analyte

Boron

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-349468/1-A

**Matrix: Water** 

**Analysis Batch: 350843** 

Analyte Calcium

Iron Lab Sample ID: LCS 310-349468/2-A

**Matrix: Water** 

Iron

Analyte

Calcium

**Analysis Batch: 350843** 

Analyte Calcium

Lab Sample ID: 240-164756-1 MS

**Matrix: Water** 

**Analysis Batch: 350843** 

Iron 120

Lab Sample ID: 240-164756-1 MSD

**Matrix: Water** 

**Analysis Batch: 350843** 

Sample Sample Spike Result Qualifier **Analyte** 

Calcium 420000 2000 Iron 120 200

Added Result Qualifier 422000 4

Prep Type: Total/NA

**Client Sample ID: Lab Control Sample** 

**Prep Batch: 349919** 

%Rec D %Rec Limits 101 80 - 120

Client Sample ID: Method Blank

Client Sample ID: MW-16-04\_20220406

**Prep Type: Total/NA Prep Batch: 349919** 

**RPD** 

RPD Limit

Unit 0.2 20 ug/L

Client Sample ID: Method Blank

Prep Type: Total/NA

Dil Fac

Prep Batch: 349468

Analyzed

04/14/22 09:00 04/22/22 21:40 04/14/22 09:00 04/22/22 21:40

Prepared

D

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA **Prep Batch: 349468** 

%Rec %Rec

Limits

95 80 - 120 105 80 - 120

Client Sample ID: MW-16-01\_20220405 Prep Type: Total/NA

%Rec

150

107

D %Rec

281

113

Prep Batch: 349468

%Rec

Limits

75 - 125

Client Sample ID: MW-16-01\_20220405

75 - 125

Prep Type: Total/NA

Prep Batch: 349468

%Rec RPD Limits RPD Limit 75 - 125 20 75 - 125 20

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-522502/3

**Matrix: Water** 

**Analysis Batch: 522502** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Job ID: 240-164756-1

MB MB MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Chloride 1.0 U 1.0 1.0 mg/L 04/13/22 04:02 Fluoride 0.050 U 0.050 0.050 mg/L 04/13/22 04:02 Sulfate 1.0 U 1.0 1.0 mg/L 04/13/22 04:02

Lab Sample ID: LCS 240-522502/4

**Matrix: Water** 

Analysis Batch: 522502

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

Client Sample ID: MW-16-01\_20220405

Client Sample ID: MW-16-01\_20220405

Prep Type: Total/NA

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	49.7		mg/L		99	90 - 110	
Fluoride	2.50	2.55		mg/L		102	90 - 110	
Sulfate	50.0	51.6		mg/L		103	90 - 110	

Lab Sample ID: 240-164756-1 MS

**Matrix: Water** 

Analysis Batch: 522502

7 maryore Datem 622662	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	10		50.0	60.3		mg/L		100	80 - 120	
Fluoride	1.6		2.50	3.88		mg/L		90	80 - 120	

Lab Sample ID: 240-164756-1 MSD

**Matrix: Water** 

Analysis Batch: 522502

•	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	10		50.0	59.4		mg/L		99	80 - 120	1	15
Fluoride	1.6		2.50	3.75		mg/L		85	80 - 120	3	15

Lab Sample ID: MB 240-522802/3

**Matrix: Water** 

**Analysis Batch: 522802** 

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

**Client Sample ID: Lab Control Sample** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	1.0	mg/L	<del></del>		04/14/22 12:33	1
Fluoride	0.050	U	0.050	0.050	mg/L			04/14/22 12:33	1
Sulfate	1.0	U	1.0	1.0	mg/L			04/14/22 12:33	1

Lab Sample ID: LCS 240-522802/4

**Matrix: Water** 

Analysis Batch: 522802

Alialysis Dalcii. 522002								
-	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	49.7		mg/L		99	90 - 110	
Fluoride	2.50	2.61		mg/L		104	90 - 110	
Sulfate	50.0	51.1		mg/L		102	90 - 110	

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Prep Type: Total/NA

## **QC Sample Results**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

Job ID: 240-164756-1

Prep Type: Total/NA

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

Lab Sample ID: MB 240-522294/1 **Client Sample ID: Method Blank** 

**Matrix: Water** 

Analysis Batch: 522294

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac **Prepared** Total Dissolved Solids 10 04/11/22 09:21 10 U 10 mg/L

Lab Sample ID: LCS 240-522294/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 522294

Spike LCS LCS %Rec Added Result Qualifier Unit D %Rec Limits **Total Dissolved Solids** 150 135 80 - 120 mg/L 90

Lab Sample ID: MB 240-522397/1 **Client Sample ID: Method Blank** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 522397** 

мв мв

Analyte Result Qualifier RLMDL Unit Prepared Analyzed Dil Fac Total Dissolved Solids 10 U 10 10 mg/L 04/12/22 07:26

Lab Sample ID: LCS 240-522397/2 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 522397** 

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit %Rec Limits Total Dissolved Solids 150 126 80 - 120 mg/L 84

## **QC Association Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

### **Metals**

### **Prep Batch: 349468**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-1	MW-16-01_20220405	Total/NA	Water	3005A	
240-164756-2	MW-16-02_20220406	Total/NA	Water	3005A	
240-164756-3	MW-16-03_20220406	Total/NA	Water	3005A	
240-164756-4	MW-16-04_20220406	Total/NA	Water	3005A	
240-164756-5	MW-16-05_20220406	Total/NA	Water	3005A	
240-164756-6	MW-16-06_20220406	Total/NA	Water	3005A	
240-164756-7	MW-16-07_20220406	Total/NA	Water	3005A	
240-164756-8	DUP-01_20220406	Total/NA	Water	3005A	
240-164756-9	MP-001F_20220406	Total/NA	Water	3005A	
MB 310-349468/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-349468/2-A	Lab Control Sample	Total/NA	Water	3005A	
240-164756-1 MS	MW-16-01_20220405	Total/NA	Water	3005A	
240-164756-1 MSD	MW-16-01_20220405	Total/NA	Water	3005A	

### **Prep Batch: 349919**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-1	MW-16-01_20220405	Total/NA	Water	3005A	
240-164756-2	MW-16-02_20220406	Total/NA	Water	3005A	
240-164756-3	MW-16-03_20220406	Total/NA	Water	3005A	
240-164756-4	MW-16-04_20220406	Total/NA	Water	3005A	
240-164756-5	MW-16-05_20220406	Total/NA	Water	3005A	
240-164756-6	MW-16-06_20220406	Total/NA	Water	3005A	
240-164756-7	MW-16-07_20220406	Total/NA	Water	3005A	
240-164756-8	DUP-01_20220406	Total/NA	Water	3005A	
240-164756-9	MP-001F_20220406	Total/NA	Water	3005A	
MB 310-349919/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-349919/2-A	Lab Control Sample	Total/NA	Water	3005A	
240-164756-4 DU	MW-16-04_20220406	Total/NA	Water	3005A	

### **Analysis Batch: 350312**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-1	MW-16-01_20220405	Total/NA	Water	6010D	349919
240-164756-2	MW-16-02_20220406	Total/NA	Water	6010D	349919
240-164756-3	MW-16-03_20220406	Total/NA	Water	6010D	349919
240-164756-4	MW-16-04_20220406	Total/NA	Water	6010D	349919
240-164756-5	MW-16-05_20220406	Total/NA	Water	6010D	349919
240-164756-6	MW-16-06_20220406	Total/NA	Water	6010D	349919
240-164756-7	MW-16-07_20220406	Total/NA	Water	6010D	349919
240-164756-8	DUP-01_20220406	Total/NA	Water	6010D	349919
240-164756-9	MP-001F_20220406	Total/NA	Water	6010D	349919
MB 310-349919/1-A	Method Blank	Total/NA	Water	6010D	349919
LCS 310-349919/2-A	Lab Control Sample	Total/NA	Water	6010D	349919
240-164756-4 DU	MW-16-04_20220406	Total/NA	Water	6010D	349919

### **Analysis Batch: 350843**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-1	MW-16-01_20220405	Total/NA	Water	6020B	349468
240-164756-2	MW-16-02_20220406	Total/NA	Water	6020B	349468
240-164756-3	MW-16-03_20220406	Total/NA	Water	6020B	349468
240-164756-4	MW-16-04_20220406	Total/NA	Water	6020B	349468
240-164756-5	MW-16-05_20220406	Total/NA	Water	6020B	349468

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Job ID: 240-164756-1

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## **QC Association Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

## **Metals (Continued)**

### **Analysis Batch: 350843 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-6	MW-16-06_20220406	Total/NA	Water	6020B	349468
240-164756-7	MW-16-07_20220406	Total/NA	Water	6020B	349468
240-164756-8	DUP-01_20220406	Total/NA	Water	6020B	349468
240-164756-9	MP-001F_20220406	Total/NA	Water	6020B	349468
MB 310-349468/1-A	Method Blank	Total/NA	Water	6020B	349468
LCS 310-349468/2-A	Lab Control Sample	Total/NA	Water	6020B	349468
240-164756-1 MS	MW-16-01_20220405	Total/NA	Water	6020B	349468
240-164756-1 MSD	MW-16-01_20220405	Total/NA	Water	6020B	349468

### **Analysis Batch: 351050**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-4	MW-16-04_20220406	Total/NA	Water	6020B	349468
240-164756-5	MW-16-05_20220406	Total/NA	Water	6020B	349468
240-164756-6	MW-16-06_20220406	Total/NA	Water	6020B	349468
240-164756-7	MW-16-07_20220406	Total/NA	Water	6020B	349468
240-164756-8	DUP-01_20220406	Total/NA	Water	6020B	349468
240-164756-9	MP-001F_20220406	Total/NA	Water	6020B	349468
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### **General Chemistry**

### Analysis Batch: 522294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-1	MW-16-01_20220405	Total/NA	Water	SM 2540C	
240-164756-2	MW-16-02_20220406	Total/NA	Water	SM 2540C	
240-164756-3	MW-16-03_20220406	Total/NA	Water	SM 2540C	
MB 240-522294/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-522294/2	Lab Control Sample	Total/NA	Water	SM 2540C	

### **Analysis Batch: 522397**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-4	MW-16-04_20220406	Total/NA	Water	SM 2540C	
240-164756-5	MW-16-05_20220406	Total/NA	Water	SM 2540C	
240-164756-6	MW-16-06_20220406	Total/NA	Water	SM 2540C	
240-164756-7	MW-16-07_20220406	Total/NA	Water	SM 2540C	
240-164756-8	DUP-01_20220406	Total/NA	Water	SM 2540C	
240-164756-9	MP-001F_20220406	Total/NA	Water	SM 2540C	
MB 240-522397/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-522397/2	Lab Control Sample	Total/NA	Water	SM 2540C	

### **Analysis Batch: 522502**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-1	MW-16-01_20220405	Total/NA	Water	9056A	
240-164756-1	MW-16-01_20220405	Total/NA	Water	9056A	
240-164756-2	MW-16-02_20220406	Total/NA	Water	9056A	
240-164756-2	MW-16-02_20220406	Total/NA	Water	9056A	
240-164756-3	MW-16-03_20220406	Total/NA	Water	9056A	
240-164756-3	MW-16-03_20220406	Total/NA	Water	9056A	
240-164756-4	MW-16-04_20220406	Total/NA	Water	9056A	
240-164756-4	MW-16-04_20220406	Total/NA	Water	9056A	
240-164756-5	MW-16-05_20220406	Total/NA	Water	9056A	
240-164756-5	MW-16-05_20220406	Total/NA	Water	9056A	

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Job ID: 240-164756-1

## **QC Association Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

### Job ID: 240-164756-1

## **General Chemistry (Continued)**

### **Analysis Batch: 522502 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-6	MW-16-06_20220406	Total/NA	Water	9056A	
240-164756-6	MW-16-06_20220406	Total/NA	Water	9056A	
240-164756-7	MW-16-07_20220406	Total/NA	Water	9056A	
240-164756-7	MW-16-07_20220406	Total/NA	Water	9056A	
240-164756-8	DUP-01_20220406	Total/NA	Water	9056A	
240-164756-8	DUP-01_20220406	Total/NA	Water	9056A	
240-164756-9	MP-001F_20220406	Total/NA	Water	9056A	
240-164756-9	MP-001F_20220406	Total/NA	Water	9056A	
MB 240-522502/3	Method Blank	Total/NA	Water	9056A	
LCS 240-522502/4	Lab Control Sample	Total/NA	Water	9056A	
240-164756-1 MS	MW-16-01_20220405	Total/NA	Water	9056A	
240-164756-1 MSD	MW-16-01_20220405	Total/NA	Water	9056A	

### **Analysis Batch: 522802**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164756-2	MW-16-02_20220406	Total/NA	Water	9056A	
MB 240-522802/3	Method Blank	Total/NA	Water	9056A	
LCS 240-522802/4	Lab Control Sample	Total/NA	Water	9056A	

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Monroe Power FAB/VEL

Client Sample ID: MW-16-01\_20220405

Date Collected: 04/05/22 12:25 Date Received: 04/08/22 08:00 Lab Sample ID: 240-164756-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349919	04/15/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6010D		1	350312	04/18/22 14:50	СТВ	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		1	350843	04/22/22 21:48	SAP	TAL CF
Total/NA	Analysis	9056A		1	522502	04/13/22 10:45	JMB	TAL CAN
Total/NA	Analysis	9056A		10	522502	04/13/22 12:25	JMB	TAL CAN
Total/NA	Analysis	SM 2540C		1	522294	04/11/22 09:21	KMS	TAL CAN

Date Collected: 04/06/22 14:11 Date Received: 04/08/22 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349919	04/15/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6010D		1	350312	04/18/22 14:52	СТВ	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		1	350843	04/22/22 22:07	SAP	TAL CF
Total/NA	Analysis	9056A		1	522802	04/14/22 21:47	JMB	TAL CAN
Total/NA	Analysis	9056A		1	522502	04/13/22 12:46	JMB	TAL CAN
Total/NA	Analysis	9056A		10	522502	04/13/22 13:06	JMB	TAL CAN
Total/NA	Analysis	SM 2540C		1	522294	04/11/22 09:21	KMS	TAL CAN

Date Received: 04/08/22 08:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349919	04/15/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6010D		1	350312	04/18/22 14:54	СТВ	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		1	350843	04/22/22 22:11	SAP	TAL CF
Total/NA	Analysis	9056A		1	522502	04/13/22 13:26	JMB	TAL CAN
Total/NA	Analysis	9056A		10	522502	04/13/22 13:46	JMB	TAL CAN
Total/NA	Analysis	SM 2540C		1	522294	04/11/22 09:21	KMS	TAL CAN

Date Collected: 04/06/22 16:43 Date Received: 04/08/22 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349919	04/15/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6010D		1	350312	04/18/22 15:00	СТВ	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		1	350843	04/22/22 22:31	SAP	TAL CF

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**Matrix: Water** 

240-164756-4
Matrix: Water

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

Client Sample ID: MW-16-04\_20220406

Date Collected: 04/06/22 16:43

Lab Sample ID: 240-164756-4

**Matrix: Water** 

Date Received: 04/08/22 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		10	351050	04/25/22 23:24	SAP	TAL CF
Total/NA	Analysis	9056A		1	522502	04/13/22 14:06	JMB	TAL CAN
Total/NA	Analysis	9056A		10	522502	04/13/22 14:26	JMB	TAL CAN
Total/NA	Analysis	SM 2540C		1	522397	04/12/22 07:26	AJ	TAL CAN

Lab Sample ID: 240-164756-5 Client Sample ID: MW-16-05\_20220406

Date Collected: 04/06/22 14:15

**Matrix: Water** 

Date Received: 04/08/22 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349919	04/15/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6010D		1	350312	04/18/22 15:04	СТВ	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		1	350843	04/22/22 22:35	SAP	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		10	351050	04/25/22 23:44	SAP	TAL CF
Total/NA	Analysis	9056A		1	522502	04/13/22 14:46	JMB	TAL CAN
Total/NA	Analysis	9056A		10	522502	04/13/22 15:06	JMB	TAL CAN
Total/NA	Analysis	SM 2540C		1	522397	04/12/22 07:26	AJ	TAL CAN

Client Sample ID: MW-16-06\_20220406

Date Collected: 04/06/22 13:05

Date Received: 04/08/22 08:00

Lab Sample ID: 240-164756-6

**Matrix: Water** 

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349919	04/15/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6010D		1	350312	04/18/22 15:06	СТВ	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		1	350843	04/22/22 22:39	SAP	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		10	351050	04/25/22 23:48	SAP	TAL CF
Total/NA	Analysis	9056A		1	522502	04/13/22 16:07	JMB	TAL CAN
Total/NA	Analysis	9056A		10	522502	04/13/22 16:27	JMB	TAL CAN
Total/NA	Analysis	SM 2540C		1	522397	04/12/22 07:26	AJ	TAL CAN

Client Sample ID: MW-16-07\_20220406

Date Collected: 04/06/22 16:25

Date Received: 04/08/22 08:00

Lab Sample ID: 240-164756-7 **Matrix: Water** 

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349919	04/15/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6010D		1	350312	04/18/22 15:08	СТВ	TAL CF

### **Lab Chronicle**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

Client Sample ID: MW-16-07 20220406

Date Collected: 04/06/22 16:25 Date Received: 04/08/22 08:00 Lab Sample ID: 240-164756-7

**Matrix: Water** 

Job ID: 240-164756-1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		1	350843	04/22/22 22:43	SAP	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		10	351050	04/25/22 23:52	SAP	TAL CF
Total/NA	Analysis	9056A		1	522502	04/13/22 16:47	JMB	TAL CAN
Total/NA	Analysis	9056A		10	522502	04/13/22 17:07	JMB	TAL CAN
Total/NA	Analysis	SM 2540C		1	522397	04/12/22 07:26	AJ	TAL CAN

Client Sample ID: DUP-01\_20220406

Date Collected: 04/06/22 00:00 Date Received: 04/08/22 08:00

Lab Sample ID: 240-164756-8

**Matrix: Water** 

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349919	04/15/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6010D		1	350312	04/18/22 15:10	СТВ	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		1	350843	04/22/22 22:46	SAP	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		10	351050	04/25/22 23:56	SAP	TAL CF
Total/NA	Analysis	9056A		1	522502	04/13/22 17:27	JMB	TAL CAN
Total/NA	Analysis	9056A		10	522502	04/13/22 17:47	JMB	TAL CAN
Total/NA	Analysis	SM 2540C		1	522397	04/12/22 07:26	AJ	TAL CAN

Client Sample ID: MP-001F 20220406

Date Collected: 04/06/22 11:30

Date Received: 04/08/22 08:00

Lab Sample	ID: 240-164756-9
------------	------------------

**Matrix: Water** 

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			349919	04/15/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6010D		1	350312	04/18/22 15:12	СТВ	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		1	350843	04/22/22 22:50	SAP	TAL CF
Total/NA	Prep	3005A			349468	04/14/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020B		10	351050	04/26/22 00:00	SAP	TAL CF
Total/NA	Analysis	9056A		1	522502	04/13/22 18:07	JMB	TAL CAN
Total/NA	Analysis	9056A		5	522502	04/13/22 18:28	JMB	TAL CAN
Total/NA	Analysis	SM 2540C		1	522397	04/12/22 07:26	AJ	TAL CAN

### **Laboratory References:**

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396 TAL CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

## **Accreditation/Certification Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power FAB/VEL

Job ID: 240-164756-1

### **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	<b>Expiration Date</b>
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
lowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
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	11-06-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	04-20-22
Oregon	NELAP	4062	04-20-22
Pennsylvania	NELAP	68-00340	04-24-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

### **Laboratory: Eurofins Cedar Falls**

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-22
Georgia	State	IA100001 (OR)	09-29-22
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-01-21 *
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-22
Oregon	NELAP	IA100001	09-29-22

Page 27 of 34

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<sup>\*</sup> Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton 180 S. Van Buren Avenue

	Eurofins Canton							N	CLIT	ANT		3		
	180 S. Van Buren Avenue Barberton, OH 44203 Phone (330) 497-9396 Phone (330) 497-0772	ວັ	ain o	f Cust	hain of Custody Record	ecor	73		190	NIEST (	S.		Environment Testing America	
	Client Information	Sample	5	AS. 9	Lab PM Brooks	Lab PM Brooks, Kris M			Carner Tr	Carrier Tracking No(s):	COC No. 240-93	COC No: 240-93655-31715.1	12	
	Client Contact. Chris Scieszka	_	043	316	E-Ma Kris	Brooks@	E-Mail Kris.Brooks@Eurofinset.com	m <sub>C</sub>	State of Origin	Origin:	Page	Page: Page 1 of 1		
	Company TRC Environmental Corporation.		ă.	PWSID				Analysis	Requested	_	# qor			
	Address 1540 Eisenhower Place	Due Date Requested:				216					Prese	00	:8:	_
	City. Ann Arbor	TAT Requested (days):	-			illu2 al					4 8 0	•	M - Hexane N - None O - AsNaO2	_
	State, Zip MI, 48108-7080	Compliance Project:	A Yes A	A No		phonia					2 2 3	_	P - Na2O4S Q - Na2SO3	_
	Phone 313-971-7080(Tel) 313-971-9022(Fax)	184083 [ ] 94	401			4-8					- 0 I	Acid	S - H2SO4  T - TSP Dodecahydrate	
	Email: CScieszka@trccompanies.com	wo #. 254222.0001				(oN							U - Acetone V - MCAA	
	Project Name. CCR DTE Monroe Plant FAB/VEL	Project #: 24016830				10 88						A PO	W - pH 4-5 Z - other (specify)	
	Site	\$SOW#				y) as	-				of cor			
	Samula Idantification		- 0	Sample Type (C=comp,	Matrix (w-water. 8=solid. O-wasteloli.	ield Filtered : MS/M myorne MS/M 540C_0alcd TI	010B Bo' e020				19dmuM (sto	1000		
Pa			X	- 0	lion Code:	X	+-				X		Special manacionalization.	
ge 2	MW-16-01 - 2022-04 05	1/5/32	2.2.	3	Water	7	×				(	24		
28 c	MW-16-02 2022 64 06	निक्रि	こかり	9	Water	3	L				^	0-16		Τ
of 34	MW-16-03 2,027,0405		3	0	Water	3	1				(	4756		
1	MW-16-04_ 2022 6406		5	S	Water	2	1				Ċ	Cha		
	MW-16-05 - 2022 0406	-	ルル	5	Water	<u>5</u>	6				6	ain of		
	MW-16-06 _ 70226406	)	305	3	Water	7	11-1				п	Cus		
	MW-16-07 _ 2.0 22 0406		1625	G	Water	TVW	X.				N	tody		
	DUP-01 - 2022 OM 66			9	Water	NN	X				N			
	MP-001F 20 22 0406		130	Ģ	Water	\ N X	X				Y			
					Mater									
	Possible Hazard Identification					Samp	le Disposa	(A fee ma	Sample Disposal ( A fee may be assessed if samples	d if samples ar	are retained longer than 1 mount,	nger than 1	mona,	_
	Non-Hazard Flammable Skin Irritant Poi Deliverable Requested: I. II. IV. Other (specify)	Poison B Unknown	]	Radiological		Speci	Return To Client al Instructions/QC	Special Instructions/QC Requirements	Disposal By rements	By Lab	Archive For	),	Months	
	Empty Kit Relinquished by:	ď	ate			Time:			Me	Method of Shipment:				T
	Relinquished by	Date Infe (5)	१३)	7	100	<u>x</u>	Recorded C	4		() 2) 22	1 (0)	22	Company	_
4/2	Reinquished by	Date/Time 7/2	21 6	22	Compagn	2 9	Received Py	J		4 7/32	2 1333		Company	Т
26/202	Custody Seals Infact: Custody Seal No.:	412137	1330		Company	2 0	oler Temperat	Cooler Temperature(s) °C and Other Remark	Wher Remarks.		8-23	8	COMPLETA	
22	Δ Yes Δ No							)					Ver. 01/16/2019	_

Eurofins TestAmerica Canton Sample Receipt Form/Narrative Canton Facility	Login # :
	Cooler unpacked by:
	To that a
	Jamy 100
FedEx: 1" Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier	Other
Receipt After-hours: Drop-off Date/Fime Storage Location	
Packing material used Bubble Wrap Foam Plastic Bag None Other	
COOLANT: Wet Ice Blue Ice Dry Ice Water None	
1. Cooler temperature upon-receipt IR GUN# IR-14 (CF -0.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp.	
IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp. C Corrected Cooler I	
	No
	No NA Tests that are not shocked for pH by
	(mermes in har of
	No NA Receiving:
	No VOAs
4. Did custody papers accompany the sample(s)?	No Off and Grease
5. Were the custody papers relinquished & signed in the appropriate place?	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	
7. Did all bottles arrive in good condition (Unbroken)?	
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes	
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and make the containers (Y/N), and make	
10. Were correct bottle(s) used for the test(s) indicated?	
11. Sufficient quantity received to perform indicated analyses?	No
	(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# HC157842
14. Were VOAs on the COC?	(No)
	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes	
17. Was a LL Hg or Me Hg trip blank present? Yes	No)
Contacted PM Date by via Verbal Vo	pice Mail Other
Concerning	
to course on control of the course of the co	a 1
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES  U additional next page	Samples processed by:
19. SAMPLE CONDITION	
Sample(s) were received after the recommended holding	g time had expired.
Sample(s) were received in Sample(s) were received with bubble >6 mm in	in a broken container.
Sample(s) were received with bubble >6 mm in	diameter. (Notify PM)
20. SAMPLE PRESERVATION	
Sample(s) were furth	her preserved in the laboratory.
Sample(s) were furth Time preserved: Preservative(s) added/Lot number(s):	
VOA Sample Preservation - Date/Time VOAs Frozen:	

WI-NC-099

E	urofins TestAmerica	Canton Sample Rece	ipt Multiple Cooler For	m
Gooler Description	IR Gun#	Observed	Corrected	Coolant
(Circle)	(Ctrole)	Temp °C	Temp °C	(Circle) Welice Stuetce Dry ic
Client Box Other	IR-15 IR-15	0.0	009	Wet ice Sive ice Dry ic
TA Client Box Other		0.4	0,0	Woler None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry ic Water None
TA Client Box Other	JR-14 JR-15			Wet Ice Blue Ice Dry Ic
TA Client Box Other	IR-14 IR-16			Wet ice Blue ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wellce Blue ice Dry ice
TA Client Box Other	R-14 R-16		1	Water None Watice Blue ice Dry ice
	IR-14 IR-16		2	Water None Water Blue ice Dry ice
	W-14 W-15			Water None Wellice Blue Ice Dry Ice
TA Client Sox Other	IR-14 IR-15			Water None Wellice Blue Ice Dry Ice
TA Client Box Other				Water None
TA Client Box Other	IR-14 IR-15			Wet ice Sive ice Dry ice Water None
TA Client Box Other	IR-14 IR-15		۸.	Wet ice Blue ice Dry ice Water None
TA Client Box Other	IR-14 IR-15	1	• 4	Wet Ice Blue Ice Dry Ice Water None
TA Client Box* Other	IR-14 IR-15			Wet ice Blue ice Dry ice
TA Client Box Other	IR-14 IR-15			Wellice Blue Ice Dry Ice
TA Client Box Other	R-04 R-15			Water None Wellice Blue Ice Dry Ice
	IR-14 IR-15			Wet ice Blue ice Dry ice
TA Client , Box Other	- 18-94 18-15			Water None Wet Ice Blue Ice - Dry Ice
TA Client Box Other	18-14 IR-15			Water None Wet Ice Blue Ice Dry Ice
TA Client Box Other				Water None
TA Client Box Other	1R-14 IR-15			Wellice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15		**	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15		1	Wet ice Blue ice Dry ice Water None
TA Client Box Other	IR-14 IR-15			Wet ice flue ice Dry ice
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice
TA Client Box Other	IR-14 IR-15			Water None Wet ice Blue ice Dry ice
	M-14 M-15			Water Norie ; Wet ice Blue ice Dry ice
TA Client Box Other			1	Water None Wellice Blue Ice Dry Ice
TA Client Box Other				Water None
TA Client Box Other	R-14 R-15		* 8	Wet ice Blue ice Dry ice Water None
TA Client Box Other	, IR-14 IR-15			Wet ice Blue ice Dry ice Water None
TA Client Box Other	III-14 IR-15		, 1	Wat ice Sive ice Dry ice Water None
TA Client Box Other	IR-14 IR-15		,	Wellice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15		· · · · · · · · · · · · · · · · · · ·	Wet ice Blue ice Dry ice
TA Client Box Other	IR-14 IR-15			Water None Wet Ice Blue Ice., Dry Ice
	IR-14 IR-15			Water None Wet Ice Blue Ice Dry Ice
TA Client Box Other		# (4.6	,	water None ** erature Excursion Form

\* WI-NC-099 Cooler Receipt Form Page 2 - Multiple Coolers

## **Login Container Summary Report**

240-164756

Temperature readings: Preservative Container Client Sample ID Container Type pH Temp Added (mls) Lot # Lab ID MW-16-01 20220405 240-164756-A-1 Plastic 500ml - unpreserved Plastic 500ml - with Nitric Acid MW-16-01 20220405 240-164756-B-1 Plastic 250ml - unpreserved MW-16-02 20220406 240-164756-A-2 MW-16-02\_20220406 240-164756-B-2 Plastic 250ml - with Nitric Acid MW-16-03 20220406 Plastic 250ml - unpreserved 240-164756-A-3 MW-16-03 20220406 240-164756-B-3 Plastic 250ml - with Nitric Acid <2 MW-16-04\_20220406 240-164756-A-4 Plastic 250ml - unpreserved MW-16-04\_20220406 Plastic 250ml - with Nitric Acid 240-164756-B-4 <2 Plastic 250ml - unpreserved MW-16-05\_20220406 240-164756-A-5 MW-16-05\_20220406 240-164756-B-5 Plastic 250ml - with Nitric Acid Plastic 250ml - unpreserved MW-16-06\_20220406 240-164756-A-6 Plastic 250ml - with Nitric Acid MW-16-06\_20220406 240-164756-B-6 <2 MW-16-07 20220406 240-164756-A-7 Plastic 250ml - unpreserved Plastic 250ml - with Nitric Acid MW-16-07 20220406 240-164756-B-7 Plastic 250ml - unpreserved DUP-01 20220406 240-164756-A-8 DUP-01\_20220406 240-164756-B-8 Plastic 250ml - with Nitric Acid <2

Plastic 250ml - unpreserved

Plastic 250ml - with Nitric Acid

<2

MP-001F\_20220406

MP-001F 20220406

240-164756-A-9

240-164756-B-9



## Environment Testing America



## Cooler/Sample Receipt and Temperature Log Form

Client Cunton						
	berton	STATE	Project			
Réceipt Information						
Date/Time DA Received L	1-9-22	1000	Received By	fr.		
Delivery Type ☐ UPS	FedEx	SAT	☐ FedEx Gro	und 🔲 US	6 Mail [	☐ Spee-Dee
☐ Lab C	ourier 🔲 Lab Fi	ield Services	☐ Client Drop	o-off 🔲 Ot	her	
Condition of Cooler/Conta	iners .,	, ,				
Sample(s) received in Co	oler? □¥es	□No	If yes Cool	er ID		
Multiple Coolers?	Yes			er# of _		
Cooler Custody Seals Pre	esent? 🗌 Yes	<u> </u>	If yes Cool	er custody seals	intact?	Yes 🗌
Sample Custody Seals Pr	resent? 🗌 Yes	□Mo	If yes. Sam	ple custody sea	ls intact?	Yes 🗌
Trip Blank Present?	☐ Yes	<u>□</u> 100	If yes Which	ch VOA samples	are in cools	er? Į
Temperature Record			<u> </u>			
Coolant  Wet ice	☐ Blue ice	☐ Dry ice	e Other:		Мог	ΛΕ 
Thermometer ID			Correction F		0	
• Temp Blank Temperature	- If no temp blank,	or temp blank te	mperature above	criteria, proceed to S	Sample Contair	ier Temperature
Uncorrected Temp (°C)			l	emp (°C)		
	· · · · · · · · · · · · · · · · · · ·		Corrected T			
Sample Container Tempe	erature		Corrected 1			
	container 1	250 m		CONTAINER 2	3	
Samplé Container Tempe Container(s) used Uncorrected Temp	container 1	250 m			0	
Samplé Container Tempe Container(s) used	container 1	250 m 11.6				
Sample Container Tempe Container(s) used Uncorrected Temp (°C)	container 1	11.6		CONTAINER 2		
• Samplé Container Tempe Container(s) used Uncorrected Temp (°C) Corrected Temp (°C)	s criteria, was sa	11, 6 11, 6 ample(s) rece	sived same day	CONTAINER 2	20	□ No
Sample Container Temper Container(s) used Uncorrected Temp (°C) Corrected Temp (°C) Exceptions Noted  1) If temperature exceed	s criteria, was sa	11, 6 11, 6 ample(s) receptilling processous signs that	pived same dayss began?	CONTAINER 2 7 12 17 17 17 17 17	0 U J	□No
• Sample Container Temper Container(s) used Uncorrected Temp (°C) Corrected Temp (°C) Exceptions Noted  1) If temperature exceed a) If yes Is there ever (e.g., bulging septa, butter it is the exceptions of the exception of the excepti	s criteria, was saridence that the coorden/cracked b	II, & II, & ample(s) recephilling proces	pived same days began?	CONTAINER 2 7 12 17 17 17 17 17	☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes	□ No promised?
• Sample Container Temper Container(s) used Uncorrected Temp (°C) Corrected Temp (°C) Exceptions Noted  1) If temperature exceed a) If yes Is there ever (e.g., bulging septa, but the september of the september	s criteria, was savidence that the coordinate of	II. 6 II. 6 ample(s) recephilling procestous signs that the potential of the process of the proc	pived same days began?	CONTAINER 2 7 12 17 17 17 17 17	☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes	□ No promised?
• Sample Container Temper Container(s) used Uncorrected Temp (°C) Corrected Temp (°C) Exceptions Noted  1) If temperature exceed a) If yes Is there ever (e.g., bulging septa, butter it is the exceptions of the exception of the excepti	s criteria, was saridence that the coorden/cracked b	II. 6 II. 6 ample(s) recephilling procestous signs that the potential of the process of the proc	pived same days began?	CONTAINER 2 7 12 17 17 17 17 17	☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes	□ No promised?
• Sample Container Temper Container(s) used Uncorrected Temp (°C) Corrected Temp (°C) Exceptions Noted  1) If temperature exceed a) If yes Is there ever (e.g., bulging septa, butter it is the exceptions of the exception of the excepti	s criteria, was savidence that the coordinate of	II. 6 II. 6 ample(s) recephilling procestous signs that the potential of the process of the proc	pived same days began?	CONTAINER 2 7 12 17 17 17 17 17	☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes	□ No promised?

Document: CED-P-SAM-FRM45521

Revision, 26 Date, 27 Jan 2022

Eurofins Cedar Falls

General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C

4/26/2022

4

6

8

10

12

1/

Environment Test ng

Phone: 330-497-9396 Fax: 330-497-0772

180 S. Van Buren Avenue **Eurofins Canton** 

Barberton, OH 44203

Chain of Custody Record

V None
O AsNaO2
P Na2O4S
O Na2SO3
Na2SO3
S H2SO4
T TSP Dodecahydrate
V MCAA
W PH 445
Z other (specify) Special Instructions/Note: Preservation Codes: A HCL
B NaOH
C Zn Acetate
D Nitric Acid
F MeOH
G Amchlor
H Ascorbic Acid COC No: 240-150578.1 240-164756-1 Page: Page 1 of 1 ice Di Water EDTA EDA evenistnop to redmuh istoT Carrier Tracking No(s): State of Origin: Michigan Analysis Requested Accreditations Required (See note): E-Mail: Kris.Brooks@et.eurofinsus.com × Ca, Fe × × × × × × × 81EJ9M (GOM) TOT\_A2005/80506 × × Lab PM: Brooks, Kris M × × × × × × × selO oB slateM TOT\_A3006/d0106 (oN to set) GSMSM mrohe (oM to seY) elqms8 betelil7 blel7 (Winwater, Shaolid, Onwaste/oil, Preservation Code: Matrix Water Water Water Water Water Water Water Water Water (C=comp, G=grab) Sample Туре Eastem 16:25 Sample Eastern 14:11 Eastern 15:00 Eastern 16:43 Eastern 14:15 Eastern 13:05 Eastern Eastern Eastern 11:30 Due Date Requested: 4/21/2022 TAT Requested (days); Sample Date 4/6/22 4/6/22 4/6/22 4/6/22 4/6/22 4/5/22 4/6/22 4/6/22 4/6/22 Project #: 24016830 SSOW#: Phone: #OM Client Information (Sub Contract Lab) Sample Identification - Client ID (Lab ID) Eurofins Environment Testing North Centr 319-277-2401(Tel) 319-277-2425(Fax) MW-16-03\_20220406 (240-164756-3) MW-16-01\_20220405 (240-164756-1) MW-16-02\_20220406 (240-164756-2) MW-16-04\_20220406 (240-164756-4) MW-16-05\_20220406 (240-164756-5) MW-16-06\_20220406 (240-164756-6) MW-16-07\_20220406 (240-164756-7) MP-001F\_20220406 (240-164756-9) DUP-01\_20220406 (240-164756-8) Project Name: CCR DTE Monroe Power Plant Shipping/Receiving 3019 Venture Way Cedar Falls Client Contact IA, 50613

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratory or other instructions will be provided. Any changes to laboratory or other instructions will be provided. Any changes to laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, roturn the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing North Central, LLC. Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) Doceible Hazard Identificatio

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	Unconfirmed			Return To Client	Disposal By Lab	Archive For	Months	_,
	Deliverable Requested: I III, IV Other (specify)	Primary Deliverable Rank: 2		Special Instructions/QC Requirements:	quirements:			
	Empty Kit Relinquished by	Date:		Time:	Method of Shipment:	hipment		
	Reinfoldispert by:	Date/Time: -22   1433	1433 CETH	Received by:		Date/Time:	Сотралу	
	Relinquished by:		Company	Received by:		Date/∏me:	Company	
1/2E/	Relinquished by	Date/Time:	Company	Raceived by:	76	U-9-11 1000	Company	
วกว	Custody Seals Intact: Custody Seal No.			Cooler Temperature(s) °C and Other Remarks:	d Other Remarks:			
2							Ver 06/08/2021	

4/26/2022

## **Login Sample Receipt Checklist**

Client: TRC Environmental Corporation.

Job Number: 240-164756-1

List Source: Eurofins Cedar Falls
List Number: 2
List Creation: 04/11/22 07:46 AM

Creator: Homolar, Dana J

Creator: Homolar, Dana J		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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# **Environment Testing**

## **ANALYTICAL REPORT**

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

Laboratory Job ID: 240-174712-1

Client Project/Site: CCR DTE Monroe Power Plant FAB/VEL

For:

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

Attn: Mr. Vincent Buening

Authorized for release by:

11/3/2022 7:22:44 PM

Kris Brooks, Project Manager II (330)966-9790

Kris.Brooks@et.eurofinsus.com

LINKS .....

Review your project results through

**Have a Question?** 



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www.eurofinsus.com/Env

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.

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## **Definitions/Glossary**

Client: TRC Environmental Corporation. Job ID: 240-174712-1

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

### **Qualifiers**

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

applicable.

U Indicates the analyte was analyzed for but not detected.

### **General Chemistry**

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
Н	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Ciossaiy	
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 MLMinimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

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

Toxicity Equivalent Factor (Dioxin) **TEF** Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

**Eurofins Canton** 

Page 3 of 30 11/3/2022

### **Case Narrative**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Job ID: 240-174712-1

**Laboratory: Eurofins Canton** 

Narrative

Job Narrative 240-174712-1

### Receipt

The samples were received on 10/14/2022 10:00 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 0.9°C

#### Metals

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

### **General Chemistry**

Method 2540C\_Calcd: LCS failed high for the batch. Samples will be reported for in hold results. Samples will be re-analyzed out of hold with passing QCMW-16-01\_20221012 (240-174712-1), MW-16-07\_20221012 (240-174712-7), DUP-01\_20220012 (240-174712-8).

Method 2540C\_Calcd: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. MW-16-07\_20221012 (240-174712-7)

Method 2540C\_Calcd: Reanalysis of the following sample(s) was performed outside of the analytical holding time to confirm initial analysis: MW-16-01 20221012 (240-174712-1), DUP-01 20220012 (240-174712-8).

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

Job ID: 240-174712-1

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## **Method Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

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 FAB/VEL

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-174712-1	MW-16-01_20221012	Water	10/12/22 14:57	10/14/22 10:00
240-174712-2	MW-16-02_20221012	Water	10/12/22 14:08	10/14/22 10:00
240-174712-3	MW-16-03_20221012	Water	10/12/22 11:48	10/14/22 10:00
240-174712-4	MW-16-04_20221012	Water	10/12/22 10:10	10/14/22 10:00
240-174712-5	MW-16-05_20221012	Water	10/12/22 10:41	10/14/22 10:00
240-174712-6	MW-16-06_20221012	Water	10/12/22 13:00	10/14/22 10:00
240-174712-7	MW-16-07_20221012	Water	10/12/22 15:43	10/14/22 10:00
240-174712-8	DUP-01_20220012	Water	10/12/22 00:00	10/14/22 10:00

Job ID: 240-174712-1

## **Detection Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-01\_20221012

## Lab Sample ID: 240-174712-1

Job ID: 240-174712-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	250		100	100	ug/L	1	_	6010B	Total
									Recoverable
Calcium	380000		1000	1000	ug/L	1		6020	Total
									Recoverable
Iron	120		100	100	ug/L	1		6020	Total
									Recoverable
Chloride	10		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	1.6		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1400		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	2000	*+	20	20	mg/L	1		SM 2540C	Total/NA
Total Dissolved Solids - RA	2000	Н	20	20	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-16-02\_20221012

## Lab Sample ID: 240-174712-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	360		100	100	ug/L		_	6010B	Total
									Recoverable
Calcium	350000		1000	1000	ug/L	1		6020	Total
									Recoverable
Iron	280		100	100	ug/L	1		6020	Total
									Recoverable
Chloride	13		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	1.5		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1500		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-16-03 20221012

## Lab Sample ID: 240-174712-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	420		100	100	ug/L	1	_	6010B	Total
									Recoverable
Calcium	380000		1000	1000	ug/L	1		6020	Total
									Recoverable
Iron	920		100	100	ug/L	1		6020	Total
									Recoverable
Chloride	18		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	1.5		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1500		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-16-04\_20221012 Lab Sample ID: 240-174712-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	160		100	100	ug/L	1	_	6010B	Total
									Recoverable
Calcium	510000		1000	1000	ug/L	1		6020	Total
									Recoverable
Chloride	34		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

This Detection Summary does not include radiochemical test results.

## **Detection Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-05\_20221012

### Lab Sample ID: 240-174712-5

Lab Sample ID: 240-174712-6

Lab Sample ID: 240-174712-7

Lab Sample ID: 240-174712-8

Job ID: 240-174712-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	220		100	100	ug/L		_	6010B	Total
									Recoverable
Calcium	390000		1000	1000	ug/L	1		6020	Total
									Recoverable
Iron	940		100	100	ug/L	1		6020	Total
									Recoverable
Chloride	11		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	1.5		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1400		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	2000		20	20	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-16-06\_20221012

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	320		100	100	ug/L	1	_	6010B	Total
									Recoverable
Calcium	380000		1000	1000	ug/L	1		6020	Total
									Recoverable
Iron	1500		100	100	ug/L	1		6020	Total
									Recoverable
Chloride	11		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	1.5		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	ma/l	1		SM 2540C	Total/NA

### Client Sample ID: MW-16-07 20221012

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	190		100	100	ug/L	1	_	6010B	Total
									Recoverable
Calcium	390000		1000	1000	ug/L	1		6020	Total
									Recoverable
Iron	660		100	100	ug/L	1		6020	Total
									Recoverable
Chloride	7.6		1.0	1.0	mg/L	1		9056A	Total/NA
Fluoride	1.4		0.050	0.050	mg/L	1		9056A	Total/NA
Sulfate	1400		10	10	mg/L	10		9056A	Total/NA
Total Dissolved Solids	2000	*+	20	20	mg/L	1		SM 2540C	Total/NA
Total Dissolved Solids - RA	2200	Н	20	20	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: DUP-01\_20220012

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Boron	220		100	100	ug/L	1	6010B	Total
								Recoverable
Calcium	380000		1000	1000	ug/L	1	6020	Total
								Recoverable
Iron	910		100	100	ug/L	1	6020	Total
								Recoverable
Chloride	11		1.0	1.0	mg/L	1	9056A	Total/NA
Fluoride	1.4		0.050	0.050	mg/L	1	9056A	Total/NA
Sulfate	1400		10	10	mg/L	10	9056A	Total/NA
Total Dissolved Solids	2000	*+	20	20	mg/L	1	SM 2540C	Total/NA
Total Dissolved Solids - RA	2000	Н	20	20	mg/L	1	SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

11/3/2022

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-01\_20221012

Date Collected: 10/12/22 14:57
Date Received: 10/14/22 10:00

Lab Sample ID: 240-174712-1

Matrix: Water

Job ID: 240-174712-1

Date Neceived. 10/14/22 10:00
Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result Qualifier	RL	MDL U	Unit	D	Prepared	Analyzed	Dil Fac
Boron	250	100	100 u	ug/L		10/17/22 12:00	10/19/22 04:59	1

Method: SW846 6020 - Metals	(ICP/MS) - <sup>-</sup>	Total Recov	/erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	380000		1000	1000	ug/L		10/17/22 12:00	10/18/22 19:41	1
Iron	120		100	100	ua/L		10/17/22 12:00	10/18/22 19:41	1

General Chemistry								
Analyte	Result Qua	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	10	1.0	1.0	mg/L			10/27/22 14:16	1
Fluoride (SW846 9056A)	1.6	0.050	0.050	mg/L			10/27/22 14:16	1
Sulfate (SW846 9056A)	1400	10	10	mg/L			10/27/22 14:36	10
Total Dissolved Solids (SM 2540C)	2000 *+	20	20	mg/L			10/19/22 10:11	1

General Chemistry - RA										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa	C
Total Dissolved Solids (SM 2540C)	2000	Н	20	20	mg/L			11/01/22 11:02		1

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Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-02\_20221012

Date Collected: 10/12/22 14:08 Date Received: 10/14/22 10:00 Lab Sample ID: 240-174712-2

	 _			-		_
		Ma	atrix	<b>K</b> :	Wat	er

Job ID: 240-174712-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	360		100	100	ug/L		10/17/22 12:00	10/19/22 05:28	1
Method: SW846 6020 - Metals (I	CP/MS) -	Total Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	350000		1000	1000	ug/L		10/17/22 12:00	10/18/22 19:53	1
Iron	280		100	100	ug/L		10/17/22 12:00	10/18/22 19:53	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	13		1.0	1.0	mg/L			10/27/22 19:18	1
Fluoride (SW846 9056A)	1.5		0.050	0.050	mg/L			10/27/22 19:18	1
Sulfate (SW846 9056A)	1500		10	10	mg/L			10/29/22 16:46	10
Total Dissolved Solids (SM 2540C)	2100		20	20	mg/L			10/17/22 10:08	1

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-03\_20221012

Date Collected: 10/12/22 11:48 Date Received: 10/14/22 10:00

Lab	Sampl	e l	D:	240	<b>)-</b> 1	17	47	1	2	-3	
				_	_		_		_		

**Matrix: Water** 

Job ID: 240-174712-1

Method: SW846 6010B - Metals	(ICP) - To	tal Recovera	able						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	420		100	100	ug/L		10/17/22 12:00	10/19/22 05:33	1
-   Method: SW846 6020 - Metals (I	CP/MS) - T	Total Recov	erable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	380000		1000	1000	ug/L		10/17/22 12:00	10/18/22 19:55	1
Iron	920		100	100	ug/L		10/17/22 12:00	10/18/22 19:55	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	18		1.0	1.0	mg/L			10/27/22 19:58	1
Fluoride (SW846 9056A)	1.5		0.050	0.050	mg/L			10/27/22 19:58	1
Sulfate (SW846 9056A)	1500		10	10	mg/L			10/29/22 17:26	10
Total Dissolved Solids (SM 2540C)	2100		20	20	mg/L			10/17/22 10:08	1

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-04\_20221012

Date Collected: 10/12/22 10:10
Date Received: 10/14/22 10:00

Lab Sample ID: 240-174712-4

Matrix: Water

Job ID: 240-174712-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	160		100	100	ug/L		10/17/22 12:00	10/19/22 05:37	1
Method: SW846 6020 - Metals (IC	CP/MS) - 1	Total Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	510000		1000	1000	ug/L		10/17/22 12:00	10/18/22 19:58	1
Iron	100	U	100	100	ug/L		10/17/22 12:00	10/18/22 19:58	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	34		1.0	1.0	mg/L			10/27/22 20:38	1
Fluoride (SW846 9056A)	0.95		0.050	0.050	mg/L			10/27/22 20:38	1
Sulfate (SW846 9056A)	1400		10	10	mg/L			10/29/22 18:06	10
Total Dissolved Solids (SM 2540C)	2100		20	20	ma/L			10/17/22 10:08	1

**Eurofins Canton** 

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Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-05\_20221012 Lab Sample ID: 240-174712-5

Date Collected: 10/12/22 10:41 Date Received: 10/14/22 10:00

**Matrix: Water** 

Job ID: 240-174712-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	220		100	100	ug/L		10/17/22 12:00	10/19/22 05:41	1
Method: SW846 6020 - Metals (I	CP/MS) - <sup>-</sup>	Total Recov	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	390000		1000	1000	ug/L		10/17/22 12:00	10/18/22 20:00	1
lron	940		100	100	ug/L		10/17/22 12:00	10/18/22 20:00	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	11		1.0	1.0	mg/L			10/27/22 21:19	1
Fluoride (SW846 9056A)	1.5		0.050	0.050	mg/L			10/27/22 21:19	1
Sulfate (SW846 9056A)	1400		10	10	mg/L			10/29/22 18:46	10
Total Dissolved Solids (SM 2540C)	2000		20	20	mg/L			10/17/22 10:05	1

# **Client Sample Results**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-06\_20221012 Lab Sample ID: 240-174712-6

Date Collected: 10/12/22 13:00 Date Received: 10/14/22 10:00

**Matrix: Water** 

Job ID: 240-174712-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	320		100	100	ug/L		10/17/22 12:00	10/19/22 05:46	1
Method: SW846 6020 - Metals (I	CP/MS) - <sup>-</sup>	Total Recov	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	380000		1000	1000	ug/L		10/17/22 12:00	10/18/22 20:03	1
lron	1500		100	100	ug/L		10/17/22 12:00	10/18/22 20:03	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	11		1.0	1.0	mg/L			10/27/22 21:59	1
Fluoride (SW846 9056A)	1.5		0.050	0.050	mg/L			10/27/22 21:59	1
Sulfate (SW846 9056A)	1400		10	10	mg/L			10/29/22 20:07	10
Total Dissolved Solids (SM 2540C)	2100		20	20	mg/L			10/17/22 10:05	1

# **Client Sample Results**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-07\_20221012 Lab Sample

Date Collected: 10/12/22 15:43 Date Received: 10/14/22 10:00 Lab Sample ID: 240-174712-7

Matrix: Water

Job ID: 240-174712-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	190		100	100	ug/L		10/17/22 12:00	10/19/22 05:50	1
Method: SW846 6020 - Metals (I	CP/MS) - 1	Total Recov	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	390000		1000	1000	ug/L		10/17/22 12:00	10/18/22 20:10	1
Iron	660		100	100	ug/L		10/17/22 12:00	10/18/22 20:10	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	7.6		1.0	1.0	mg/L			10/27/22 23:19	1
Fluoride (SW846 9056A)	1.4		0.050	0.050	mg/L			10/27/22 23:19	1
Sulfate (SW846 9056A)	1400		10	10	mg/L			10/29/22 20:47	10
Total Dissolved Solids (SM 2540C)	2000	*+	20	20	mg/L			10/19/22 10:11	1
General Chemistry - RA									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2200		20		mg/L			10/28/22 19:21	

11/3/2022

5

7

0

10

11

# **Client Sample Results**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: DUP-01\_20220012

Date Collected: 10/12/22 00:00 Date Received: 10/14/22 10:00

Total Dissolved Solids (SM 2540C)

Lab Sample ID: 240-174712-8

Matrix: Water

Job ID: 240-174712-1

11/01/22 11:02

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	220		100	100	ug/L		10/17/22 12:00	10/19/22 05:54	1
Method: SW846 6020 - Metals (IC	CP/MS) -	Total Recov	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	380000		1000	1000	ug/L		10/17/22 12:00	10/18/22 20:13	1
Iron	910		100	100	ug/L		10/17/22 12:00	10/18/22 20:13	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	11		1.0	1.0	mg/L			10/28/22 00:00	1
Fluoride (SW846 9056A)	1.4		0.050	0.050	mg/L			10/28/22 00:00	1
Sulfate (SW846 9056A)	1400		10	10	mg/L			10/29/22 21:27	10
Total Dissolved Solids (SM 2540C)	2000	*+	20	20	mg/L			10/19/22 10:11	1
General Chemistry - RA									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

20

20 mg/L

2000 H

3

5

6

8

9

10

11

Client: TRC Environmental Corporation. Job ID: 240-174712-1

MB MB

Sample Sample

Sample Sample

250

Result Qualifier

MB MB

1000 U

100 U

Result Qualifier

250

Result Qualifier

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-547391/1-A

Analysis Batch: 547695

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 547391** 

Unit

ug/L

Unit

ug/L

Unit

ug/L

ug/L

Unit

ug/L

ug/L

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte D Prepared 100 10/17/22 12:00 10/19/22 04:51 Boron 100 U 100 ug/L

LCS LCS

MS MS

MSD MSD

Result Qualifier

**MDL** Unit

100 ug/L

ug/L

1000

LCS LCS

MS MS

402000 4

5280

Result Qualifier

23900

4860

Result Qualifier

1290

1150

RL

1000

100

Result Qualifier

955

Result Qualifier

Spike

Added

1000

Spike

Added

1000

Spike

Added

1000

Spike Added

25000

5000

Lab Sample ID: LCS 240-547391/2-A

**Matrix: Water** 

**Matrix: Water** 

**Analysis Batch: 547695** 

Analyte Boron

Lab Sample ID: 240-174712-1 MS

**Matrix: Water Analysis Batch: 547695** 

Analyte

Boron

Lab Sample ID: 240-174712-1 MSD

**Matrix: Water** 

**Analysis Batch: 547695** 

Analyte

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-547391/1-A

**Matrix: Water** 

Boron

Calcium

Calcium

Iron

**Analysis Batch: 547691** 

Analyte

Iron Lab Sample ID: LCS 240-547391/3-A

**Matrix: Water** 

**Analysis Batch: 547691** 

**Analyte** 

Lab Sample ID: 240-174712-1 MS **Matrix: Water** 

Analysis Batch: 547691

Sample Sample Spike Analyte Result Qualifier Added Calcium 380000

25000 120 5000 Iron

**Client Sample ID: Lab Control Sample** 

**Prep Type: Total Recoverable Prep Batch: 547391** 

%Rec D %Rec Limits

Client Sample ID: MW-16-01 20221012

80 - 120

95

**Prep Type: Total Recoverable** Prep Batch: 547391

%Rec

Limits Unit %Rec 104 75 - 125 ug/L

Client Sample ID: MW-16-01\_20221012

**Prep Type: Total Recoverable** 

**Prep Batch: 547391** %Rec **RPD** 

%Rec Limits **RPD** Limit 75 - 125 20

**Client Sample ID: Method Blank** 

**Prep Type: Total Recoverable** Prep Batch: 547391

Prepared Analyzed Dil Fac 10/17/22 12:00 10/18/22 19:31 10/17/22 12:00 10/18/22 19:31

**Client Sample ID: Lab Control Sample Prep Type: Total Recoverable** 

Prep Batch: 547391

%Rec D %Rec Limits 96 80 - 12097 80 - 120

Client Sample ID: MW-16-01\_20221012

**Prep Type: Total Recoverable** 

Prep Batch: 547391 %Rec

D %Rec Limits 75 - 125

91 103 75 - 125

**Eurofins Canton** 

11/3/2022

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-174712-1 MSD

**Matrix: Water** 

Analysis Batch: 547691

Client Sample ID: MW-16-01\_20221012

**Prep Type: Total Recoverable** 

**Prep Batch: 547391** %Rec **RPD** 

Job ID: 240-174712-1

Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Analyte Unit Calcium 380000 25000 369000 4 ug/L -42 75 - 125 9 20 Iron 120 5000 4730 ug/L 92 75 - 125 11 20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-548708/22

**Matrix: Water** 

**Analysis Batch: 548708** 

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac Chloride 10/27/22 17:57 1.0 U 1.0 1.0 ma/L Fluoride 0.050 U 0.050 0.050 mg/L 10/27/22 17:57

Lab Sample ID: MB 240-548708/3 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analyte

Chloride

Fluoride

Sulfate

Analysis Batch: 548708

MB MB Result Qualifier RL **MDL** Unit D Dil Fac Prepared Analyzed mg/L 1.0 U 1.0 1.0 10/27/22 11:35 0.050 0.050 U 0.050 mg/L 10/27/22 11:35 1.0 U 1.0 1.0 mg/L 10/27/22 11:35

Lab Sample ID: LCS 240-548708/23 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 548708** 

Spike LCS LCS %Rec Added Result Qualifier Limits **Analyte** Unit %Rec Chloride 50.0 51.2 mg/L 102 90 - 110 Fluoride 2.50 2.65 mg/L 106 90 - 110

Lab Sample ID: LCS 240-548708/4 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 548708** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 50.0 49.8 mg/L 100 90 - 110 Fluoride 2.50 2.57 mg/L 103 90 - 110 Sulfate 50.0 52.0 mg/L 104 90 - 110

Lab Sample ID: MB 240-549313/3 **Client Sample ID: Method Blank** 

**Matrix: Water** 

Analysis Batch: 549313

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 1.0 U 1.0 Chloride 1.0 mg/L 10/29/22 15:45 Fluoride 0.050 U 0.050 10/29/22 15:45 0.050 mg/L Sulfate 1.0 U 1.0 1.0 mg/L 10/29/22 15:45

**Eurofins Canton** 

11/3/2022

Prep Type: Total/NA

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

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

Lab Sample ID: LCS 240-549313/4

Analysis Batch: 549313								•	
-	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	50.0	49.5		mg/L		99	90 - 110		

2.55

51.0

mg/L

mg/L

2.50

50.0

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

Lab Sample ID: MB 240-547339/1

**Matrix: Water** 

**Matrix: Water** 

Fluoride

Sulfate

Analysis Batch: 547339

	IVIB	INIR
Analyte	Result	Qua

lifier RL **MDL** Unit **Prepared** Analyzed Dil Fac **Total Dissolved Solids** 10 U 10 10 mg/L 10/17/22 10:05

Lab Sample ID: LCS 240-547339/2

**Matrix: Water** 

Analysis Batch: 547339

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

Lab Sample ID: MB 240-547340/1

**Matrix: Water** 

Analysis Batch: 547340

MB MB

Analyte	Result 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

**Matrix: Water** 

Analysis Batch: 547340

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

Lab Sample ID: MB 240-547745/1

**Matrix: Water** 

**Analysis Batch: 547745** 

MR MR

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Total Dissolved Solids 10 U 10 10 mg/L 10/19/22 10:11

Lab Sample ID: LCS 240-547745/2

**Matrix: Water** 

Analysis Batch: 547745

7 mary old Batom 647146									
		Spike	LCS	LCS				%Rec	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Total Dissolved Solids	 	500	796	*+	mg/L		159	80 - 120	_

**Eurofins Canton** 

11/3/2022

Job ID: 240-174712-1

Prep Type: Total/NA

**Client Sample ID: Lab Control Sample** 

90 - 110

90 - 110

**Client Sample ID: Method Blank** 

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Method Blank** 

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Method Blank** 

**Client Sample ID: Lab Control Sample** 

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# **QC Sample Results**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Job ID: 240-174712-1

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

**Client Sample ID: Method Blank** 

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

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

Lab Sample ID: MB 240-549374/1

**Matrix: Water** 

Analysis Batch: 549374

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac **Prepared** Total Dissolved Solids 10 10/28/22 19:21 10 U 10 mg/L

Lab Sample ID: LCS 240-549374/2

**Matrix: Water** 

Analysis Batch: 549374

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits **Total Dissolved Solids** 388 80 - 120 377 mg/L 97

Lab Sample ID: MB 240-549787/1

**Matrix: Water** 

**Analysis Batch: 549787** 

мв мв

Analyte Result Qualifier RLMDL Unit Prepared Analyzed Dil Fac Total Dissolved Solids 10 U 10 10 mg/L 11/01/22 11:02

Lab Sample ID: LCS 240-549787/2

**Matrix: Water** 

**Analysis Batch: 549787** 

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit %Rec Limits Total Dissolved Solids 388 340 80 - 120 mg/L 88

**Eurofins Canton** 

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

#### **Metals**

#### **Prep Batch: 547391**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
240-174712-1	MW-16-01_20221012	Total Recoverable	Water	3005A	
240-174712-2	MW-16-02_20221012	Total Recoverable	Water	3005A	
240-174712-3	MW-16-03_20221012	Total Recoverable	Water	3005A	
240-174712-4	MW-16-04_20221012	Total Recoverable	Water	3005A	
240-174712-5	MW-16-05_20221012	Total Recoverable	Water	3005A	
240-174712-6	MW-16-06_20221012	Total Recoverable	Water	3005A	
240-174712-7	MW-16-07_20221012	Total Recoverable	Water	3005A	
240-174712-8	DUP-01_20220012	Total Recoverable	Water	3005A	
MB 240-547391/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-547391/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-547391/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-174712-1 MS	MW-16-01_20221012	Total Recoverable	Water	3005A	
240-174712-1 MS	MW-16-01_20221012	Total Recoverable	Water	3005A	
240-174712-1 MSD	MW-16-01_20221012	Total Recoverable	Water	3005A	
240-174712-1 MSD	MW-16-01 20221012	Total Recoverable	Water	3005A	

#### **Analysis Batch: 547691**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174712-1	MW-16-01_20221012	Total Recoverable	Water	6020	547391
240-174712-2	MW-16-02_20221012	Total Recoverable	Water	6020	547391
240-174712-3	MW-16-03_20221012	Total Recoverable	Water	6020	547391
240-174712-4	MW-16-04_20221012	Total Recoverable	Water	6020	547391
240-174712-5	MW-16-05_20221012	Total Recoverable	Water	6020	547391
240-174712-6	MW-16-06_20221012	Total Recoverable	Water	6020	547391
240-174712-7	MW-16-07_20221012	Total Recoverable	Water	6020	547391
240-174712-8	DUP-01_20220012	Total Recoverable	Water	6020	547391
MB 240-547391/1-A	Method Blank	Total Recoverable	Water	6020	547391
LCS 240-547391/3-A	Lab Control Sample	Total Recoverable	Water	6020	547391
240-174712-1 MS	MW-16-01_20221012	Total Recoverable	Water	6020	547391
240-174712-1 MSD	MW-16-01_20221012	Total Recoverable	Water	6020	547391

#### **Analysis Batch: 547695**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174712-1	MW-16-01_20221012	Total Recoverable	Water	6010B	547391
240-174712-2	MW-16-02_20221012	Total Recoverable	Water	6010B	547391
240-174712-3	MW-16-03_20221012	Total Recoverable	Water	6010B	547391
240-174712-4	MW-16-04_20221012	Total Recoverable	Water	6010B	547391
240-174712-5	MW-16-05_20221012	Total Recoverable	Water	6010B	547391
240-174712-6	MW-16-06_20221012	Total Recoverable	Water	6010B	547391
240-174712-7	MW-16-07_20221012	Total Recoverable	Water	6010B	547391
240-174712-8	DUP-01_20220012	Total Recoverable	Water	6010B	547391
MB 240-547391/1-A	Method Blank	Total Recoverable	Water	6010B	547391
LCS 240-547391/2-A	Lab Control Sample	Total Recoverable	Water	6010B	547391
240-174712-1 MS	MW-16-01_20221012	Total Recoverable	Water	6010B	547391
240-174712-1 MSD	MW-16-01_20221012	Total Recoverable	Water	6010B	547391

#### **General Chemistry**

#### Analysis Batch: 547339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174712-5	MW-16-05 20221012	Total/NA	Water	SM 2540C	

**Eurofins Canton** 

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Job ID: 240-174712-1

# **QC Association Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

## **General Chemistry (Continued)**

#### **Analysis Batch: 547339 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174712-6	MW-16-06_20221012	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 240-174712-2	Client Sample ID MW-16-02_20221012	Prep Type Total/NA	Matrix Water	Method SM 2540C	Prep Batch
240-174712-3	MW-16-03_20221012	Total/NA	Water	SM 2540C	
240-174712-4	MW-16-04_20221012	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: 547745**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174712-1	MW-16-01_20221012	Total/NA	Water	SM 2540C	
240-174712-7	MW-16-07_20221012	Total/NA	Water	SM 2540C	
240-174712-8	DUP-01_20220012	Total/NA	Water	SM 2540C	
MB 240-547745/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-547745/2	Lab Control Sample	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 548708**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174712-1	MW-16-01_20221012	Total/NA	Water	9056A	
240-174712-1	MW-16-01_20221012	Total/NA	Water	9056A	
240-174712-2	MW-16-02_20221012	Total/NA	Water	9056A	
240-174712-3	MW-16-03_20221012	Total/NA	Water	9056A	
240-174712-4	MW-16-04_20221012	Total/NA	Water	9056A	
240-174712-5	MW-16-05_20221012	Total/NA	Water	9056A	
240-174712-6	MW-16-06_20221012	Total/NA	Water	9056A	
240-174712-7	MW-16-07_20221012	Total/NA	Water	9056A	
240-174712-8	DUP-01_20220012	Total/NA	Water	9056A	
MB 240-548708/22	Method Blank	Total/NA	Water	9056A	
MB 240-548708/3	Method Blank	Total/NA	Water	9056A	
LCS 240-548708/23	Lab Control Sample	Total/NA	Water	9056A	
LCS 240-548708/4	Lab Control Sample	Total/NA	Water	9056A	

#### **Analysis Batch: 549313**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174712-2	MW-16-02_20221012	Total/NA	Water	9056A	
240-174712-3	MW-16-03_20221012	Total/NA	Water	9056A	
240-174712-4	MW-16-04_20221012	Total/NA	Water	9056A	
240-174712-5	MW-16-05_20221012	Total/NA	Water	9056A	
240-174712-6	MW-16-06_20221012	Total/NA	Water	9056A	
240-174712-7	MW-16-07_20221012	Total/NA	Water	9056A	
240-174712-8	DUP-01_20220012	Total/NA	Water	9056A	
MB 240-549313/3	Method Blank	Total/NA	Water	9056A	
LCS 240-549313/4	Lab Control Sample	Total/NA	Water	9056A	

#### Analysis Batch: 549374

_	- *										
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch						
240-174712-7 - RA	MW-16-07 20221012	Total/NA	Water	SM 2540C							

**Eurofins Canton** 

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Job ID: 240-174712-1

# **QC Association Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

#### Job ID: 240-174712-1

## **General Chemistry (Continued)**

#### **Analysis Batch: 549374 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-549374/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-549374/2	Lab Control Sample	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 549787**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-174712-1 - RA	MW-16-01_20221012	Total/NA	Water	SM 2540C	
240-174712-8 - RA	DUP-01_20220012	Total/NA	Water	SM 2540C	
MB 240-549787/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-549787/2	Lab Control Sample	Total/NA	Water	SM 2540C	

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#### **Lab Chronicle**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-01 20221012

Date Collected: 10/12/22 14:57 Date Received: 10/14/22 10:00 Lab Sample ID: 240-174712-1

**Matrix: Water** 

Job ID: 240-174712-1

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 04:59
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6020		1	547691	DSH	EET CAN	10/18/22 19:41
Total/NA	Analysis	9056A		1	548708	JMB	EET CAN	10/27/22 14:16
Total/NA	Analysis	9056A		10	548708	JMB	EET CAN	10/27/22 14:36
Total/NA	Analysis	SM 2540C		1	547745	MS	EET CAN	10/19/22 10:11
Total/NA	Analysis	SM 2540C	RA	1	549787	MS	EET CAN	11/01/22 11:02

Client Sample ID: MW-16-02 20221012

Date Collected: 10/12/22 14:08 Date Received: 10/14/22 10:00

Lab Sample ID: 240-174712-2

**Matrix: Water** 

Batch **Batch** Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number Analyst Lab or Analyzed Total Recoverable Prep 3005A 547391 SHB EET CAN 10/17/22 12:00 6010B 547695 RKT 10/19/22 05:28 Total Recoverable Analysis 1 **EET CAN** Total Recoverable Prep 3005A 547391 SHB **EET CAN** 10/17/22 12:00 6020 547691 DSH Total Recoverable Analysis 1 **EET CAN** 10/18/22 19:53 Total/NA Analysis 9056A 548708 JMB **EET CAN** 10/27/22 19:18 1 Total/NA Analysis 9056A 10 549313 JWW **EET CAN** 10/29/22 16:46 Total/NA Analysis SM 2540C 1 547340 MS FFT CAN 10/17/22 10:08

Client Sample ID: MW-16-03 20221012

Date Collected: 10/12/22 11:48 Date Received: 10/14/22 10:00 Lab Sample ID: 240-174712-3

**Matrix: Water** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 05:33
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6020		1	547691	DSH	EET CAN	10/18/22 19:55
Total/NA	Analysis	9056A		1	548708	JMB	EET CAN	10/27/22 19:58
Total/NA	Analysis	9056A		10	549313	JWW	EET CAN	10/29/22 17:26
Total/NA	Analysis	SM 2540C		1	547340	MS	EET CAN	10/17/22 10:08

Client Sample ID: MW-16-04 20221012

Date Collected: 10/12/22 10:10

Date Received: 10/14/22 10:00

Lab Sample ID: 240-174712-4 **Matrix: Water** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 05:37
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6020		1	547691	DSH	EET CAN	10/18/22 19:58

**Eurofins Canton** 

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#### **Lab Chronicle**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: MW-16-04 20221012

Analysis

SM 2540C

Date Collected: 10/12/22 10:10

Lab Sample ID: 240-174712-4 **Matrix: Water** Date Received: 10/14/22 10:00

Batch Batch Dilution Batch Prepared Method Number Analyst or Analyzed **Prep Type** Type Run **Factor** Lab Total/NA Analysis 9056A 548708 JMB EET CAN 10/27/22 20:38 Total/NA Analysis 9056A 10 549313 JWW **EET CAN** 10/29/22 18:06

Client Sample ID: MW-16-05 20221012 Lab Sample ID: 240-174712-5

547340 MS

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EET CAN

10/17/22 10:08

Date Collected: 10/12/22 10:41 Date Received: 10/14/22 10:00

Total/NA

Batch Batch Dilution Batch Prepared **Prep Type** Type Method Run Factor Number Analyst or Analyzed Lab 10/17/22 12:00 3005A Total Recoverable Prep 547391 SHB EET CAN Total Recoverable 6010B EET CAN 10/19/22 05:41 Analysis 1 547695 RKT Total Recoverable 3005A 547391 SHB EET CAN 10/17/22 12:00 Prep Total Recoverable 6020 547691 DSH **EET CAN** 10/18/22 20:00 Analysis 1 Total/NA Analysis 9056A **EET CAN** 10/27/22 21:19 1 548708 JMB Total/NA Analysis 9056A 10 549313 JWW EET CAN 10/29/22 18:46 Total/NA Analysis SM 2540C 1 547339 MS **EET CAN** 10/17/22 10:05

Client Sample ID: MW-16-06 20221012 Lab Sample ID: 240-174712-6

Date Collected: 10/12/22 13:00 **Matrix: Water** Date Received: 10/14/22 10:00

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 05:46
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6020		1	547691	DSH	EET CAN	10/18/22 20:03
Total/NA	Analysis	9056A		1	548708	JMB	EET CAN	10/27/22 21:59
Total/NA	Analysis	9056A		10	549313	JWW	EET CAN	10/29/22 20:07
Total/NA	Analysis	SM 2540C		1	547339	MS	EET CAN	10/17/22 10:05

Client Sample ID: MW-16-07\_20221012 Lab Sample ID: 240-174712-7

Date Collected: 10/12/22 15:43 Date Received: 10/14/22 10:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 05:50
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6020		1	547691	DSH	EET CAN	10/18/22 20:10
Total/NA	Analysis	9056A		1	548708	JMB	EET CAN	10/27/22 23:19
Total/NA	Analysis	9056A		10	549313	JWW	EET CAN	10/29/22 20:47
Total/NA	Analysis	SM 2540C		1	547745	MS	EET CAN	10/19/22 10:11
Total/NA	Analysis	SM 2540C	RA	1	549374	JWW	EET CAN	10/28/22 19:21

**Eurofins Canton** 

Job ID: 240-174712-1

**Matrix: Water** 

**Matrix: Water** 

#### **Lab Chronicle**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Client Sample ID: DUP-01\_20220012

Date Collected: 10/12/22 00:00 Date Received: 10/14/22 10:00 Lab Sample ID: 240-174712-8

Matrix: Water

Job ID: 240-174712-1

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6010B		1	547695	RKT	EET CAN	10/19/22 05:54
Total Recoverable	Prep	3005A			547391	SHB	EET CAN	10/17/22 12:00
Total Recoverable	Analysis	6020		1	547691	DSH	EET CAN	10/18/22 20:13
Total/NA	Analysis	9056A		1	548708	JMB	EET CAN	10/28/22 00:00
Total/NA	Analysis	9056A		10	549313	JWW	EET CAN	10/29/22 21:27
Total/NA	Analysis	SM 2540C		1	547745	MS	EET CAN	10/19/22 10:11
Total/NA	Analysis	SM 2540C	RA	1	549787	MS	EET CAN	11/01/22 11:02

#### **Laboratory References:**

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

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# **Accreditation/Certification Summary**

Client: TRC Environmental Corporation.

Project/Site: CCR DTE Monroe Power Plant FAB/VEL

Job ID: 240-174712-1

#### **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

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MICHIGANChain of Custody Record

Barberton, OH 44203 Phone: 330-497-9396 Fax: 330-497-0772

180 S. Van Buren Avenue **Eurofins Canton** 

N - None
O - AshlaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrat Special Instructions/Note: Ver. 06/08/2021 EEE Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont COC No. 240-99748-31715.1 Preservation Code A - HCL
B - NaOH
C - Zn Acetate
D - Ninic Acid
F - NaHSO4
F - MaCH
G - Amchlor
H - Ascorbic Acid 1860 10:00 Page: Page 1 of 1 Job#: - Di Water Total Number of containers 10/13/32 20-1422 Method of Shipmen amer Tracking No(s) State of Origin. **Analysis Requested** Cooler Temperature(s) °C and Other Remarks Special Instructions/QC Requirements Lab PM:
Brooks, Kris M
E-Mail
Kris. Brooks@et.eurofinsus.com XZZ 2 Company ST-Tissue, AnAir) Company of Water Preservation Code: Water Water Water Water Matrix Water Water Water **CWater** Water Company Sou will 8358 Radiological Type (C=comp, G=grab) 8 6 966 2 sterne and 38 360 Sample Time 541 1010 1543 4041 27516 N122 145 12/22 Date Unknown Heury (AT Requested (days): Due Date Requested: 12/27 NWA Date/Time 10/13/33 12/12/22 Sample Date てんだりつ 254222.0001 Project #: 24016830 SSOW#: THUC Date/Tung 0/ 164009 WO #: Phone Poison B some Skin Imtant Deliverable Requested: I, II, III, IV, Other (specify) The Burning Custody Seals Intact: Custody Seal No. 20221012. 2022 1012 2022 10 12 2022 6012 FAB/ 313-971-7080(Tel) 313-971-9022(Fax) 2022012 202200 2022 1012 Possible Hazard Identification
Non-Hazard Flammable 2022 1012 CCR DTE Monroe Plant FAB/VE TRC Environmental Corporation CScieszka@trocompanies.com 1 gn /60 8 Empty Kit Relinquished by 1540 Eisenhower Place Client Information Sample Identification A Yes A No Shris Scieszka State, Zip: MI, 48108-7080 elinquished by: WW-16-01 inquished by: elinquished by MW-16-02 WW-16-03 MW-16-04 MW-16-07 WW-18-05 WW-16-06 Ann Arbor MP-004F DUP-01

The Control of the Co	· Pi		
Eurofins - Canton Sample Receipt Form/Narrative Log Barberton Facility	gin # :_		
	1	Cooler u	inpacked by:
Client Site Name	-	$\sim 1$	MUK
Cooler Received on 1844-2 Opened on 1044-2	- L	7,44	VILLE
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courie		er	
Receipt After-hours: Drop-off Date/Time Storage Loc Eurofins Cooler # Foam Box Client Cooler Box Other			
	ner		-
COOLANT: Wet Ige Blue Ice Dry Ice Water None			
1 Cooler temperature upon receipt	ooler Form	1 - 0	
IR GUN# IR-13 (CF +0.7 °C) Observed Cooler Temp. O.2 °C Corrected C	Cooler To	emp. O, 9	_°C
IR GUN #IR-15 (CF 0.0°C) Observed Cooler Temp. C Corrected Co	ooler Tei	mp	_°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity	_ Yes	No	Tests that are not
-Were the seals on the outside of the cooler(s) signed & dated?		No NA	checked for pH by
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes		Receiving:
-Were tamper/custody seals intact and uncompromised?	_	No NA	
3. Shippers' packing slip attached to the cooler(s)?	<b>19</b>		VOAs Oil and Grease
4. Did custody papers accompany the sample(s)?		No	TOC
5. Were the custody papers relinquished & signed in the appropriate place?	<b>O</b> s		
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes s		
7. Did all bottles arrive in good condition (Unbroken)?  8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	<b>(3)</b>		
9. For each sample, does the COC specify preservatives (2/N), # of containers (Y/N),			grab/comp(\(\mathbf{Q}/\N\)?
10. Were correct bottle(s) used for the test(s) indicated?	Yes		g. a.o. rossing (Cross)
11. Sufficient quantity received to perform indicated analyses?	68		
12. Are these work share samples and all listed on the COC?	Yes	\	
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	M M NA	
15. Were air bubbles >6 mm in any VOA vials? Larger than this.			
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes		
17. Was a LL Hg or Me Hg trip blank present?	_Yes \	No	
Contacted PM Date by via Ver	rhal Voi	ce Mail Ot	her
718 707		••••••	
Concerning			
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES  additional next p		Camples and	ocessed by:
16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Sudditional next p	age	samples bro	ocessed by:
19. SAMPLE CONDITION			
Sample(s) were received after the recommended	holding	time had e	xpired.
Sample(s) were rec	ceived in	a broken c	ontainer.
Sample(s)were received with bubble >6	mm in d	hameter. (N	NOTITY PM)
20. SAMPLE PRESERVATION			
Sample(s) we	ere furthe	r preserved	in the laboratory.
Sample(s) we Time preserved: Preservative(s) added/Lot number(s):			
			- 1
VOA Sample Preservation - Date/Time VOAs Frozen:			

# **Login Container Summary Report**

240-174712

Temperature readings: \_\_\_\_\_

			Con	<u>tainer</u>	Preservative
Client Sample ID	<u>Lab ID</u>	Container Type	<u>рН</u>	<u>Temp</u>	Added (mls) Lot #
MW-16-01_20221012	240-174712-C-1	Plastic 500ml - with Nitric Acid	<2		
MW-16-02_20221012	240-174712-C-2	Plastic 500ml - with Nitric Acid	<2		
MW-16-03_20221012	240-174712-C-3	Plastic 500ml - with Nitric Acid	<2		
MW-16-04_20221012	240-174712-C-4	Plastic 500ml - with Nitric Acid	<2		
MW-16-05_20221012	240-174712-C-5	Plastic 500ml - with Nitric Acid	<2		
MW-16-06_20221012	240-174712-C-6	Plastic 500ml - with Nitric Acid	<2		
MW-16-07_20221012	240-174712-C-7	Plastic 500ml - with Nitric Acid	<2		
DUP-01_20220012	240-174712-C-8	Plastic 500ml - with Nitric Acid	<2		



# **Appendix B Data Quality Reviews**

# Laboratory Data Quality Review Groundwater Monitoring Event April 2022 DTE Electric Company Monroe Power Plant Fly Ash Basin and Vertical Extension Landfill (MONPP FAB & VEL)

Groundwater samples were collected by TRC for the April 2022 sampling event. Samples were analyzed for anions and total dissolved solids by Eurofins Environment Testing America (Eurofins), located in Canton, Ohio and metals by Eurofins, located in Cedar Falls, Iowa. The laboratory analytical results are reported in laboratory report 240-164756-1.

During the April 2022 sampling event, a groundwater sample was collected from each of the following wells:

■ MW-16-01

■ MW-16-02

■ MW-16-03

MW-16-04

■ MW-16-05

■ MW-16-06

■ MW-16-07

Each sample was analyzed for the following constituents:

Analyte Group	Method
Anions (Chloride, Fluoride, Sulfate)	SW846 9056A
Boron	SW846 3005A/6010D
Calcium	SW846 3005A/6020B
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 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 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.
- LCS recoveries for all target analytes were within laboratory control limits.
- MS/MSD analyses were performed on sample MW-16-01\_20220406 for calcium, chloride, and fluoride. The recoveries of calcium in the MS/MSD performed on sample MW-16-01\_20220406 were below the laboratory acceptance limits. However, data usability was not affected since the concentration of calcium in the parent sample was greater than four times the spike concentration.
- Laboratory duplicate analyses were performed on sample MW-16-04\_20220406 for boron; relative percent differences (RPDs) between parent and duplicate samples were within the QC limits.
- DUP-01\_20220406 corresponds with MW-16-03\_20220406 for anions, metals, and TDS; RPDs between the parent and duplicate samples were within the QC limits.
- Samples MW-16-04\_20220406 and MW-16-07\_20220406 reported boron at 140 ug/L and 180 ug/L, respectively, which are below the QAPP requested RL for boron of 200 ug/L.

# Laboratory Data Quality Review Groundwater Monitoring Event October 2022 DTE Electric Company Monroe Power Plant Fly Ash Basin and Vertical extension Landfill (MONPP FAB & VEL)

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 America (Eurofins), located in Canton, Ohio. The laboratory analytical results are reported in laboratory reports 240-174595-1 and 240-174712-1.

During the October 2020 sampling event, a groundwater sample was collected from each of the following wells:

■ MW-16-01

■ MW-16-02

■ MW-16-03

■ MW-16-04

■ MW-16-05

■ MW-16-06

■ MW-16-07

■ DUP-01

Each sample was analyzed for 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	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 constituents 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**

- An equipment blank was not collected with this data set.
- Target analytes were not detected in the method blanks.
- Samples MW-16-01, MW-16-07, and DUP-01were re-analyzed between 9 and 13 days outside of the holding time for TDS due to issues with the LCS. The results of the original analyses were reported and should be used for project objectives; therefore, there was no adverse effect on the usability of the data due to the holding time exceedance.
- LCS recoveries for all target analytes were within laboratory control limits with the following exception. The recovery of TDS in LCS 240-547745/2 (159%) associated with the original TDS analyses of samples MW-16-01, MW-16-07, and DUP-01 exceeded QC limits (80-120%). The laboratory re-analyzed these samples outside of the holding time due to this issue; the LCS recovery associated with the reanalysis was within QC limits. The results of the original TDS analyses should be used for project objectives. Therefore, the positive results for TDS from the original analyses of samples MW-16-01, MW-16-07, and DUP-01 should be considered estimated with a potential high bias as summarized in the attached table, Attachment A.
- MS/MSD analyses were performed on sample MW-16-01for calcium and boron. The recovery of calcium in the MSD performed on sample MW-16-01\_20221012 was below the laboratory acceptance limits. However, data usability was not affected since the

concentration of calcium in the parent sample was greater than four times the spike concentration.

■ DUP-01 corresponds with MW-16-05; relative percent differences (RPDs) between the parent and duplicate sample were within the QC limits.

#### Attachment A

Summary of Data Non-Conformances for Groundwater Monitoring Event Analytical Data DTE Monroe Power Plant Fly Ash Basin and Vertical Extension Landfill (MONPP FAB & VEL)

Ann Arbor, Michigan

Samples	Collection Date	Analyte	Non-Conformance/Issue
MW-16-01	10/12/2022		
MW-16-07	10/12/2022	TDS	LCS recovery exceeded QC limits, positive result should be considered estiamted with a potential high bias.
DUP-01	10/12/2022		