2024 Annual Groundwater Monitoring Report

Sibley Quarry Coal Combustion Residual Landfill
801 Fort Street
Trenton, Michigan

January 2025

Prepared For:

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Executive Summary

On April 17, 2015, the United States Environmental Protection Agency (USEPA) published the final rule for the regulation and management of Coal Combustion Residuals (CCR) under the Resource Conservation and Recovery Act (RCRA) (the CCR Rule), as amended, applies to the DTE Electric Company (DTE Electric) Sibley Quarry Landfill (SQLF) CCR unit. 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 2024 activities at the SQLF CCR unit.

The SQLF was operating under the detection monitoring program at the start of the 2024 annual reporting period and remained in the detection monitoring program through the end of the 2024 annual reporting period. The semiannual detection monitoring events for 2024 were completed in April and October 2024 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. All the monitoring data that has been collected and evaluated under §257.90 through §257.98 in 2024 are presented in this report.

No initial SSIs over prediction limits were recorded for Appendix III constituents in the monitoring wells during the April and October 2024 monitoring events. A potential SSI for total dissolved solids (TDS) was detected at one monitoring well, MW-108A, during the October 2024 monitoring event. The potential SSI was not statistically significant (i.e. verification resampling did not confirm the exceedance). Therefore, detection monitoring will continue at the SQLF CCR unit in accordance with §257.94.

In response to the chloride and sulfate SSIs noted during the October 2023 monitoring event, DTE Electric has developed an Alternative Source Demonstration (ASD) dated February 29, 2024 that is included in this report as Appendix A.

Additionally, based on the hydrogeology at the site, the uppermost aquifer is in an area where pumping has been performed continuously since before CCR disposal began and will continue to be dewatered, by which a continuous inward hydraulic gradient is maintained. As a result, there is no reasonable probability for the uppermost aquifer perimeter monitoring wells to have been affected by the SQLF CCR unit operations to date, nor could they be in the future under current pumping conditions.

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, applies to the DTE Electric Company (DTE Electric) Sibley Quarry Landfill Coal Combustion Residual Landfill (SQLF) CCR unit. 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 2024 activities at the SQLF CCR unit (2024 Annual Report).

As documented in the *2023 Annual Groundwater Monitoring Report for the Sibley Quarry Landfill* (2023 Annual Report) (TRC, January 2024), potential statistically significant increases (SSIs) over prediction limits were noted for chloride and sulfate during the October 2023 semiannual detection monitoring event. These SSIs were evaluated and determined to be a result of natural variability in groundwater quality as documented in an alternate source demonstration (ASD) included in Appendix A, and not attributable to the SQLF CCR unit. As such, DTE Electric continued detection monitoring at the SQLF CCR Unit in 2024 pursuant to §257.94 of the CCR Rule.

This 2024 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 2024 semiannual groundwater monitoring events for the SQLF CCR unit. Detection monitoring for these events continued to be performed in accordance with the *CCR Groundwater Monitoring and Quality Assurance Project Plan – DTE Electric Company Sibley Quarry Coal Combustion Residual Landfill* (QAPP) (TRC, August 2016; revised March 2017) and statistically evaluated per the *Groundwater Statistical Evaluation Plan – DTE Electric Company Sibley Quarry Coal Combustion Residual Landfill* (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.

1.2 Site Overview

The SQLF is located in Section 7, Township 4 South, Range 11 East, at 801 Fort Street in Trenton, Wayne County, Michigan (Figure 1). The SQLF is located about two miles north of the DTE Electric Trenton Power Plant. The SQLF is bounded mostly by Fort Street to the west, Sibley Road to the north, the former Detroit and Toledo Shore Line Railroad and West Jefferson Avenue to the east, and the former Vulcan Mold & Iron Company (now owned by Danou Enterprises) and the DTE Electric Jefferson Substation to the south.

The SQLF is a licensed Coal Ash Landfill owned and operated by DTE Electric. In 2024, the disposal facility received the majority of CCR from the Monroe Power Plant, including CCR from the Monroe Power Plant Bottom Ash Impoundment closure through 2024. The SQLF is

operated under the current operating license number 9602 in accordance with Michigan Part 115 of the Natural Resources and Environmental Protection Act (NREPA), PA 451 of 1994, as amended.

1.3 Geology/Hydrogeology

The SQLF CCR unit is located approximately one-half mile west of the Detroit River. The Sibley quarry was originally developed to mine limestone beginning in the mid-1800s and was mined to over 300 feet below ground surface (ft bgs) in some areas before mining activities ceased. In 1951, Detroit Edison (now DTE Electric) acquired Sibley Quarry and began to manage CCR in the SQLF. As part of normal operations, the SQLF is continuously dewatered to approximately 300 ft bgs maintaining a water level in the bottom of the quarry by pumping an average of approximately 1.5 million gallons per day.

The SQLF resides in an area characterized by near surface deposits of glacio-lacustrine clay and silt units on top of thick strata of dolomite and limestone bedrock. The SQLF is located in an area where the Dundee Formation (mostly limestone) and the Detroit River Group (limestone, dolostone and some sandstone) underlie the unconsolidated glacial drift and are the uppermost aquifer. At SQLF, the Dundee Formation is overlain by anywhere from less than 15 feet to more than 70 feet of unconsolidated material, most of which is clay-rich soil with some fill. The top of the Dundee Formation limestone/dolostone bedrock was encountered at depths ranging from 16.5 to 74.5 ft bgs and including the underlying Detroit River Group limestone/dolostone/ sandstone, extends to depths ranging from 235 to over 310 ft bgs. The underlying Sylvania Sandstone was encountered at depths ranging from 235 to 300 ft bgs in some locations at the SQLF.

As expected, data show that groundwater levels are significantly lower within the bedrock in monitoring wells that are the closest to the quarry where significant pumping is occurring, with water levels ranging from 113 to more than 220 ft bgs. Groundwater flow is consistently inward toward the base of the quarry due to continuous pumping that hydraulically controls groundwater flow. The pumped water from the quarry is managed in accordance with a National Pollution Discharge Elimination System (NPDES) permit. Quarry dewatering results in all the perimeter uppermost aquifer CCR monitoring wells being upgradient of the SQLF CCR unit.

Because the uppermost aquifer is in an area where pumping has been performed continuously before CCR disposal began, and will be continued to be dewatered, a continuous inward hydraulic gradient is maintained. As a result, there is no reasonable probability for the uppermost aquifer perimeter monitoring wells to have been affected by the SQLF CCR unit operations to date, nor could they be in the future under current pumping conditions.

2.0 Groundwater Monitoring

2.1 Monitoring Well Network

A groundwater monitoring system has been established for the SQLF CCR unit as detailed in the *Groundwater Monitoring System Summary Report – DTE Electric Company Sibley Quarry Coal Combustion Residual Landfill* (GWMS Report) (TRC, October 2017). The detection monitoring well network for the SQLF CCR unit currently consists of eight monitoring wells, MW-101 through MW-107 and MW-108A, which replaced decommissioned monitoring well MW-108 in January 2017. Monitoring wells MW-101 through MW-107 and MW-108A are located around the perimeter of the SQLF and provide data on both background and perimeter groundwater quality that has not been affected by the CCR unit (total of eight background/compliance monitoring wells) given that inward gradients are maintained by continuous dewatering within the quarry. All monitoring wells are screened in the uppermost aquifer. 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 2024 (1SA24) was performed on April 8 and 9, 2024, 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 eight monitoring well locations. Groundwater samples were collected from the eight detection monitoring wells for the Appendix III indicator parameters and field parameters. A summary of the groundwater data collected during the April 2024 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 2024 (2SA24) was performed on October 7 and 8, 2024 by TRC personnel and samples were analyzed by Eurofins in accordance with the QAPP. Static water elevation data were collected at all eight monitoring well locations. Groundwater samples were collected from the eight detection monitoring wells for the Appendix III indicator parameters and field parameters. A summary of the groundwater data collected during the October 2024 event is provided on Table 1 (static groundwater elevation data), Table 2 (field data), and Table 4 (analytical results). The laboratory analytical reports and field data are included in Appendix B.

2.2.2 Data Quality Review

Data from each round were evaluated for completeness, overall quality and usability, method-specified sample holding times, precision and accuracy, and potential sample contamination. The data were found to be complete and usable for the purposes of the CCR monitoring program, with the following exception:

- The relative percent difference (RPD) for TDS in samples DUP-01 and MW-108A was above 30% in the October 2024 sampling event. Therefore, the positive results for TDS in all groundwater samples in this data set should be considered estimated, as summarized in Appendix C.

2.2.3 Groundwater Flow Rate and Direction

Groundwater elevation data collected during the April and October 2024 sampling events continue to show that groundwater within the uppermost aquifer flows radially into the quarry as a result of continuous pumping/dewatering at the site. Groundwater potentiometric surface elevations measured across the site during the April 2024 and the October 2024 sampling events are provided on Table 1 and were used to construct the groundwater potentiometric surface maps shown on Figures 3 and 4, respectively.

The data indicates that current groundwater flow rates and direction are consistent with previous monitoring events. The average hydraulic gradients throughout the site were 0.100 ft/ft for both monitoring events, resulting in estimated average seepage velocities of approximately 6.8 ft/day or 2,500 ft/year, using the average hydraulic conductivity of 6.8 ft/day (Golder, 2015) and an assumed effective porosity of 0.1.

Given that groundwater flow is maintained inward toward the quarry under active pumping, all the perimeter monitoring wells in the groundwater monitoring system are located in an upgradient position relative to the landfill. Therefore, there is no potential for groundwater to migrate away from the SQLF CCR unit.

3.0 Statistical Evaluation

3.1 Establishing Background Limits

As discussed in the Stats Plan, intrawell statistical methods for the SQLF were selected because the uppermost aquifer is in an area where pumping has been performed continuously since before CCR disposal began, and will be continued to be dewatered, resulting in a maintained continuous inward hydraulic gradient. Given that groundwater flow is inward under pumping conditions toward the quarry, all the perimeter monitoring wells in the groundwater monitoring system are located in an upgradient position relative to the landfill. Therefore, monitoring of the SQLF CCR unit using interwell statistical methods (upgradient to downgradient) is not possible. This also supports that the aquifer is unaffected by the CCR unit, where, as a result of the continuously maintained inward gradient, there is no reasonable probability for the perimeter monitoring wells within the uppermost aquifer to have been affected by the SQLF CCR unit operations to date, nor could they be in the future under current pumping conditions. An intrawell statistical approach requires that each of the monitoring wells double as background and compliance wells, 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 eight established detection monitoring wells (MW-101 through MW-107 and MW108A). -The initial statistical evaluation of the background data is presented in the 2017 Annual Report. 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 SQLF CCR unit by comparing concentrations in the detection monitoring wells to their respective background limits for each Appendix III indicator parameter.

Consistent with the Stats Plan and the *USEPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (Unified Guidance, USEPA, 2009), prediction limits are periodically updated to reflect the additional data and additional temporal variability observed over time. The Appendix III prediction limits for the SQLF were updated per the Stats Plan and Unified Guidance in December 2021 to incorporate additional data collected since 2017 as presented in the December 15, 2021 Technical Memorandum, *Prediction Limit Update – DTE Electric Company, Sibley Quarry 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 2024 Semiannual Event (April 2024)

The concentrations of the indicator parameters in each of the detection monitoring wells (MW-101 through MW-107 and MW-108A) were compared to their respective statistical background limits calculated from the background data collected from each individual well (i.e., monitoring data from MW-101 is compared to the background limit developed using the background dataset from MW-101, and so forth).

The statistical evaluation of the April 2024 Appendix III indicator parameters shows no initial potential SSIs compared to background for any of the constituents. The chloride concentration at MW-101 has been previously demonstrated to be from natural variability and not from a release at SQLF CCR unit as presented in the still applicable August 2020 ASD. Therefore, no verification resampling was performed. The comparisons for the April 2024 monitoring event are presented on Table 3.

3.3 Data Comparison to Background Limits – Second 2024 Semiannual Event (October 2024)

The concentrations of the indicator parameters in each of the detection monitoring wells (MW-101 through MW-107 and MW-108A) were compared to their respective statistical background limits calculated from the background data collected from each individual well (i.e., monitoring data from MW-101 is compared to the background limit developed using the background dataset from MW-101, and so forth).

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

- TDS at MW-108A.

As discussed in Section 2.2.2, the RPD for TDS in samples DUP-01 and MW-108A was above 30% in the October 2024 sampling event. Therefore, the positive results for TDS in all groundwater samples in this data set including for MW-108A should be considered estimated, as summarized in Appendix C. The boron and chloride concentrations at MW-101 and the chloride and sulfate concentrations at MW-107 have been demonstrated to be from natural variability and not from the SQLF CCR unit as presented in the still applicable ASDs listed in Table 4.

The initial observation of a constituent concentration above the established background limits does not constitute a SSI. Per the Stats Plan, if there is an initial exceedance of a prediction limit for one or more of the constituents that have not been attributed to an alternate source, the well(s) of concern can be resampled within 30 days of the completion of the initial statistical analysis for verification purposes. Therefore, verification resampling was performed at MW-108A for TDS as described in Section 3.4. There were no potential SSIs compared to background for boron, calcium, chloride fluoride, pH, or sulfate. The statistical evaluation of the October 2024 Appendix III indicator parameters are presented on Table 4.

3.4 Verification Resampling – Second Semiannual Event (October 2024)

Verification resampling is recommended per the Stats Plan and the Unified Guidance to achieve performance standards as specified by §257.93(g) in the CCR Rule. Per the Stats Plan, if there is an exceedance of a prediction limit for one or more of the parameters, the well(s) of concern will be resampled within 30 days of the completion of the initial statistical analysis. Constituents that initially exceed their statistical limit (i.e., have no previously recorded SSIs) will be analyzed for verification purposes. As such, verification resampling was conducted on December 5, 2024, by TRC personnel for TDS at MW-108A. A summary of the groundwater data collected during the verification resampling event is provided on Table 4. The associated data quality

review is included in Appendix B.

The December 2024 verification sampling did not confirm the SSI for TDS at monitoring well MW-108A. Therefore, in accordance with the Stats Plan and the Unified Guidance, the initial TDS exceedance is not statistically significant, and no SSI was recorded at MW-108A during the October 2024 sampling event. As such, DTE Electric will continue detection monitoring at the SQLF CCR Unit in 2025 pursuant to §257.94 of the CCR Rule.

4.0 Conclusions and Recommendations

No SSIs over background limits were observed during the April and October 2024 monitoring events. Therefore, detection monitoring will be continued at the SQLF CCR unit in accordance with §257.94.

As discussed above, and in the GWMS Report, because the uppermost aquifer is in an area where pumping has been performed continuously since before CCR disposal began and will continue to be dewatered to maintain a continuous inward hydraulic gradient, there is no reasonable probability for the uppermost aquifer perimeter monitoring wells to have been affected by the SQLF CCR unit operations to date, nor could they be in the future under current pumping conditions.

No corrective actions were performed in 2024. The next semiannual monitoring event at the SQLF CCR unit is scheduled for the second calendar quarter of 2025.

5.0 Groundwater Monitoring Report Certification

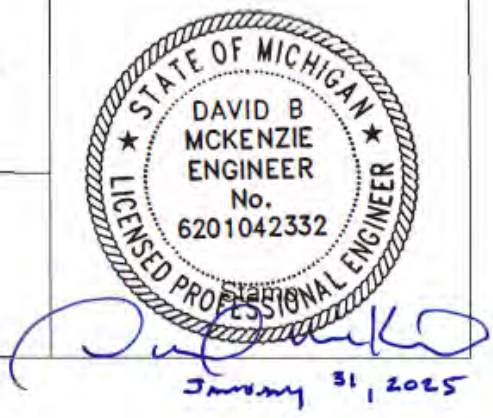
The U.S. EPA's Disposal of Coal Combustion Residuals from Electric Utilities Final Rule Title 40 CFR Part 257 §257.90(e) requires that the owner or operator of an existing CCR unit prepare an annual groundwater monitoring and corrective action report.

Annual Groundwater Monitoring Report Certification
Monroe Power Plant Fly Ash Basin and Vertical Extension Landfill
Monroe, Michigan

CERTIFICATION

I hereby certify that the annual groundwater monitoring 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).

Name:	Expiration Date:	
David B. McKenzie, P.E.	December 17, 2025	
Company:	Date:	
TRC Engineers Michigan, Inc.	January 31, 2025	



6.0 References

TRC. August 2016; Revised March 2017. CCR Groundwater Monitoring and Quality Assurance Project Plan – DTE Electric Company – Sibley Quarry Coal Combustion Residual Landfill, 801 Fort Street, Trenton, Michigan. Prepared for DTE Electric Company.

TRC. October 2017. Groundwater Monitoring System Summary Report – Sibley Quarry Coal Combustion Residual Landfill, 801 Fort Street, Trenton, Michigan. Prepared for DTE Electric Company.

TRC. October 2017. Groundwater Statistical Evaluation Plan –DTE Electric Company Sibley Quarry Coal Combustion Residual Landfill, 801 Fort Street, Trenton, Michigan. Prepared for DTE Electric Company.

TRC. January 2018. Annual Groundwater Monitoring Report – DTE Electric Company Sibley Quarry Coal Combustion Residual Landfill, 801 Fort Street, Trenton, Michigan. Prepared for DTE Electric Company.

TRC. August 8, 2019. Alternate Source Demonstration: 2019 First Semiannual Detection Monitoring Sampling Event Sibley Quarry Coal Combustion Residual Landfill, Trenton, Michigan. Prepared for DTE Electric Company.

TRC. August 26, 2020. Alternate Source Demonstration: 2020 First Semiannual Detection Monitoring Sampling Event Sibley Quarry Coal Combustion Residual Landfill, Trenton, Michigan. Prepared for DTE Electric Company.

TRC. January 2024. 2023 Annual Groundwater Monitoring Report – DTE Electric Company, Sibley Quarry Landfill, Coal Combustion Residual Unit. Prepared for DTE Electric Company.

TRC. February 29, 2024. Alternate Source Demonstration: 2023 Second Semiannual Detection Monitoring Sampling Event Sibley Quarry Coal Combustion Residual Landfill, Trenton, Michigan. Prepared for DTE Electric Company.

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

Tables

Table 1
Summary of Groundwater Elevation Data – April and October 2024
Sibley Quarry Landfill – RCRA CCR Monitoring Program
Trenton, Michigan

Well ID	MW-101		MW-102		MW-103		MW-104		MW-105		MW-106		MW-107		MW-108A	
Date Installed	7/14/2015		7/16/2015		7/15/2015		7/16/2015		3/30/2016		3/28/2016		4/6/2016		1/24/2017	
TOC Elevation	617.67		615.03		607.23		608.39		593.28		606.75		610.03		594.06	
Geologic Unit of Screened Interval	Limestone Bedrock		Limestone Bedrock		Limestone Bedrock		Limestone Bedrock		Limestone Bedrock		Limestone Bedrock		Limestone Bedrock		Sandstone Bedrock	
Bottom of Open Hole Elevation	295.2		342.6		294.7		296.0		290.7		304.0		336.5		290.5	
Unit	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft	ft BTOC	ft
Measurement Date	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation	Depth to Water	GW Elevation
04/08/2024	163.80	453.87	222.64	392.39	153.98	453.25	118.50	489.89	19.63	573.65	113.80	492.95	155.20	454.83	51.43	542.63
10/07/2024	163.40	454.27	220.90	394.13	159.20	448.03	118.10	490.29	23.10	570.18	114.00	492.75	151.10	458.93	52.50	541.56

Notes:

Elevations are reported in feet relative to the national geodetic vertical datum of 1929.

ft BTOC - feet below top of casing

Table 2
Summary of Groundwater Field Parameters – April and October 2024
Sibley Quarry Landfill
Trenton, Michigan

Sample Location	Sample Date	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	pH (SU)	Specific Conductivity (umhos/cm)	Temperature (°C)	Turbidity (NTU)
MW-101	4/8/2024	1.46	-27.2	7.0	1,540	12.20	1.58
	10/7/2024	0.75	-255.0	7.4	2,108	12.40	7.00
MW-102	4/8/2024	8.04	57.2	6.9	1,426	12.20	2.07
	10/8/2024	3.08	-180.0	7.0	2,039	11.40	30.00
MW-103	4/8/2024	1.55	-272.3	7.1	2,430	12.30	0.93
	10/7/2024	0.70	-348.0	7.3	3,378	12.90	7.80
MW-104	4/9/2024	1.86	-189.4	7.0	2,302	12.30	1.52
	10/7/2024	0.60	-320.0	7.3	3,203	12.40	0.65
MW-105	4/8/2024	1.45	41.5	6.8	8,022	11.60	1.19
	10/7/2024	0.58	-254.9	7.4	11,905	14.00	2.50
MW-106	4/8/2024	1.52	-277.1	7.0	2,328	12.60	0.42
	10/8/2024	0.70	-350.0	7.1	3,236	12.30	20.00
MW-107	4/8/2024	1.25	-268.6	6.9	35,776	12.10	2.51
	10/7/2024	0.50	-340.0	7.2	48,995	13.40	3.20
MW-108A	4/9/2024	1.92	-44.7	6.8	4,422	11.40	0.79
	10/7/2024	0.76	-215.0	7.0	6,336	12.10	7.00
	12/5/2024[(1)]	0.00	-276.0	6.9	4,737	10.50	3.82

Notes:
mg/L -Milligrams per Liter.
mV - Millivolts.
SU - Standard Units.
umhos/cm - Micromhos per centimeter.
°C - Degrees Celsius.
NTU - Nephelometric Turbidity Unit
(1) - Results shown for verification sampling performed on 12/5/2024.

Table 3
Comparison of Detection Monitoring Parameter Results to Background Limits – April 2024
Sibley Quarry Landfill
Trenton, Michigan

Sample Location:		MW-101		MW-102		MW-103		MW-104		MW-105		MW-106		MW-107		MW-108A	
Sample Date:		4/8/2024	PL	4/8/2024	PL	4/8/2024	PL	4/9/2024	PL	4/8/2024	PL	4/8/2024	PL	4/8/2024	PL	4/9/2024	PL
Constituent	Unit	Data		Data		Data		Data		Data		Data		Data		Data	
Appendix III																	
Boron	ug/L	320	320	120	150	650	820	630	950	1,900	2,600	610	2,400	1,300	1,600	1,100	1,400
Calcium	ug/L	220,000	260,000	250,000	300,000	610,000	630,000	500,000	520,000	720,000	790,000	610,000	640,000	1,400,000	1,500,000	440,000	460,000
Chloride	mg/L	**290**[(1)]	220	200	260	150	160	220	690	3,100	4,500	110	180	19,000	21,000	1,600	2,100
Fluoride	mg/L	1.8	2.0	1.5	1.8	1.7	2.0	1.6	2.3	0.95	5.8	1.6	3.0	1.6	2.5	0.9	2.5
pH, Field	su	7.0	6.8 - 7.8	6.9	6.5 - 7.6	7.1	6.7 - 7.6	7.0	6.8 - 7.9	6.8	6.6 - 7.9	7.0	6.5 - 7.6	6.9	6.5 - 7.6	6.8	7.0 - 7.0
Sulfate	mg/L	540	700	490	720	1,900	2,100	1,600	1,900	1,900	2,200	1,900	2,100	3,300	3,700	1,100	1,200
Total Dissolved Solids	mg/L	1,400	1,400	1,300	1,700	3,100	3,600	2,900	3,700	6,900	9,400	3,000	3,200	35,000	39,000	4,000	4,900

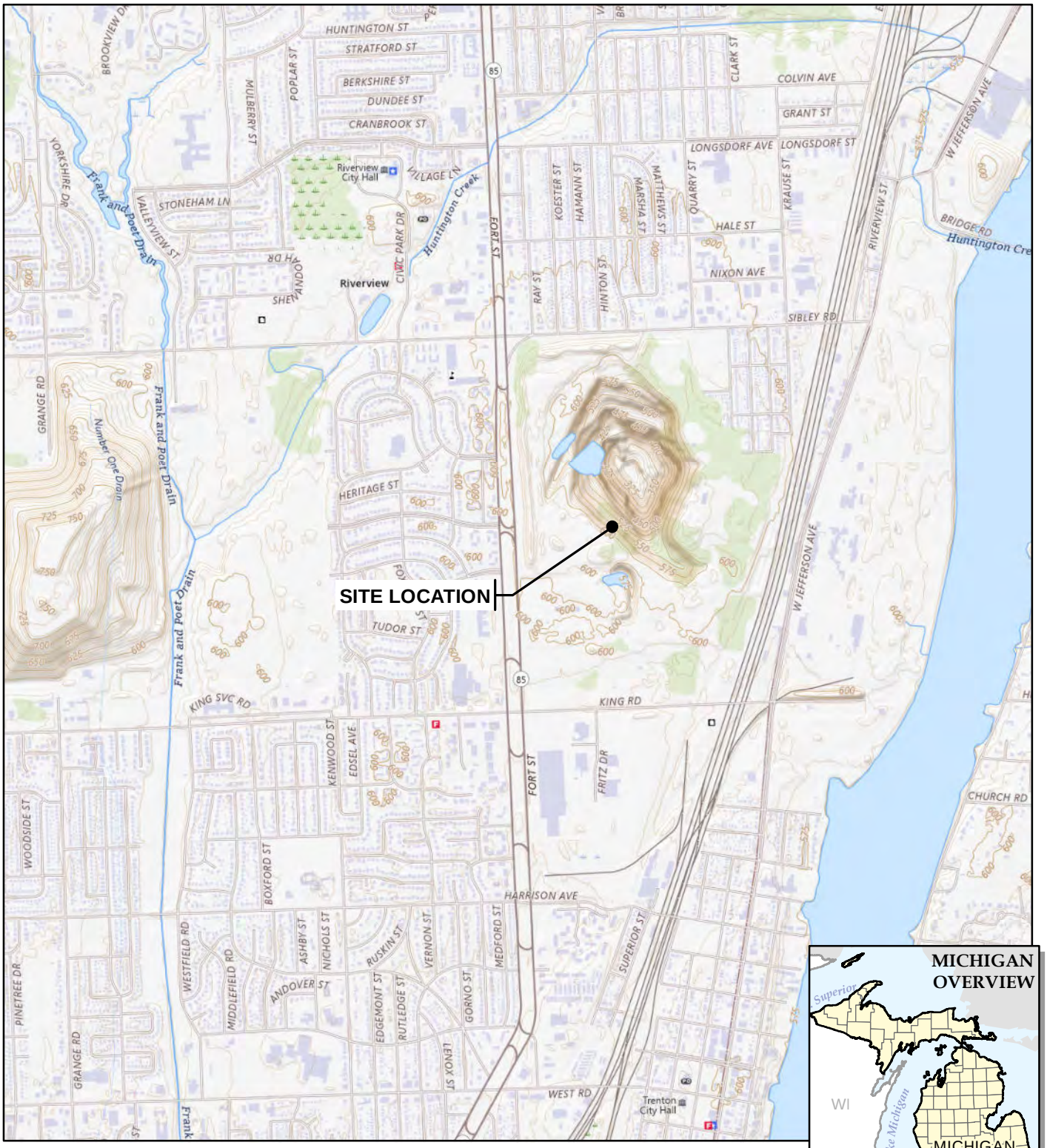
Notes:
ug/L - micrograms per liter.
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
All metals were analyzed as total unless otherwise specified.
Bold font indicates an exceedance of the Prediction Limit (PL).
(1) - Exceedance was determined to be from an alternate source in the still applicable First 2020 Semiannual Alternate Source Demonstration dated 8/26/2020.

Table 4
Comparison of Groundwater Detection Parameter Results to Background Limits – October 2024
Sibley Quarry Landfill
Trenton, Michigan

Sample Location:		MW-101		MW-102		MW-103		MW-104		MW-105		MW-106		MW-107		MW-108A		
Sample Date:		10/7/2024	PL	10/8/2024	PL	10/7/2024	PL	10/7/2024	PL	10/7/2024	PL	10/8/2024	PL	10/7/2024	PL	10/7/2024	12/5/2024[1]	PL
Constituent	Unit	Data		Data		Data		Data		Data		Data		Data		Data		
Appendix III																		
Boron	ug/L	**330[2]**	320	130	150	730	820	710	950	2,500	2,600	710	2,400	1,400	1,600	1,200	--	1,400
Calcium	ug/L	210,000	260,000	240,000	300,000	570,000	630,000	460,000	520,000	680,000	790,000	550,000	640,000	1,400,000	1,500,000	390,000	--	460,000
Chloride	mg/L	**270[3]**	220	180	260	150	160	260	690	3,500	4,500	100	180	**24,000[4]**	21,000	1,700	--	2,100
Fluoride	mg/L	1.9	2.0	1.8	1.8	1.9	2.0	2.0	2.3	1.2	5.8	1.7	3.0	< 5	2.5	1.1	--	2.5
pH, Field	su	7.4	6.8 - 7.8	7.0	6.5 - 7.6	7.3	6.7 - 7.6	7.3	6.8 - 7.9	7.4	6.6 - 7.9	7.1	6.5 - 7.6	7.2	6.5 - 7.6	7.0	--	7.0 - 7.0
Sulfate	mg/L	540	700	600	720	2,000	2,100	1,800	1,900	2,100	2,200	1,900	2,100	**4,000[4]**	3,700	1,100	--	1,200
Total Dissolved Solids	mg/L	1,300	1,400	1,600	1,700	3,000	3,600	2,600	3,700	8,100	9,400	3,000	3,200	38,000	39,000	**10,000**	3,200	4,900

Notes:
ug/L - micrograms per liter.
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
All metals were analyzed as total unless otherwise specified.
Bold font indicates an exceedance of the Prediction Limit (PL).
(1) - Results shown for verification sampling performed on 12/5/2024.
(2) - Exceedance was determined to be from an alternate source in the still applicable First 2019 Semiannual Alternate Source Demonstration dated 8/8/2019.
(3) - Exceedance was determined to be from an alternate source in the still applicable First 2020 Semiannual Alternate Source Demonstration dated 8/26/2020.
(4) - Exceedance was determined to be from an alternate source in the still applicable Second 2023 Semiannual Alternate Source Demonstration dated 2/29/2024.

Figures



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

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

0 2,000 4,000
FEET

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PROJECT:

DTE ELECTRIC COMPANY
SIBLEY QUARRY LANDFILL
801 FORT STREET
TRENTON, MICHIGAN

TITLE:

SITE LOCATION MAP

DRAWN BY:	A. ADAIR
CHECKED BY:	A. WHALEY
APPROVED BY:	V. BUENING
DATE:	JANUARY 2025
PROJ. NO.:	553931.0002
FILE:	FEDERAL_553931_0002_01_SLM.mxd

FIGURE 1

T:\1-PROJECTS\CCR\413591_Sibley_Quarry_Landfill\2-APRX\FEDERAL_553931_0002_01_SLM.mxd -- Saved By: AFOJTIK on 12/10/2024, 11:02:00 AM

Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0
Plot Date: 12/10/2024, 11:03:12 AM by AFOJTIK -- LAYOUT: ANSI B (11"x17")
Path: T:\1-PROJECTS\CCR\413591_Sibley_Quarry_Landfill\2-APRX\STATE_553931_0002_MN.mxd

LEGEND

- MONITORING WELLS
- SURFACE WATER SAMPLING LOCATION
- DECOMMISSIONED MONITORING WELL
- SIBLEY QUARRY PROPERTY LINE
- SOLID WASTE DISPOSAL AREA BOUNDARY
- 1 FILL AREA DESIGNATION

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO, AND PARTNERS, (11/6/2022).
2. SITE LAYOUT INFORMATION FROM GEOREFERENCED CAD FILE. FEATURES ARE APPROXIMATE.
3. SURVEY PERFORMED BY THE DTE SURVEY GROUP IN AUGUST 2015, MAY 2016 AND JANUARY 2017.

N

0 600 1,200 Feet

1 " = 600 '
1:7,200

PROJECT:
DTE ELECTRIC COMPANY
SIBLEY QUARRY LANDFILL
801 FORT STREET
TRENTON, MICHIGAN

TITLE:
MONITORING NETWORK AND SITE PLAN

DRAWN BY:	A. ADAIR	PROJ NO.:	553931.0002
CHECKED BY:	A. WHALEY		
APPROVED BY:	V. BUENING		**FIGURE 2**
DATE:	JANUARY 2025		

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FILE NO.: STATE_553931_0002_MN.mxd

Plot Date: 7/22/2024, 11:45:51 AM by AADAIR -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl (Foot)
Map Rotation: 0

LEGEND

- DECOMMISSIONED MONITORING WELL
- MONITORING WELLS
- SURFACE WATER SAMPLING LOCATION
- SIBLEY QUARRY PROPERTY LINE
- SOLID WASTE DISPOSAL AREA BOUNDARY
- 1 — FILL AREA DESIGNATION
- (439.08) — GROUNDWATER ELEVATION (FT NGVD 1929)
- POTENTIOMETRIC SURFACE CONTOUR (50-FT INTERVAL, DASHED WHERE INFERRED)
- INFERRED GROUNDWATER FLOW DIRECTION

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO. AND PARTNERS, (11/6/2022).
2. SITE LAYOUT INFORMATION FROM GEOREFERENCED CAD FILE. FEATURES ARE APPROXIMATE.
3. SURVEY PERFORMED BY THE DTE SURVEY GROUP IN AUGUST 2015, MAY 2016 AND JANUARY 2017.
4. GROUNDWATER ELEVATIONS DISPLAYED IN FEET RELATIVE TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.

N

0 600 1,200 Feet

1 " = 600 '
1:7,200

PROJECT: DTE ELECTRIC COMPANY
SIBLEY QUARRY LANDFILL
801 FORT STREET
TRENTON, MICHIGAN

TITLE: GROUNDWATER POTENTIOMETRIC SURFACE MAP
APRIL 2024

DRAWN BY:	A. ADAIR	PROJ NO.:	553931.0002
CHECKED BY:	A. WHALEY		
APPROVED BY:	V. BUENING		FIGURE 3
DATE:	January 2025		

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FILE NO.: STATE_553931_0103_GWP.mxd

LEGEND

- DECOMMISSIONED MONITORING WELL
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N

0 600 1,200 Feet

1 " = 600 '
1:7,200

PROJECT:
DTE ELECTRIC COMPANY
SIBLEY QUARRY LANDFILL
801 FORT STREET
TRENTON, MICHIGAN

TITLE:
GROUNDWATER POTENTIOMETRIC SURFACE MAP OCTOBER 2024

DRAWN BY:	A. ADAIR	PROJ NO.:	553931.0002
CHECKED BY:	A. WHALEY		
APPROVED BY:	V. BUENING		**FIGURE 4**
DATE:	JANUARY 2025		

TRC
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FILE NO.: STATE_553931_0103_GWP.mxd

Appendix A
Alternate Source Demonstration: 2023 Second Semiannual Detection Monitoring Sampling Event

1540 Eisenhower Pl.
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February 29, 2024

Jim Bakun
District Geologist
Materials Management Division
Michigan Department of Environment, Great Lakes, and Energy (EGLE)
27700 Donald Court
Warren, MI 48092-2793

Subject: Alternate Source Demonstration: 2023 Second Semiannual Detection Monitoring Sampling Event
Sibley Quarry Landfill Coal Combustion Residual Unit
801 Fort Street, Trenton, Michigan

Dear Mr. Bakun:

TRC was retained by DTE Electric Company (DTE Electric) to conduct routine groundwater monitoring activities for the uppermost aquifer at the Sibley Quarry Landfill (SQLF) coal combustion residual (CCR) unit, located in Trenton, Michigan. Routine groundwater monitoring at the SQLF CCR unit is conducted in accordance with the Michigan Department of Environment, Great Lakes, and Energy (EGLE)-approved *Hydrogeological Monitoring Plan for the DTE Electric Company Sibley Quarry Landfill, 801 Fort Street, Trenton, Michigan* (SQLF HMP) (TRC, November 5, 2019; Revised March 17, 2020) and the United States Environmental Protection Agency (USEPA) final rule for the regulation and management of CCR under the Resource Conservation and Recovery Act (RCRA) (the CCR Rule), as amended (USEPA, April 2015).

As discussed in the *Fourth Quarter 2023 Hydrogeological Monitoring and Performance Monitoring Report* (Fourth Quarter 2023 Report) (TRC, January 2024), the statistical evaluation of the October 2023 detection monitoring indicator parameters showed potential statistically significant increases (SSIs) over the prediction limit (PL) for chloride and sulfate at MW-107 (Table 1). Verification resampling for the October 2023 event was conducted on December 11, 2023 by TRC personnel. The verification results for chloride and sulfate at MW-107 were slightly above their respective prediction limits, confirming the initial potential SSIs from the October 2023 sampling event (Table 1).

In accordance with §257.94(e)(2) and the 2020 HMP, DTE Electric may demonstrate that a source other than the CCR unit caused the SSI or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. This Alternate Source Demonstration (ASD) has been prepared to address the SSIs identified in the October 2023 detection monitoring event and demonstrates that the chloride and sulfate SSIs are not due to a release of CCR leachate into the uppermost aquifer.

Background

The SQLF is located in Section 7, Township 4 South, Range 11 East, at 801 Fort Street in Trenton, Wayne County, Michigan. The site location is shown in Figure 1. The former limestone quarry began operations in the mid-1800s and was mined to over 300 feet below ground surface (ft bgs). Quarry dewatering activities were necessary to facilitate limestone mining. The groundwater elevation is currently maintained at a depth of approximately 300 feet below ground surface. In 1951, Detroit Edison (now DTE Electric) acquired the quarry for the purpose of CCR landfilling (TRC, January 2018).

The SQLF resides in an area characterized by near surface deposits of approximately 16.5 to 74.5 feet of glacio-lacustrine clay and silt units on top of thick strata of dolomite and limestone bedrock. Limestone bedrock strata underlaying the clay-rich soil extends to over 310 ft bgs and is considered the uppermost aquifer at the site (TRC, January 2018). The CCR detection monitoring well network for the SQLF currently consists of eight monitoring wells installed in the uppermost aquifer, details for which can be found in the Groundwater Monitoring System Summary Report – DTE Electric Sibley Quarry Coal Combustion Residual Landfill (TRC, October 2017). Monitoring well locations are shown in Figure 2.

Due to the dewatering of the quarry, at a rate of approximately 1.5 million gallons per day (MGD), groundwater levels are significantly lower within the bedrock monitoring wells that are closest to the quarry. The pumping creates an inward hydraulic gradient and prevents groundwater contact with the CCR material. All CCR monitoring network wells are therefore considered upgradient of the CCR disposal unit. Based on the site-specific hydrogeological conditions, the uppermost aquifer cannot be affected by CCR disposal operations. A current potentiometric map of the site is provided in Figure 3.

Alternate Source Demonstration

As discussed above, verification resampling was performed as recommended per the Stats Plan and the Unified Guidance to achieve performance standards as specified by §257.93(g) in the CCR Rule and the 2020 HMP. Per the Statistical Evaluation Plan, if there is an exceedance of a prediction limit for one or more of the parameters, the well(s) of concern will be resampled within 30 days of the completion of the initial statistical analysis. Only constituents that initially exceed their statistical limit (i.e., have no previously recorded SSIs) will be analyzed for verification purposes. As such, verification resampling was conducted on December 11, 2023, by TRC personnel, and groundwater samples were collected in accordance with the CCR Groundwater Monitoring and Quality Assurance Project Plan – DTE Electric Company Sibley Quarry Coal Ash Landfill (QAPP) (TRC, August 2016; Revised March 2017) and the 2020 HMP. A summary of the groundwater data collected during the verification resampling event is provided on Table 1.

The verification resampling confirmed the SSI exceedances for chloride and sulfate at MW-107 (Table 1). The following discussion presents the Alternative Source Demonstration (ASD) for the confirmed prediction limit exceedance for chloride and sulfate at MW-107. As mentioned above, continuous quarry dewatering activities that hydraulically control groundwater levels in the SQLF and maintain significant inward gradients toward the SQLF demonstrate that Appendix III concentrations in groundwater are from an off-site source other than the SQLF CCR unit. Prior to and during CCR landfilling operations, which began at the Sibley Quarry in 1951, dewatering has occurred via a sump in

the bottom of the 300-foot-deep excavation. The groundwater discharge rate is kept at approximately 1.5 MGD to maintain the water level at the bottom of the quarry at approximately 300 ft bgs. Dewatering operations will continue, ensuring that no direct contact between the groundwater and the CCR waste occurs, and that an inward hydraulic gradient will be maintained, preventing any release of CCR constituents. As a result of dewatering activities, the groundwater monitoring wells are all upgradient and therefore changes in groundwater constituent concentrations are derived from natural conditions within the aquifer and/or other off-site anthropogenic sources. Additional supporting lines of evidence specific to the SSIs are presented below.

Chloride and Sulfate at MW-107: The SSI of chloride and sulfate in the groundwater at MW-107, shown graphically as data points greater than the prediction limit in Figure 4 and Figure 5, respectively, is the result of natural variability in the groundwater quality and/or from an off-site source and not the release of CCR constituents from the SQLF CCR unit. Multiple lines of evidence are provided in support of this conclusion and are as follows:

- **Laboratory precision and accuracy**–The laboratory-reported chloride and sulfate concentrations for the MW-107 groundwater samples collected during the second semiannual 2023 sampling event (October 2023 original sample and the December 2023 confirmation sample) are slightly higher than the PL. However:
  - Chloride: The laboratory precision and accuracy range for chloride is +/- 20%. The October (24,000 milligrams per liter (mg/L)) and December (23,000 mg/L) 2023 groundwater samples had chloride detected at concentrations that were only slightly above the MW-16-01 PL of 21,000 mg/L. As such, the PL for each of these samples is within the margin of error of the laboratory results.
  - Sulfate: The laboratory precision and accuracy range for sulfate is +/- 20%. The December 2023 groundwater sample (3,800 mg/L) had sulfate detected at a concentration that was only slightly above the MW-16-01 PL of 3,700 mg/L. As such, the PL for the December 2023 confirmation sample is within the margin of error of the laboratory results.
- **Dominant groundwater type** – Groundwater at the SQLF is from a fractured limestone and dolomite formation underlain by a sulfate and chloride-rich groundwater within a sandstone formation. This is apparent in the background monitoring data for the monitoring wells at the SQLF that show:
  - Sulfate: Sulfate concentrations in background reportedly range from 540 mg/L to 3,800 mg/L. The SSI concentration of sulfate measured in MW-107 during the October detection monitoring event is reported as 5,200 mg/L, and the December 2023 verification resample is reported as 3,800 mg/L. The sulfate concentration for the verification resample event for MW-107 is within the range of background variation at the SQLF.
- **Off-site anthropogenic sources** – The SQLF has groundwater pumped at approximately 1.5 MGD drawing groundwater from off-site onto the SQLF CCR unit as shown on Figure 3, including from the north into the area of MW-107. Sibley Road to the north of the SQLF CCR unit, and immediately north of MW-107, is a major east-west road that has had road salt applied to it for many decades in the winter to melt ice and snow. Road salt is a significant source of chloride, and sulfate is often present as an impurity in road salt. The off-site operations and maintenance activities have the potential to contribute anthropogenic sources of chloride and sulfate to groundwater that is not from the SQLF CCR unit operations.

- **Insufficient background sampling timeline to account for long-term trends** – Variability in chloride and sulfate concentrations observed in the groundwater at SQLF during the background sampling events provides evidence of the heterogeneity of this constituent in groundwater. Although background concentrations have been updated in 2021 to account for additional temporal variation since the onset of monitoring in 2016, the background dataset still represents a relatively short timeframe considering that the potential horizontal groundwater flow rate towards the quarry ranges from approximately 4.7 feet/day (~1,700 feet/year) to 7.0 feet/day (~2,600 feet/year) for the uppermost aquifer at SQLF (TRC, October 2017; Revised October 2019). Due to this inward hydraulic gradient, groundwater from off-site replaces the groundwater on-site in a relatively short timeframe and background groundwater conditions can change significantly due to potential for off-site influences that are unrelated to on-site activities. The relatively short duration of the background sampling events limit the ability of the statistical analysis to capture the temporal variability and/or influences from other off-site anthropogenic sources in the groundwater quality at the SQLF, as can be seen in the time-series plots on Figures 4 and 5 for chloride and sulfate concentrations, respectively, at MW-107.
- **Lack of similar increase in other indicator parameters** – The lack of SSIs across the other wells within the monitoring well network during this event also supports a source other than CCR for the observed chloride and sulfate SSIs at MW-107.

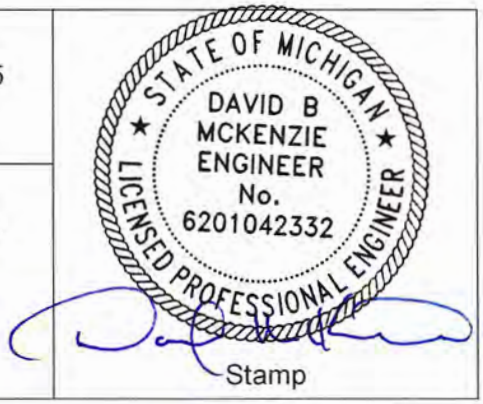
Conclusions and Recommendations

The information provided in this report serves as the ASD for the DTE Electric SQLF; this ASD was prepared in accordance with 40 CFR 257.94(e)(2) of the CCR Rule and the 2020 HMP and demonstrates that the chloride and sulfate SSIs determined based on the October 2023 detection monitoring event are due to the natural variability of background groundwater quality within the uppermost aquifer and/or from off-site anthropogenic sources drawn on-site due to the continuous dewatering. Therefore, based on the information provided in this ASD, DTE Electric will continue detection monitoring as per 40 CFR 257.94 at the SQLF CCR unit.

Signatures and Certifications

Engineer Certification Statement

I hereby certify that the alternative source demonstration presented within this document for the SQLF CCR unit has been prepared to meet the requirements of Title 40 CFR §257.94(e)(2) of the Federal CCR Rule and the March 2020 *Hydrogeological Monitoring Plan for the DTE Electric Company Sibley Quarry Landfill* (2020 HMP). This document is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of Title 40 CFR §257.94(e)(2) and the 2020 HMP.

Name: David B. McKenzie, P.E.	Expiration Date: December 17, 2025	 Stamp
Company: TRC Engineers Michigan, Inc.	Date: February 29, 2024	

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

Sincerely,

TRC

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

Sarah B. Holmstrom, P.G
Senior Hydrogeologist

Attachments

Table 1 Comparison of Verification Sampling Results to Background Limits

Figure 1 Site Location Map
Figure 2 Monitoring Network and Site Plan
Figure 3 Groundwater Potentiometric Surface Map – October 2023
Figure 4 MW-107 Chloride Time Series Plot
Figure 5 MW-107 Sulfate Time Series Plot

Appendix A References

cc: Christopher P. Scieszka, DTE Electric Company

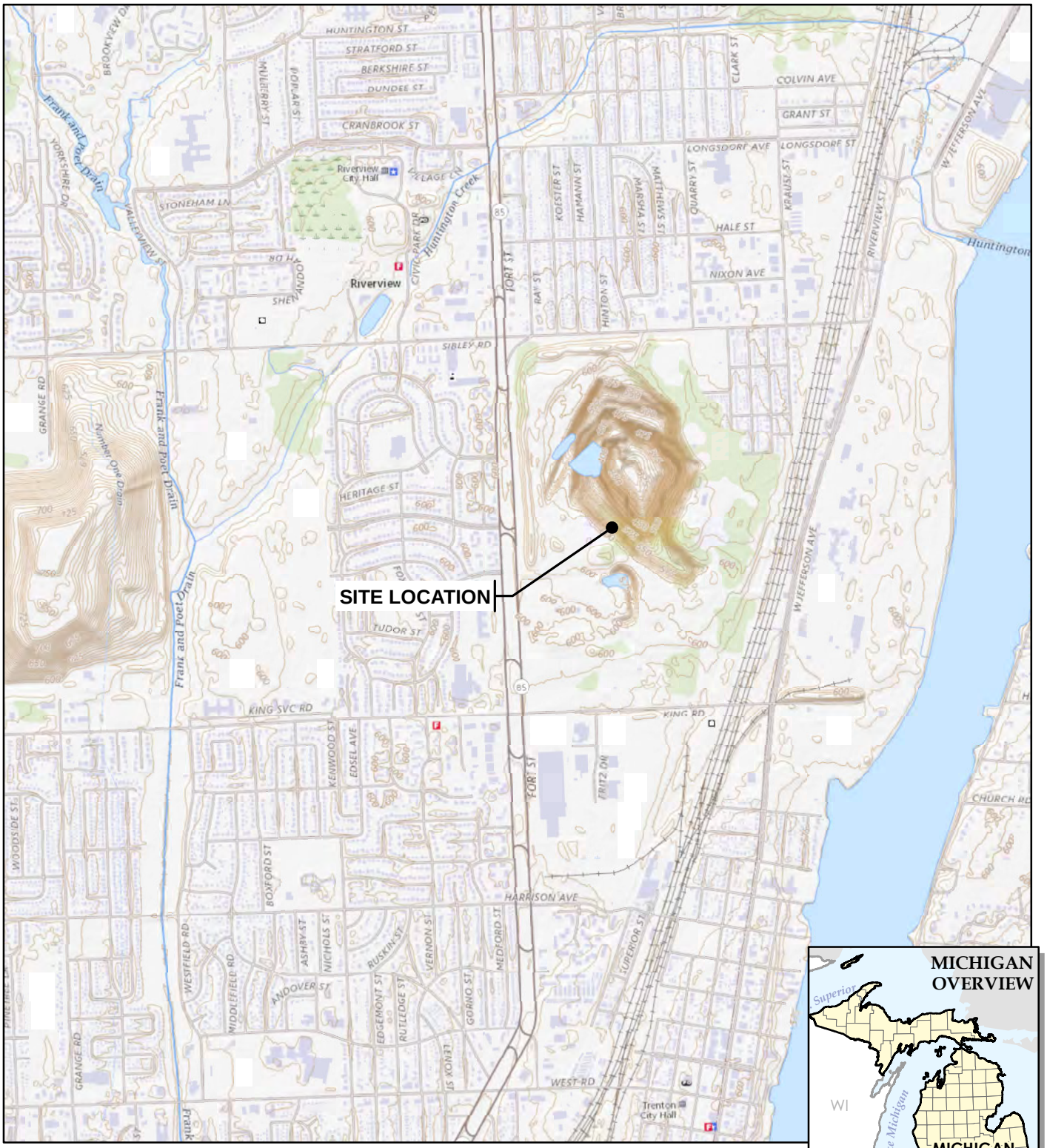
Table

Table 1
Comparison of Detection Monitoring Parameter Results to Background Limits – October and December 2023
Sibley Quarry Landfill – RCRA CCR Monitoring Program
Trenton, Michigan

Sample Location:		MW-101		MW-102		MW-103		MW-104		MW-105		MW-106		MW-107			MW-108A	
Sample Date:		10/17/2023	PL	10/17/2023	PL	10/18/2023	PL	10/18/2023	PL	10/17/2023	PL	10/18/2023	PL	10/17/2023	12/11/2023 [1]	PL	10/18/2023	PL
Constituent	Unit	Data		Data		Data		Data		Data		Data		Data	Data		Data	
Appendix III																		
Boron	ug/L	**340**[2]	320	140	150	750	820	790	950	2,500	2,600	730	2,400	1,500	--	1,600	1,300	1,400
Calcium	ug/L	210,000	260,000	260,000	300,000	560,000	630,000	460,000	520,000	690,000	790,000	540,000	640,000	1,400,000	--	1,500,000	400,000	460,000
Chloride	mg/L	220	220	180	260	140	160	220	690	3,600	4,500	100	180	**24,000**	**23,000**	21,000	1,700	2,100
Fluoride	mg/L	1.8	2.0	1.6	1.8	1.7	2.0	1.7	2.3	1.2	5.8	1.6	3.0	< 5	--	2.5	1.0	2.5
pH, Field	su	7.1	6.8 - 7.8	6.9	6.5 - 7.6	6.8	6.7 - 7.6	7.0	6.8 - 7.9	6.8	6.6 - 7.9	6.9	6.5 - 7.6	6.8	6.8	6.5 - 7.6	6.9	7.0 - 7.0
Sulfate	mg/L	500	700	600	720	1,800	2,100	1,800	1,900	2,200	2,200	1,900	2,100	**5,200**	**3,800**	3,700	1,100	1,200
Total Dissolved Solids	mg/L	1,400	1,400	1,500	1,700	3,100	3,600	2,700	3,700	7,700	9,400	3,000	3,200	31,000	--	39,000	4,100	4,900
Part 115 Parameters																		
Iron	ug/L	690	n<8	850	n<8	48	n<8	170	n<8	2,300	n<8	2,000	n<8	1,300	1,300	n<8	610	n<8

Notes:
ug/L - micrograms per liter.
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
All metals were analyzed as total unless otherwise specified.
-- Not Analyzed
Bold font indicates an exceedance of the Prediction Limit (PL).
[1] - Results shown for verification sampling performed on 12/11/2023.
[2] - Exceedance determined to be from an alternate source in the First 2019 Semiannual alternate source demonstration dated 8/8/2019.
RESULT Shading and bold font indicates a confirmed exceedance of the Prediction Limit (PL).

Figures



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

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

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FEET

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PROJECT:
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SIBLEY QUARRY LANDFILL
801 FORT STREET
TRENTON, MICHIGAN

TITLE:
SITE LOCATION MAP

DRAWN BY:	A. ADAIR
CHECKED BY:	A. WHALEY
APPROVED BY:	V. BUENING
DATE:	JANUARY 2024
PROJ. NO.:	518728.0002
FILE:	FEDERAL_518728_2002_01_SLM.mxd

FIGURE 1

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Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet (Foot US)
Map Rotation: 0
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Path: T:\1-PROJECTS\CCR\413591_Sibley_Quarry_Landfill\2-APRX\STATE_518728_2002_MN.mxd

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- 1 FILL AREA DESIGNATION

NOTES

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N

0 600 1,200 Feet

1 " = 600 '
1:7,200

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DTE ELECTRIC COMPANY
SIBLEY QUARRY LANDFILL
801 FORT STREET
TRENTON, MICHIGAN

TITLE:
MONITORING NETWORK AND SITE PLAN

DRAWN BY:	A. ADAIR	PROJ NO.:	518728.0002
CHECKED BY:	A. WHALEY		
APPROVED BY:	V. BUENING		**FIGURE 2**
DATE:	JANUARY 2024		

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FILE NO.: STATE_518728_2002_MN.mxd

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1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO. AND PARTNERS, (11/6/2022).
2. SITE LAYOUT INFORMATION FROM GEOREFERENCED CAD FILE. FEATURES ARE APPROXIMATE.
3. SURVEY PERFORMED BY THE DTE SURVEY GROUP IN AUGUST 2015, MAY 2016 AND JANUARY 2017.
4. GROUNDWATER ELEVATIONS DISPLAYED IN FEET RELATIVE TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.

N

0 600 1,200 Feet

1 " = 600 '
1:7,200

PROJECT:
DTE ELECTRIC COMPANY
SIBLEY QUARRY LANDFILL
801 FORT STREET
TRENTON, MICHIGAN

TITLE:
GROUNDWATER POTENTIOMETRIC SURFACE MAP OCTOBER 2023

DRAWN BY:	A. ADAIR	PROJ NO.:	518728.0002
CHECKED BY:	A. WHALEY		
APPROVED BY:	V. BUENING		**FIGURE 3**
DATE:	JANUARY 2024		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108-3284
Phone: 734.971.7080
www.trccompanies.com

FILE NO.: STATE_518728_2003_GWP.mxd

Plot Date: 12/22/2023, 09:08:44 AM by AADAIR -- LAYOUT: ANSI B (11"x17")
Path: T:\1-PROJECTS\CCR\413591_Sibley_Quarry_Landfill\2-APRX\STATE_518728_2003_GWP.mxd
Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl (Foot)
Map Rotation: 0

FIGURE 4
MW-107 CHLORIDE TIME SERIES PLOT

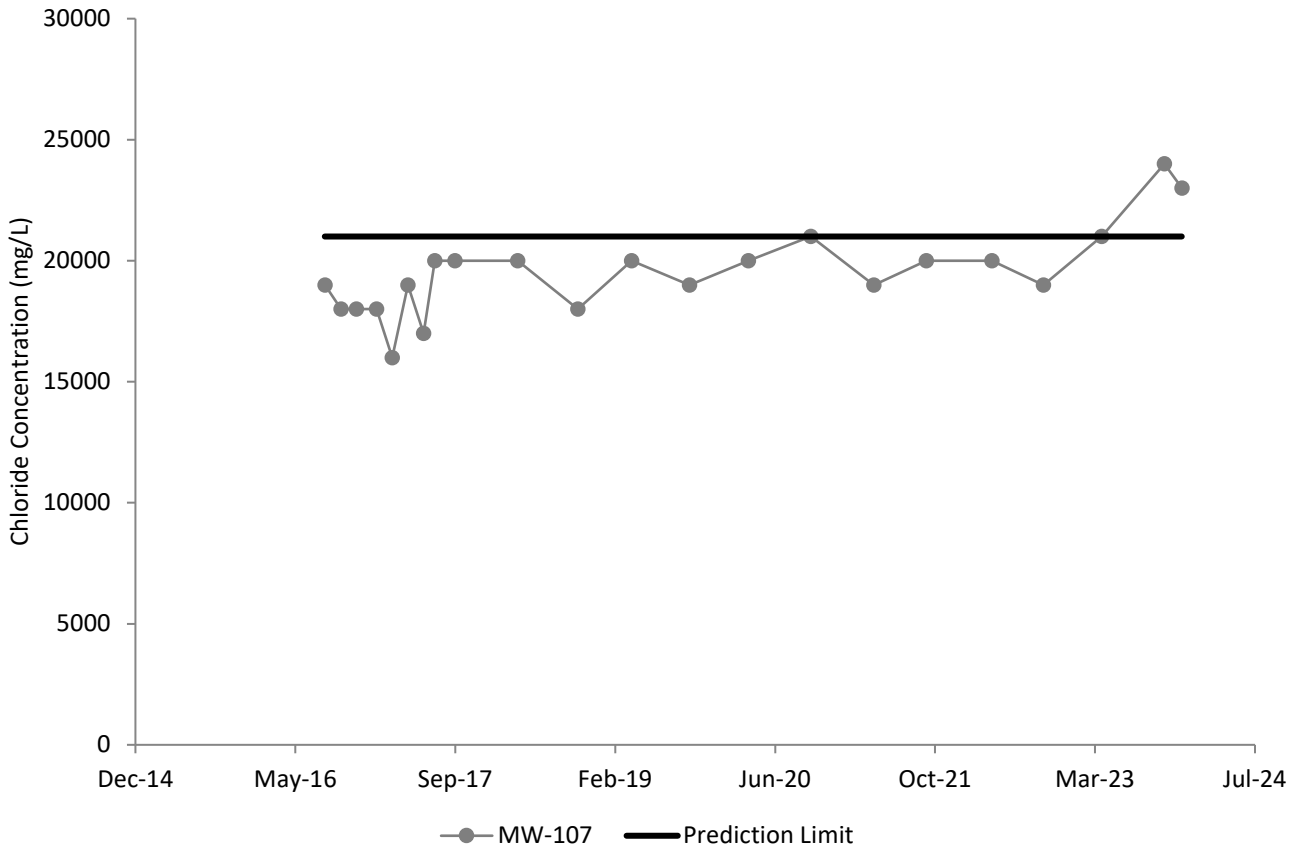
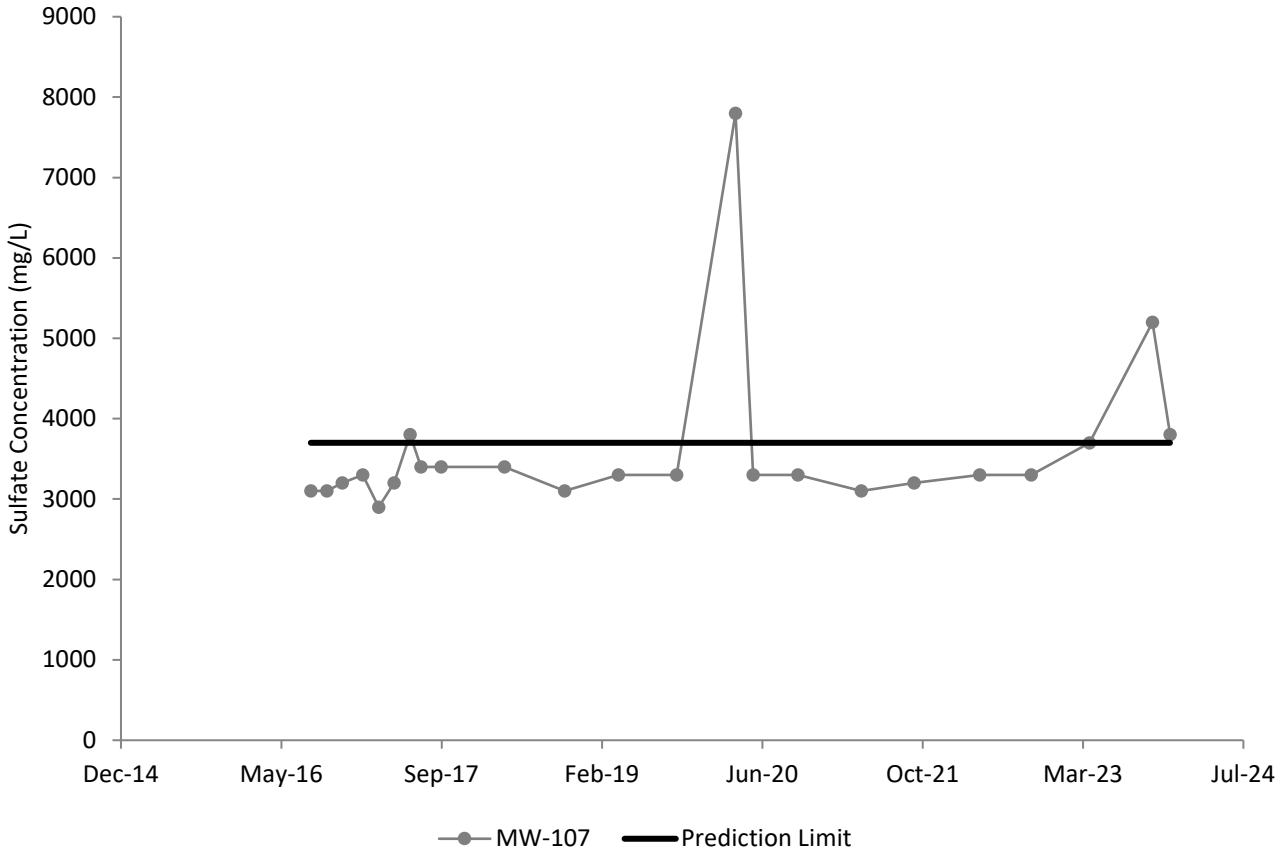


FIGURE 5
MW-107 SULFATE TIME SERIES PLOT



Appendix A
References

References

TRC. August 2016; Revised March 2017 and October 2019. CCR Groundwater Monitoring and Quality Assurance Project Plan – DTE Electric Company Sibley Quarry Coal Ash Landfill, 801 Fort Street, Trenton, Michigan. Prepared for DTE Electric Company.

TRC. October 2017, Revised October 2019. Groundwater Monitoring System Summary Report, DTE Electric Company, Sibley Quarry Coal Combustion Landfill, 801 Fort Street, Trenton, Michigan.

TRC. October 2017, Revised October 2019 and November 2019. Groundwater Statistical Evaluation Plan – Coal Combustion Residual Landfill, 801 Fort Street, Trenton, Michigan. Prepared for DTE Electric Company.

TRC. August 8, 2019. Alternate Source Demonstration: 2019 First Semiannual Detection Monitoring Sampling Event Sibley Quarry Coal Combustion Residual Landfill, Trenton, Michigan. Prepared for DTE Electric Company.TRC.

TRC. November 2019, Revised March 2020. Hydrogeological Monitoring Plan for the DTE Electric Company Sibley Quarry Landfill,801 Fort Street, Trenton, Michigan. Prepared for DTE Electric Company.

TRC. December 15, 2021. Prediction Limit Update – DTE Electric Company, Sibley Quarry Landfill, Coal Combustion Residual Unit. Prepared for DTE Electric Company

TRC. January 2024. Fourth Quarter 2023 Hydrogeologic Monitoring and Performance Monitoring Report. Prepared for DTE Electric Company.

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

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

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

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

Appendix B
Laboratory Analytical and Field Data

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/20/2024 12:30:09 PM

JOB DESCRIPTION

CCR DTE Sibley Quarry

JOB NUMBER

240-202632-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

Job Notes

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

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

Authorization

Generated
4/20/2024 12:30:09 PM

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

Table of Contents

Definitions/Glossary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Qualifiers

Metals

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

General Chemistry

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

Glossary

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

Job ID: 240-202632-1 Eurofins Cleveland

Job Narrative
240-202632-1

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

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

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

Receipt
The samples were received on 4/11/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C.

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

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

Method Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

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

Protocol References:

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

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

Laboratory References:

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

Sample Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-202632-1	MW-101	Water	04/08/24 10:50	04/11/24 08:00
240-202632-2	MW-102	Water	04/08/24 12:05	04/11/24 08:00
240-202632-3	MW-103	Water	04/08/24 13:38	04/11/24 08:00
240-202632-4	MW-104	Water	04/09/24 10:17	04/11/24 08:00
240-202632-5	MW-105	Water	04/08/24 09:44	04/11/24 08:00
240-202632-6	MW-106	Water	04/08/24 14:22	04/11/24 08:00
240-202632-7	MW-107	Water	04/08/24 12:55	04/11/24 08:00
240-202632-8	MW-108A	Water	04/09/24 08:30	04/11/24 08:00
240-202632-9	QUARRY SUMP	Water	04/09/24 09:10	04/11/24 08:00
240-202632-10	QUARRY DISCHARGE	Water	04/09/24 09:40	04/11/24 08:00
240-202632-11	DUP-01	Water	04/08/24 00:00	04/11/24 08:00

Detection Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-101 — Lab Sample ID: 240-202632-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	320		100		ug/L	1		6010D	Total Recoverable
Calcium	220000		1000		ug/L	1		6020B	Total Recoverable
Iron	110		100		ug/L	1		6020B	Total Recoverable
Chloride	290		10		mg/L	10		9056A	Total/NA
Fluoride	1.8		0.050		mg/L	1		9056A	Total/NA
Sulfate	540		10		mg/L	10		9056A	Total/NA
Total Dissolved Solids	1400		20		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-102 — Lab Sample ID: 240-202632-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	120		100		ug/L	1		6010D	Total Recoverable
Calcium	250000		1000		ug/L	1		6020B	Total Recoverable
Iron	360		100		ug/L	1		6020B	Total Recoverable
Chloride	200		1.0		mg/L	1		9056A	Total/NA
Fluoride	1.5		0.050		mg/L	1		9056A	Total/NA
Sulfate	490		10		mg/L	10		9056A	Total/NA
Total Dissolved Solids	1300		20		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-103 — Lab Sample ID: 240-202632-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	650		100		ug/L	1		6010D	Total Recoverable
Calcium	610000		1000		ug/L	1		6020B	Total Recoverable
Chloride	150		2.0		mg/L	2		9056A	Total/NA
Fluoride	1.7		0.10		mg/L	2		9056A	Total/NA
Sulfate	1900		20		mg/L	20		9056A	Total/NA
Total Dissolved Solids	3100		40		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-104 — Lab Sample ID: 240-202632-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	630		100		ug/L	1		6010D	Total Recoverable
Calcium	500000		1000		ug/L	1		6020B	Total Recoverable
Iron	110		100		ug/L	1		6020B	Total Recoverable
Chloride	220		2.0		mg/L	2		9056A	Total/NA
Fluoride	1.6		0.10		mg/L	2		9056A	Total/NA
Sulfate	1600		20		mg/L	20		9056A	Total/NA
Total Dissolved Solids	2900		40		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-105 — Lab Sample ID: 240-202632-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100		ug/L	1		6010D	Total Recoverable

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-105 (Continued) — Lab Sample ID: 240-202632-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Calcium	720000		1000		ug/L	1		6020B	Total Recoverable
Iron	1900		100		ug/L	1		6020B	Total Recoverable
Chloride	3100		50		mg/L	50		9056A	Total/NA
Fluoride	0.95		0.25		mg/L	5		9056A	Total/NA
Sulfate	1900		50		mg/L	50		9056A	Total/NA
Total Dissolved Solids	6900		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-106 — Lab Sample ID: 240-202632-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	610		100		ug/L	1		6010D	Total Recoverable
Calcium	610000		1000		ug/L	1		6020B	Total Recoverable
Iron	1000		100		ug/L	1		6020B	Total Recoverable
Chloride	110		2.0		mg/L	2		9056A	Total/NA
Fluoride	1.6		0.10		mg/L	2		9056A	Total/NA
Sulfate	1900		20		mg/L	20		9056A	Total/NA
Total Dissolved Solids	3000		20		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-107 — Lab Sample ID: 240-202632-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	1300		100		ug/L	1		6010D	Total Recoverable
Calcium	1400000		10000		ug/L	10		6020B	Total Recoverable
Iron	570		100		ug/L	1		6020B	Total Recoverable
Chloride	19000		250		mg/L	250		9056A	Total/NA
Fluoride	1.6		1.3		mg/L	25		9056A	Total/NA
Sulfate	3300		25		mg/L	25		9056A	Total/NA
Total Dissolved Solids	35000		1000		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-108A — Lab Sample ID: 240-202632-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100		ug/L	1		6010D	Total Recoverable
Calcium	440000		1000		ug/L	1		6020B	Total Recoverable
Iron	670		100		ug/L	1		6020B	Total Recoverable
Chloride	1600		25		mg/L	25		9056A	Total/NA
Fluoride	0.90		0.25		mg/L	5		9056A	Total/NA
Sulfate	1100		25		mg/L	25		9056A	Total/NA
Total Dissolved Solids	4000		50		mg/L	1		SM 2540C	Total/NA

Client Sample ID: QUARRY SUMP — Lab Sample ID: 240-202632-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	2400		100		ug/L	1		6010D	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample ID: QUARRY SUMP (Continued) — Lab Sample ID: 240-202632-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Calcium	770000		1000		ug/L	1		6020B	Total Recoverable
Iron	350		100		ug/L	1		6020B	Total Recoverable
Chloride	3500		50		mg/L	50		9056A	Total/NA
Fluoride	1.3		0.25		mg/L	5		9056A	Total/NA
Sulfate	2000		50		mg/L	50		9056A	Total/NA
Total Dissolved Solids	7400		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: QUARRY DISCHARGE — Lab Sample ID: 240-202632-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	2300		100		ug/L	1		6010D	Total Recoverable
Calcium	780000		1000		ug/L	1		6020B	Total Recoverable
Iron	310		100		ug/L	1		6020B	Total Recoverable
Chloride	3800		50		mg/L	50		9056A	Total/NA
Fluoride	1.3		0.25		mg/L	5		9056A	Total/NA
Sulfate	2200		50		mg/L	50		9056A	Total/NA
Total Dissolved Solids	8100		100		mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-202632-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	1800		100		ug/L	1		6010D	Total Recoverable
Calcium	690000		1000		ug/L	1		6020B	Total Recoverable
Iron	1800		100		ug/L	1		6020B	Total Recoverable
Chloride	3100		50		mg/L	50		9056A	Total/NA
Fluoride	0.93		0.25		mg/L	5		9056A	Total/NA
Sulfate	1900		50		mg/L	50		9056A	Total/NA
Total Dissolved Solids	6800		100		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-101

Date Collected: 04/08/24 10:50
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	320		100		ug/L		04/11/24 14:00	04/12/24 18:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	220000		1000		ug/L		04/11/24 14:00	04/12/24 20:11	1
Iron	110		100		ug/L		04/11/24 14:00	04/12/24 20:11	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	290		10		mg/L			04/16/24 03:31	10
Fluoride (SW846 9056A)	1.8		0.050		mg/L			04/16/24 03:10	1
Sulfate (SW846 9056A)	540		10		mg/L			04/16/24 03:31	10
Total Dissolved Solids (SM 2540C)	1400		20		mg/L			04/12/24 09:36	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-102

Date Collected: 04/08/24 12:05
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	120		100		ug/L		04/11/24 14:00	04/12/24 18:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	250000		1000		ug/L		04/11/24 14:00	04/12/24 20:34	1
Iron	360		100		ug/L		04/11/24 14:00	04/12/24 20:34	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	200		1.0		mg/L			04/16/24 03:53	1
Fluoride (SW846 9056A)	1.5		0.050		mg/L			04/16/24 03:53	1
Sulfate (SW846 9056A)	490		10		mg/L			04/16/24 04:15	10
Total Dissolved Solids (SM 2540C)	1300		20		mg/L			04/12/24 09:36	1

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-103

Date Collected: 04/08/24 13:38
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-3

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	**650**		100		ug/L		04/11/24 14:00	04/12/24 18:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**610000**		1000		ug/L		04/11/24 14:00	04/12/24 20:38	1
Iron	100	U	100		ug/L		04/11/24 14:00	04/12/24 20:38	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	**150**		2.0		mg/L			04/16/24 11:51	2
Fluoride (SW846 9056A)	**1.7**		0.10		mg/L			04/16/24 11:51	2
Sulfate (SW846 9056A)	**1900**		20		mg/L			04/16/24 12:13	20
Total Dissolved Solids (SM 2540C)	**3100**		40		mg/L			04/12/24 09:32	1

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-104

Date Collected: 04/09/24 10:17
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-4

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	630		100		ug/L		04/11/24 14:00	04/12/24 19:05	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	500000		1000		ug/L		04/11/24 14:00	04/12/24 20:43	1
Iron	110		100		ug/L		04/11/24 14:00	04/12/24 20:43	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	220		2.0		mg/L			04/16/24 12:35	2
Fluoride (SW846 9056A)	1.6		0.10		mg/L			04/16/24 12:35	2
Sulfate (SW846 9056A)	1600		20		mg/L			04/16/24 12:56	20
Total Dissolved Solids (SM 2540C)	2900		40		mg/L			04/12/24 09:32	1

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-105

Date Collected: 04/08/24 09:44
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-5

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100		ug/L		04/11/24 14:00	04/12/24 19:09	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	720000		1000		ug/L		04/11/24 14:00	04/12/24 20:56	1
Iron	1900		100		ug/L		04/11/24 14:00	04/12/24 20:56	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	3100		50		mg/L			04/16/24 13:40	50
Fluoride (SW846 9056A)	0.95		0.25		mg/L			04/16/24 13:18	5
Sulfate (SW846 9056A)	1900		50		mg/L			04/16/24 13:40	50
Total Dissolved Solids (SM 2540C)	6900		100		mg/L			04/12/24 09:32	1

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-106

Date Collected: 04/08/24 14:22
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-6

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	610		100		ug/L		04/11/24 14:00	04/12/24 19:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	610000		1000		ug/L		04/11/24 14:00	04/12/24 21:01	1
Iron	1000		100		ug/L		04/11/24 14:00	04/12/24 21:01	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	110		2.0		mg/L			04/16/24 14:45	2
Fluoride (SW846 9056A)	1.6		0.10		mg/L			04/16/24 14:45	2
Sulfate (SW846 9056A)	1900		20		mg/L			04/16/24 15:07	20
Total Dissolved Solids (SM 2540C)	3000		20		mg/L			04/12/24 09:32	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-107

Date Collected: 04/08/24 12:55
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-7

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	1300		100		ug/L		04/11/24 14:00	04/12/24 19:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1400000		10000		ug/L		04/11/24 14:00	04/15/24 13:17	10
Iron	570		100		ug/L		04/11/24 14:00	04/12/24 21:06	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	19000		250		mg/L			04/16/24 15:50	250
Fluoride (SW846 9056A)	1.6		1.3		mg/L			04/16/24 15:28	25
Sulfate (SW846 9056A)	3300		25		mg/L			04/16/24 15:28	25
Total Dissolved Solids (SM 2540C)	35000		1000		mg/L			04/12/24 09:32	1

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-108A

Date Collected: 04/09/24 08:30
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-8

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	1100		100		ug/L		04/11/24 14:00	04/12/24 19:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	440000		1000		ug/L		04/11/24 14:00	04/12/24 21:10	1
Iron	670		100		ug/L		04/11/24 14:00	04/12/24 21:10	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	1600		25		mg/L			04/16/24 21:38	25
Fluoride (SW846 9056A)	0.90		0.25		mg/L			04/16/24 21:16	5
Sulfate (SW846 9056A)	1100		25		mg/L			04/16/24 21:38	25
Total Dissolved Solids (SM 2540C)	4000		50		mg/L			04/12/24 09:32	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: QUARRY SUMP

Lab Sample ID: 240-202632-9

Date Collected: 04/09/24 09:10

Matrix: Water

Date Received: 04/11/24 08:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	2400		100		ug/L		04/11/24 14:00	04/12/24 19:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	770000		1000		ug/L		04/11/24 14:00	04/12/24 21:15	1
Iron	350		100		ug/L		04/11/24 14:00	04/12/24 21:15	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	3500		50		mg/L			04/16/24 22:21	50
Fluoride (SW846 9056A)	1.3		0.25		mg/L			04/16/24 21:59	5
Sulfate (SW846 9056A)	2000		50		mg/L			04/16/24 22:21	50
Total Dissolved Solids (SM 2540C)	7400		100		mg/L			04/12/24 09:32	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: QUARRY DISCHARGE

Lab Sample ID: 240-202632-10

Date Collected: 04/09/24 09:40
Date Received: 04/11/24 08:00

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	2300		100		ug/L		04/11/24 14:00	04/12/24 19:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	780000		1000		ug/L		04/11/24 14:00	04/12/24 21:19	1
Iron	310		100		ug/L		04/11/24 14:00	04/12/24 21:19	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	3800		50		mg/L			04/16/24 23:48	50
Fluoride (SW846 9056A)	1.3		0.25		mg/L			04/16/24 23:26	5
Sulfate (SW846 9056A)	2200		50		mg/L			04/16/24 23:48	50
Total Dissolved Solids (SM 2540C)	8100		100		mg/L			04/12/24 09:32	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: DUP-01

Date Collected: 04/08/24 00:00
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-11

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	1800		100		ug/L		04/11/24 14:00	04/12/24 19:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	690000		1000		ug/L		04/11/24 14:00	04/12/24 21:24	1
Iron	1800		100		ug/L		04/11/24 14:00	04/12/24 21:24	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	3100		50		mg/L			04/17/24 00:31	50
Fluoride (SW846 9056A)	0.93		0.25		mg/L			04/17/24 00:10	5
Sulfate (SW846 9056A)	1900		50		mg/L			04/17/24 00:31	50
Total Dissolved Solids (SM 2540C)	6800		100		mg/L			04/12/24 09:32	1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-609310/1-A
Matrix: Water
Analysis Batch: 609434

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 609310

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100		ug/L		04/11/24 14:00	04/12/24 18:19	1

Lab Sample ID: LCS 240-609310/2-A
Matrix: Water
Analysis Batch: 609434

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 609310

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1000	1010		ug/L		101	80 - 120		

Lab Sample ID: 240-202632-1 MS
Matrix: Water
Analysis Batch: 609434

Client Sample ID: MW-101
Prep Type: Total Recoverable
Prep Batch: 609310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	320		1000	1310		ug/L		99	75 - 125		

Lab Sample ID: 240-202632-1 MSD
Matrix: Water
Analysis Batch: 609434

Client Sample ID: MW-101
Prep Type: Total Recoverable
Prep Batch: 609310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	320		1000	1290		ug/L		97	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-609310/1-A
Matrix: Water
Analysis Batch: 609546

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 609310

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000		ug/L		04/11/24 14:00	04/12/24 20:02	1
Iron	100	U	100		ug/L		04/11/24 14:00	04/12/24 20:02	1

Lab Sample ID: LCS 240-609310/3-A
Matrix: Water
Analysis Batch: 609546

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 609310

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			25000	24000		ug/L		96	80 - 120		
Iron			5000	5130		ug/L		103	80 - 120		

Lab Sample ID: 240-202632-1 MS
Matrix: Water
Analysis Batch: 609546

Client Sample ID: MW-101
Prep Type: Total Recoverable
Prep Batch: 609310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	220000		25000	241000	4	ug/L		70	80 - 120		
Iron	110		5000	5210		ug/L		102	80 - 120		

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

Lab Sample ID: 240-202632-1 MSD
Matrix: Water
Analysis Batch: 609546

Client Sample ID: MW-101
Prep Type: Total Recoverable
Prep Batch: 609310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	220000		25000	244000	4	ug/L		82	80 - 120	1	20
Iron	110		5000	5260		ug/L		103	80 - 120	1	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-609665/3
Matrix: Water
Analysis Batch: 609665

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0		mg/L			04/15/24 13:46	1
Fluoride	0.050	U	0.050		mg/L			04/15/24 13:46	1
Sulfate	1.0	U	1.0		mg/L			04/15/24 13:46	1

Lab Sample ID: LCS 240-609665/4
Matrix: Water
Analysis Batch: 609665

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.2		mg/L		100	90 - 110		
Fluoride			2.50	2.63		mg/L		105	90 - 110		
Sulfate			50.0	51.6		mg/L		103	90 - 110		

Lab Sample ID: MB 240-609688/3
Matrix: Water
Analysis Batch: 609688

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0		mg/L			04/16/24 06:03	1
Fluoride	0.050	U	0.050		mg/L			04/16/24 06:03	1
Sulfate	1.0	U	1.0		mg/L			04/16/24 06:03	1

Lab Sample ID: LCS 240-609688/4
Matrix: Water
Analysis Batch: 609688

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.3		mg/L		101	90 - 110		
Fluoride			2.50	2.59		mg/L		103	90 - 110		
Sulfate			50.0	51.5		mg/L		103	90 - 110		

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

Lab Sample ID: MB 240-609397/1
Matrix: Water
Analysis Batch: 609397

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10		mg/L			04/12/24 09:32	1

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

Lab Sample ID: LCS 240-609397/2
Matrix: Water
Analysis Batch: 609397

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			495	483		mg/L		98	80 - 120		

Lab Sample ID: 240-202632-6 DU
Matrix: Water
Analysis Batch: 609397

Client Sample ID: MW-106
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	3000			2990		mg/L				1	20

Lab Sample ID: MB 240-609399/1
Matrix: Water
Analysis Batch: 609399

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10		mg/L			04/12/24 09:36	1

Lab Sample ID: LCS 240-609399/2
Matrix: Water
Analysis Batch: 609399

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			495	475		mg/L		96	80 - 120		

Metals

Prep Batch: 609310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202632-1	MW-101	Total Recoverable	Water	3005A	
240-202632-2	MW-102	Total Recoverable	Water	3005A	
240-202632-3	MW-103	Total Recoverable	Water	3005A	
240-202632-4	MW-104	Total Recoverable	Water	3005A	
240-202632-5	MW-105	Total Recoverable	Water	3005A	
240-202632-6	MW-106	Total Recoverable	Water	3005A	
240-202632-7	MW-107	Total Recoverable	Water	3005A	
240-202632-8	MW-108A	Total Recoverable	Water	3005A	
240-202632-9	QUARRY SUMP	Total Recoverable	Water	3005A	
240-202632-10	QUARRY DISCHARGE	Total Recoverable	Water	3005A	
240-202632-11	DUP-01	Total Recoverable	Water	3005A	
MB 240-609310/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-609310/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-609310/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-202632-1 MS	MW-101	Total Recoverable	Water	3005A	
240-202632-1 MS	MW-101	Total Recoverable	Water	3005A	
240-202632-1 MSD	MW-101	Total Recoverable	Water	3005A	
240-202632-1 MSD	MW-101	Total Recoverable	Water	3005A	

Analysis Batch: 609434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202632-1	MW-101	Total Recoverable	Water	6010D	609310
240-202632-2	MW-102	Total Recoverable	Water	6010D	609310
240-202632-3	MW-103	Total Recoverable	Water	6010D	609310
240-202632-4	MW-104	Total Recoverable	Water	6010D	609310
240-202632-5	MW-105	Total Recoverable	Water	6010D	609310
240-202632-6	MW-106	Total Recoverable	Water	6010D	609310
240-202632-7	MW-107	Total Recoverable	Water	6010D	609310
240-202632-8	MW-108A	Total Recoverable	Water	6010D	609310
240-202632-9	QUARRY SUMP	Total Recoverable	Water	6010D	609310
240-202632-10	QUARRY DISCHARGE	Total Recoverable	Water	6010D	609310
240-202632-11	DUP-01	Total Recoverable	Water	6010D	609310
MB 240-609310/1-A	Method Blank	Total Recoverable	Water	6010D	609310
LCS 240-609310/2-A	Lab Control Sample	Total Recoverable	Water	6010D	609310
240-202632-1 MS	MW-101	Total Recoverable	Water	6010D	609310
240-202632-1 MSD	MW-101	Total Recoverable	Water	6010D	609310

Analysis Batch: 609546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202632-1	MW-101	Total Recoverable	Water	6020B	609310
240-202632-2	MW-102	Total Recoverable	Water	6020B	609310
240-202632-3	MW-103	Total Recoverable	Water	6020B	609310
240-202632-4	MW-104	Total Recoverable	Water	6020B	609310
240-202632-5	MW-105	Total Recoverable	Water	6020B	609310
240-202632-6	MW-106	Total Recoverable	Water	6020B	609310
240-202632-7	MW-107	Total Recoverable	Water	6020B	609310
240-202632-8	MW-108A	Total Recoverable	Water	6020B	609310
240-202632-9	QUARRY SUMP	Total Recoverable	Water	6020B	609310
240-202632-10	QUARRY DISCHARGE	Total Recoverable	Water	6020B	609310
240-202632-11	DUP-01	Total Recoverable	Water	6020B	609310
MB 240-609310/1-A	Method Blank	Total Recoverable	Water	6020B	609310

Metals (Continued)

Analysis Batch: 609546 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-609310/3-A	Lab Control Sample	Total Recoverable	Water	6020B	609310
240-202632-1 MS	MW-101	Total Recoverable	Water	6020B	609310
240-202632-1 MSD	MW-101	Total Recoverable	Water	6020B	609310

Analysis Batch: 609698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202632-7	MW-107	Total Recoverable	Water	6020B	609310

General Chemistry

Analysis Batch: 609397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202632-3	MW-103	Total/NA	Water	SM 2540C	
240-202632-4	MW-104	Total/NA	Water	SM 2540C	
240-202632-5	MW-105	Total/NA	Water	SM 2540C	
240-202632-6	MW-106	Total/NA	Water	SM 2540C	
240-202632-7	MW-107	Total/NA	Water	SM 2540C	
240-202632-8	MW-108A	Total/NA	Water	SM 2540C	
240-202632-9	QUARRY SUMP	Total/NA	Water	SM 2540C	
240-202632-10	QUARRY DISCHARGE	Total/NA	Water	SM 2540C	
240-202632-11	DUP-01	Total/NA	Water	SM 2540C	
MB 240-609397/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-609397/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-202632-6 DU	MW-106	Total/NA	Water	SM 2540C	

Analysis Batch: 609399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202632-1	MW-101	Total/NA	Water	SM 2540C	
240-202632-2	MW-102	Total/NA	Water	SM 2540C	
MB 240-609399/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-609399/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 609665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202632-1	MW-101	Total/NA	Water	9056A	
240-202632-1	MW-101	Total/NA	Water	9056A	
240-202632-2	MW-102	Total/NA	Water	9056A	
240-202632-2	MW-102	Total/NA	Water	9056A	
MB 240-609665/3	Method Blank	Total/NA	Water	9056A	
LCS 240-609665/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 609688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202632-3	MW-103	Total/NA	Water	9056A	
240-202632-3	MW-103	Total/NA	Water	9056A	
240-202632-4	MW-104	Total/NA	Water	9056A	
240-202632-4	MW-104	Total/NA	Water	9056A	
240-202632-5	MW-105	Total/NA	Water	9056A	
240-202632-5	MW-105	Total/NA	Water	9056A	
240-202632-6	MW-106	Total/NA	Water	9056A	
240-202632-6	MW-106	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 609688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202632-7	MW-107	Total/NA	Water	9056A	
240-202632-7	MW-107	Total/NA	Water	9056A	
240-202632-8	MW-108A	Total/NA	Water	9056A	
240-202632-8	MW-108A	Total/NA	Water	9056A	
240-202632-9	QUARRY SUMP	Total/NA	Water	9056A	
240-202632-9	QUARRY SUMP	Total/NA	Water	9056A	
240-202632-10	QUARRY DISCHARGE	Total/NA	Water	9056A	
240-202632-10	QUARRY DISCHARGE	Total/NA	Water	9056A	
240-202632-11	DUP-01	Total/NA	Water	9056A	
240-202632-11	DUP-01	Total/NA	Water	9056A	
MB 240-609688/3	Method Blank	Total/NA	Water	9056A	
LCS 240-609688/4	Lab Control Sample	Total/NA	Water	9056A	

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-101

Lab Sample ID: 240-202632-1

Date Collected: 04/08/24 10:50

Matrix: Water

Date Received: 04/11/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 18:27
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 20:11
Total/NA	Analysis	9056A		1	609665	JWW	EET CLE	04/16/24 03:10
Total/NA	Analysis	9056A		10	609665	JWW	EET CLE	04/16/24 03:31
Total/NA	Analysis	SM 2540C		1	609399	MS	EET CLE	04/12/24 09:36

Client Sample ID: MW-102

Lab Sample ID: 240-202632-2

Date Collected: 04/08/24 12:05

Matrix: Water

Date Received: 04/11/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 18:48
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 20:34
Total/NA	Analysis	9056A		1	609665	JWW	EET CLE	04/16/24 03:53
Total/NA	Analysis	9056A		10	609665	JWW	EET CLE	04/16/24 04:15
Total/NA	Analysis	SM 2540C		1	609399	MS	EET CLE	04/12/24 09:36

Client Sample ID: MW-103

Lab Sample ID: 240-202632-3

Date Collected: 04/08/24 13:38

Matrix: Water

Date Received: 04/11/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 18:52
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 20:38
Total/NA	Analysis	9056A		2	609688	JWW	EET CLE	04/16/24 11:51
Total/NA	Analysis	9056A		20	609688	JWW	EET CLE	04/16/24 12:13
Total/NA	Analysis	SM 2540C		1	609397	MS	EET CLE	04/12/24 09:32

Client Sample ID: MW-104

Lab Sample ID: 240-202632-4

Date Collected: 04/09/24 10:17

Matrix: Water

Date Received: 04/11/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 19:05
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 20:43
Total/NA	Analysis	9056A		2	609688	JWW	EET CLE	04/16/24 12:35

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-104

Date Collected: 04/09/24 10:17
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		20	609688	JWW	EET CLE	04/16/24 12:56
Total/NA	Analysis	SM 2540C		1	609397	MS	EET CLE	04/12/24 09:32

Client Sample ID: MW-105

Date Collected: 04/08/24 09:44
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 19:09
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 20:56
Total/NA	Analysis	9056A		5	609688	JWW	EET CLE	04/16/24 13:18
Total/NA	Analysis	9056A		50	609688	JWW	EET CLE	04/16/24 13:40
Total/NA	Analysis	SM 2540C		1	609397	MS	EET CLE	04/12/24 09:32

Client Sample ID: MW-106

Date Collected: 04/08/24 14:22
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 19:14
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 21:01
Total/NA	Analysis	9056A		2	609688	JWW	EET CLE	04/16/24 14:45
Total/NA	Analysis	9056A		20	609688	JWW	EET CLE	04/16/24 15:07
Total/NA	Analysis	SM 2540C		1	609397	MS	EET CLE	04/12/24 09:32

Client Sample ID: MW-107

Date Collected: 04/08/24 12:55
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 19:18
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 21:06
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		10	609698	AJC	EET CLE	04/15/24 13:17
Total/NA	Analysis	9056A		25	609688	JWW	EET CLE	04/16/24 15:28
Total/NA	Analysis	9056A		250	609688	JWW	EET CLE	04/16/24 15:50
Total/NA	Analysis	SM 2540C		1	609397	MS	EET CLE	04/12/24 09:32

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: MW-108A
Date Collected: 04/09/24 08:30
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 19:23
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 21:10
Total/NA	Analysis	9056A		5	609688	JWW	EET CLE	04/16/24 21:16
Total/NA	Analysis	9056A		25	609688	JWW	EET CLE	04/16/24 21:38
Total/NA	Analysis	SM 2540C		1	609397	MS	EET CLE	04/12/24 09:32

Client Sample ID: QUARRY SUMP
Date Collected: 04/09/24 09:10
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 19:27
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 21:15
Total/NA	Analysis	9056A		5	609688	JWW	EET CLE	04/16/24 21:59
Total/NA	Analysis	9056A		50	609688	JWW	EET CLE	04/16/24 22:21
Total/NA	Analysis	SM 2540C		1	609397	MS	EET CLE	04/12/24 09:32

Client Sample ID: QUARRY DISCHARGE
Date Collected: 04/09/24 09:40
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 19:32
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 21:19
Total/NA	Analysis	9056A		5	609688	JWW	EET CLE	04/16/24 23:26
Total/NA	Analysis	9056A		50	609688	JWW	EET CLE	04/16/24 23:48
Total/NA	Analysis	SM 2540C		1	609397	MS	EET CLE	04/12/24 09:32

Client Sample ID: DUP-01
Date Collected: 04/08/24 00:00
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6010D		1	609434	KLC	EET CLE	04/12/24 19:36
Total Recoverable	Prep	3005A			609310	BN	EET CLE	04/11/24 14:00
Total Recoverable	Analysis	6020B		1	609546	AJC	EET CLE	04/12/24 21:24
Total/NA	Analysis	9056A		5	609688	JWW	EET CLE	04/17/24 00:10

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-202632-1

Client Sample ID: DUP-01

Date Collected: 04/08/24 00:00
Date Received: 04/11/24 08:00

Lab Sample ID: 240-202632-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		50	609688	JWW	EET CLE	04/17/24 00:31
Total/NA	Analysis	SM 2540C		1	609397	MS	EET CLE	04/12/24 09:32

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation.
Job ID: 240-202632-1
Project/Site: CCR DTE Sibley Quarry

Laboratory: Eurofins Cleveland

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

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

MICHIGAN 190

MICHIGAN 190

Chain of Custody Record

1.0 | 1.0

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

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Client Information	Sampler: A. Whaley, E. Rinehart	Lab PM: Brooks, Kris M	Carrier Tracking No(s):	COC No: 240-119185-31882.1
Client Contact: Jacob Krenz	Phone: 734-210-9259	E-Mail: Kris.Brooks@et.eurofinsus.com	State of Origin: MI	Page: Page 1 of 1
Company: TRC Environmental Corporation.	PWSID:			Job #:
Address: 1540 Eisenhower Place	Due Date Requested: Standard			
City: Ann Arbor	TAT Requested (days): Standard			
State, Zip: MI, 48108-7080	Compliance Project: Δ Yes Δ No			
Phone: 313-971-7080(Tel) 313-971-9022(Fax)	PO #: ~~109488 - 2023~~ ~~55931.0002~~			
Email: JKrenz@trccompanies.com	WO #: ~~518728.0002~~ 55931.0002			
Project Name: CCR DTE Sibley Quarry	Project #: 24016805			
Site: Michigan	SSOW#:			

Analysis Requested

Preservation Codes:

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd - TDS	6010B, 6020	9056A_28D - Chloride, Fluoride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N		
MW-101	4/18/24	1050	G	Water	N	N	X	X	X	3	
MW-102	4/18/24	1205	G	Water	N	N	X	X	X	3	
MW-103	4/18/24	1338	G	Water	N	N	X	X	X	3	
MW-104	4/19/24	1017	G	Water	N	N	X	X	X	3	
MW-105	4/18/24	0944	G	Water	N	N	X	X	X	3	
MW-106	4/18/24	1422	G	Water	N	N	X	X	X	3	
MW-107	4/18/24	1255	G	Water	N	N	X	X	X	3	
MW-108A	4/19/24	0830	G	Water	N	N	X	X	X	3	
QUARRY SUMP	4/19/24	0910	G	Water	N	N	X	X	X	3	
QUARRY DISHCARGE	4/19/24	0940	G	Water	N	N	X	X	X	3	
DUP-01	4/18/24	—	G	Water	N	N	X	X	X	3	

240-202632 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/19/24 1220	TRC			
	4/10/24 1242PM	TRC		4/10/24 1242	FEDEX
	4/10/24 1300	FEDEX		4-11-24 800	EC

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

Cooler Temperature(s) °C and Other Remarks:

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client IRC Site Name _____ Cooler unpacked by:

Cooler Received on 4-11-24 Opened on 4-11-24

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 18 (CF 0.0 °C) Observed Cooler Temp 1.0 °C Corrected Cooler Temp 1.0 °C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13-17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC329089
14.	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

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

Concerning _____

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

Samples processed by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container

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

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen. _____

4/11/2024

Login Container Summary Report

240-202632

4/20/2024

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-101	240-202632-A-1	Plastic 60 mL - unpreserved				
MW 101	240 202632-B-1	Plastic 500ml unpreserved				
MW-101	240-202632-C-1	Plastic 500ml - with Nitric Acid	<2			
MW-102	240-202632 A 2	Plastic 60 mL - unpreserved				
MW-102	240-202632-B-2	Plastic 500ml - unpreserved				
MW-102	240 202632-C-2	Plastic 500ml - with Nitric Acid	<2			
MW-103	240-202632-A-3	Plastic 60 mL - unpreserved				
MW-103	240-202632-B-3	Plastic 500ml - unpreserved				
MW-103	240-202632-C-3	Plastic 500ml - with Nitric Acid	<2			
MW-104	240-202632-A-4	Plastic 60 mL - unpreserved				
MW-104	240-202632-B-4	Plastic 500ml - unpreserved				
MW-104	240-202632-C-4	Plastic 500ml - with Nitric Acid	<2			
MW 105	240-202632-A-5	Plastic 60 mL - unpreserved				
MW-105	240-202632-B-5	Plastic 500ml unpreserved				
MW-105	240-202632-C-5	Plastic 500ml - with Nitric Acid	<2			
MW-106	240-202632 A-6	Plastic 60 mL - unpreserved				
MW-106	240-202632-B-6	Plastic 500ml - unpreserved				
MW 106	240-202632-C-6	Plastic 500ml - with Nitric Acid	<2			
MW-107	240-202632-A 7	Plastic 60 mL - unpreserved				
MW 107	240 202632-B-7	Plastic 500ml - unpreserved				
MW-107	240-202632-C-7	Plastic 500ml with Nitric Acid	<2			
MW-108A	240-202632-A-8	Plastic 60 mL - unpreserved				
MW-108A	240-202632 B-8	Plastic 500ml unpreserved				
MW 108A	240-202632-C-8	Plastic 500ml - with Nitric Acid	<2			
QUARRY SUMP	240-202632-A-9	Plastic 60 mL - unpreserved				
QUARRY SUMP	240-202632-B-9	Plastic 500ml - unpreserved				
QUARRY SUMP	240-202632-C-9	Plastic 500ml with Nitric Acid	<2			
QUARRY DISCHARGE	240 202632-A-10	Plastic 60 mL - unpreserved				
QUARRY DISCHARGE	240-202632-B-10	Plastic 500ml unpreserved				
QUARRY DISCHARGE	240-202632-C-10	Plastic 500ml - with Nitric Acid	<2			
DUP-01	240-202632-A-11	Plastic 60 mL unpreserved				
DUP-01	240-202632-B 11	Plastic 500ml - unpreserved				
DUP-01	240-202632-C-11	Plastic 500ml - with Nitric Acid	<2			

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/23/2024 7:58:38 PM

JOB DESCRIPTION

CCR DTE Sibley Quarry

JOB NUMBER

240-212734-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

Job Notes

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

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

Authorization

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10/23/2024 7:58:38 PM

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

Table of Contents

Qualifiers

Metals

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

Glossary

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

Job ID: 240-212734-1 Eurofins Cleveland

Job Narrative
240-212734-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt
The samples were received on 10/10/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

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

General Chemistry
Method 9056A_28D: The following sample was diluted due to the nature of the sample matrix: MW-107 (240-212734-5). Elevated reporting limits (RLs) are provided.

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

Method Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

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

Protocol References:

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

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

Laboratory References:

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

Sample Summary

Client: TRC Environmental Corporation.
Job ID: 240-212734-1
Project/Site: CCR DTE Sibley Quarry

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-212734-1	MW-108A	Water	10/07/24 09:30	10/10/24 08:00
240-212734-2	DUP-01	Water	10/07/24 00:00	10/10/24 08:00
240-212734-3	MW-104	Water	10/07/24 10:20	10/10/24 08:00
240-212734-4	MW-101	Water	10/07/24 11:08	10/10/24 08:00
240-212734-5	MW-107	Water	10/07/24 12:04	10/10/24 08:00
240-212734-6	MW-105	Water	10/07/24 12:51	10/10/24 08:00
240-212734-7	MW-103	Water	10/07/24 13:46	10/10/24 08:00
240-212734-8	MW-106	Water	10/08/24 07:45	10/10/24 08:00
240-212734-9	MW-102	Water	10/08/24 09:00	10/10/24 08:00
240-212734-10	QUARRY SUMP	Water	10/08/24 09:30	10/10/24 08:00
240-212734-11	QUARRY DISCHARGE	Water	10/08/24 09:40	10/10/24 08:00

Detection Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-108A — Lab Sample ID: 240-212734-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	1200		100		ug/L	1		6010D	Total Recoverable
Calcium	390000		1000		ug/L	1		6020B	Total Recoverable
Iron	640		100		ug/L	1		6020B	Total Recoverable
Chloride	1700		20		mg/L	20		9056A	Total/NA
Fluoride	1.1		0.25		mg/L	5		9056A	Total/NA
Sulfate	1100		20		mg/L	20		9056A	Total/NA
Total Dissolved Solids	10000		50		mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-212734-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	1200		100		ug/L	1		6010D	Total Recoverable
Calcium	390000		1000		ug/L	1		6020B	Total Recoverable
Iron	660		100		ug/L	1		6020B	Total Recoverable
Chloride	1700		20		mg/L	20		9056A	Total/NA
Fluoride	1.1		0.25		mg/L	5		9056A	Total/NA
Sulfate	1100		20		mg/L	20		9056A	Total/NA
Total Dissolved Solids	4300		50		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-104 — Lab Sample ID: 240-212734-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	710		100		ug/L	1		6010D	Total Recoverable
Calcium	460000		1000		ug/L	1		6020B	Total Recoverable
Iron	230		100		ug/L	1		6020B	Total Recoverable
Chloride	260		2.0		mg/L	2		9056A	Total/NA
Fluoride	2.0		0.10		mg/L	2		9056A	Total/NA
Sulfate	1800		10		mg/L	10		9056A	Total/NA
Total Dissolved Solids	2600		20		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-101 — Lab Sample ID: 240-212734-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	330		100		ug/L	1		6010D	Total Recoverable
Calcium	210000		1000		ug/L	1		6020B	Total Recoverable
Chloride	270		10		mg/L	10		9056A	Total/NA
Fluoride	1.9		0.050		mg/L	1		9056A	Total/NA
Sulfate	540		10		mg/L	10		9056A	Total/NA
Total Dissolved Solids	1300		20		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-107 — Lab Sample ID: 240-212734-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100		ug/L	1		6010D	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-107 (Continued) — Lab Sample ID: 240-212734-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Calcium	1400000		10000		ug/L	10		6020B	Total Recoverable
Iron	1600		100		ug/L	1		6020B	Total Recoverable
Chloride	24000		1000		mg/L	1000		9056A	Total/NA
Sulfate	4000		100		mg/L	100		9056A	Total/NA
Total Dissolved Solids	38000		1000		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-105 — Lab Sample ID: 240-212734-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	2500		100		ug/L	1		6010D	Total Recoverable
Calcium	680000		1000		ug/L	1		6020B	Total Recoverable
Iron	2300		100		ug/L	1		6020B	Total Recoverable
Chloride	3500		50		mg/L	50		9056A	Total/NA
Fluoride	1.2		0.25		mg/L	5		9056A	Total/NA
Sulfate	2100		50		mg/L	50		9056A	Total/NA
Total Dissolved Solids	8100		50		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-103 — Lab Sample ID: 240-212734-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	730		100		ug/L	1		6010D	Total Recoverable
Calcium	570000		1000		ug/L	1		6020B	Total Recoverable
Chloride	150		2.0		mg/L	2		9056A	Total/NA
Fluoride	1.9		0.10		mg/L	2		9056A	Total/NA
Sulfate	2000		20		mg/L	20		9056A	Total/NA
Total Dissolved Solids	3000		20		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-106 — Lab Sample ID: 240-212734-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	710		100		ug/L	1		6010D	Total Recoverable
Calcium	550000		1000		ug/L	1		6020B	Total Recoverable
Iron	560		100		ug/L	1		6020B	Total Recoverable
Chloride	100		2.0		mg/L	2		9056A	Total/NA
Fluoride	1.7		0.10		mg/L	2		9056A	Total/NA
Sulfate	1900		20		mg/L	20		9056A	Total/NA
Total Dissolved Solids	3000		20		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-102 — Lab Sample ID: 240-212734-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	130		100		ug/L	1		6010D	Total Recoverable
Calcium	240000		1000		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-102 (Continued) — Lab Sample ID: 240-212734-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Iron	2600		100		ug/L	1		6020B	Total Recoverable
Chloride	180		1.0		mg/L	1		9056A	Total/NA
Fluoride	1.8		0.050		mg/L	1		9056A	Total/NA
Sulfate	600		10		mg/L	10		9056A	Total/NA
Total Dissolved Solids	1600		20		mg/L	1		SM 2540C	Total/NA

Client Sample ID: QUARRY SUMP — Lab Sample ID: 240-212734-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	2500		100		ug/L	1		6010D	Total Recoverable
Calcium	710000		1000		ug/L	1		6020B	Total Recoverable
Iron	140		100		ug/L	1		6020B	Total Recoverable
Chloride	3900		50		mg/L	50		9056A	Total/NA
Fluoride	1.5		0.25		mg/L	5		9056A	Total/NA
Sulfate	2200		50		mg/L	50		9056A	Total/NA
Total Dissolved Solids	9100		50		mg/L	1		SM 2540C	Total/NA

Client Sample ID: QUARRY DISCHARGE — Lab Sample ID: 240-212734-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Boron	2600		100		ug/L	1		6010D	Total Recoverable
Calcium	730000		1000		ug/L	1		6020B	Total Recoverable
Iron	120		100		ug/L	1		6020B	Total Recoverable
Chloride	3600		50		mg/L	50		9056A	Total/NA
Fluoride	1.5		0.25		mg/L	5		9056A	Total/NA
Sulfate	2200		50		mg/L	50		9056A	Total/NA
Total Dissolved Solids	8400		50		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-108A
Date Collected: 10/07/24 09:30
Date Received: 10/10/24 08:00

Lab Sample ID: 240-212734-1
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	1200		100		ug/L		10/11/24 14:00	10/15/24 05:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	390000		1000		ug/L		10/11/24 14:00	10/14/24 15:34	1
Iron	640		100		ug/L		10/11/24 14:00	10/14/24 15:34	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	1700		20		mg/L			10/18/24 18:11	20
Fluoride (SW846 9056A)	1.1		0.25		mg/L			10/18/24 17:52	5
Sulfate (SW846 9056A)	1100		20		mg/L			10/18/24 18:11	20
Total Dissolved Solids (SM 2540C)	10000		50		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: DUP-01

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

Lab Sample ID: 240-212734-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	1200		100		ug/L		10/11/24 14:00	10/15/24 05:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	390000		1000		ug/L		10/11/24 14:00	10/14/24 15:48	1
Iron	660		100		ug/L		10/11/24 14:00	10/14/24 15:48	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	1700		20		mg/L			10/18/24 18:51	20
Fluoride (SW846 9056A)	1.1		0.25		mg/L			10/18/24 18:31	5
Sulfate (SW846 9056A)	1100		20		mg/L			10/18/24 18:51	20
Total Dissolved Solids (SM 2540C)	4300		50		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-104
Date Collected: 10/07/24 10:20
Date Received: 10/10/24 08:00

Lab Sample ID: 240-212734-3
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	710		100		ug/L		10/11/24 14:00	10/15/24 05:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	460000		1000		ug/L		10/11/24 14:00	10/14/24 15:51	1
Iron	230		100		ug/L		10/11/24 14:00	10/14/24 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	260		2.0		mg/L			10/18/24 19:11	2
Fluoride (SW846 9056A)	2.0		0.10		mg/L			10/18/24 19:11	2
Sulfate (SW846 9056A)	1800		10		mg/L			10/18/24 20:10	10
Total Dissolved Solids (SM 2540C)	2600		20		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-101
Date Collected: 10/07/24 11:08
Date Received: 10/10/24 08:00

Lab Sample ID: 240-212734-4
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	330		100		ug/L		10/11/24 14:00	10/15/24 05:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	210000		1000		ug/L		10/11/24 14:00	10/14/24 15:59	1
Iron	100	U	100		ug/L		10/11/24 14:00	10/14/24 15:59	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	270		10		mg/L			10/18/24 20:49	10
Fluoride (SW846 9056A)	1.9		0.050		mg/L			10/18/24 20:30	1
Sulfate (SW846 9056A)	540		10		mg/L			10/18/24 20:49	10
Total Dissolved Solids (SM 2540C)	1300		20		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-107
Date Collected: 10/07/24 12:04
Date Received: 10/10/24 08:00

Lab Sample ID: 240-212734-5
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100		ug/L		10/11/24 14:00	10/15/24 05:44	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1400000		10000		ug/L		10/11/24 14:00	10/23/24 09:38	10
Iron	1600		100		ug/L		10/11/24 14:00	10/14/24 16:02	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	24000		1000		mg/L			10/18/24 21:29	1000
Fluoride (SW846 9056A)	5.0	U	5.0		mg/L			10/18/24 21:09	100
Sulfate (SW846 9056A)	4000		100		mg/L			10/18/24 21:09	100
Total Dissolved Solids (SM 2540C)	38000		1000		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-105
Date Collected: 10/07/24 12:51
Date Received: 10/10/24 08:00

Lab Sample ID: 240-212734-6
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	2500		100		ug/L		10/11/24 14:00	10/15/24 05:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	680000		1000		ug/L		10/11/24 14:00	10/14/24 16:05	1
Iron	2300		100		ug/L		10/11/24 14:00	10/14/24 16:05	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	3500		50		mg/L			10/18/24 22:08	50
Fluoride (SW846 9056A)	1.2		0.25		mg/L			10/18/24 21:48	5
Sulfate (SW846 9056A)	2100		50		mg/L			10/18/24 22:08	50
Total Dissolved Solids (SM 2540C)	8100		50		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-103
Date Collected: 10/07/24 13:46
Date Received: 10/10/24 08:00

Lab Sample ID: 240-212734-7
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	730		100		ug/L		10/11/24 14:00	10/15/24 05:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	570000		1000		ug/L		10/11/24 14:00	10/14/24 16:07	1
Iron	100	U	100		ug/L		10/11/24 14:00	10/14/24 16:07	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	150		2.0		mg/L			10/18/24 22:28	2
Fluoride (SW846 9056A)	1.9		0.10		mg/L			10/18/24 22:28	2
Sulfate (SW846 9056A)	2000		20		mg/L			10/22/24 22:25	20
Total Dissolved Solids (SM 2540C)	3000		20		mg/L			10/11/24 08:07	1

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-106

Date Collected: 10/08/24 07:45
Date Received: 10/10/24 08:00

Lab Sample ID: 240-212734-8

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	710		100		ug/L		10/11/24 14:00	10/15/24 05:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	550000		1000		ug/L		10/11/24 14:00	10/14/24 16:10	1
Iron	560		100		ug/L		10/11/24 14:00	10/14/24 16:10	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	100		2.0		mg/L			10/16/24 00:39	2
Fluoride (SW846 9056A)	1.7		0.10		mg/L			10/16/24 00:39	2
Sulfate (SW846 9056A)	1900		20		mg/L			10/16/24 00:58	20
Total Dissolved Solids (SM 2540C)	3000		20		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-102
Date Collected: 10/08/24 09:00
Date Received: 10/10/24 08:00

Lab Sample ID: 240-212734-9
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	130		100		ug/L		10/11/24 14:00	10/15/24 06:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	240000		1000		ug/L		10/11/24 14:00	10/14/24 16:13	1
Iron	2600		100		ug/L		10/11/24 14:00	10/14/24 16:13	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	180		1.0		mg/L			10/16/24 01:18	1
Fluoride (SW846 9056A)	1.8		0.050		mg/L			10/16/24 01:18	1
Sulfate (SW846 9056A)	600		10		mg/L			10/16/24 01:38	10
Total Dissolved Solids (SM 2540C)	1600		20		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Job ID: 240-212734-1
Project/Site: CCR DTE Sibley Quarry

Client Sample ID: QUARRY SUMP
Lab Sample ID: 240-212734-10
Date Collected: 10/08/24 09:30
Matrix: Water
Date Received: 10/10/24 08:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	2500		100		ug/L		10/11/24 14:00	10/15/24 06:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	710000		1000		ug/L		10/11/24 14:00	10/14/24 16:16	1
Iron	140		100		ug/L		10/11/24 14:00	10/14/24 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	3900		50		mg/L			10/16/24 02:57	50
Fluoride (SW846 9056A)	1.5		0.25		mg/L			10/16/24 01:58	5
Sulfate (SW846 9056A)	2200		50		mg/L			10/16/24 02:57	50
Total Dissolved Solids (SM 2540C)	9100		50		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: QUARRY DISCHARGE

Lab Sample ID: 240-212734-11

Date Collected: 10/08/24 09:40

Matrix: Water

Date Received: 10/10/24 08:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	2600		100		ug/L		10/11/24 14:00	10/15/24 06:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	730000		1000		ug/L		10/11/24 14:00	10/14/24 16:19	1
Iron	120		100		ug/L		10/11/24 14:00	10/14/24 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	3600		50		mg/L			10/16/24 03:36	50
Fluoride (SW846 9056A)	1.5		0.25		mg/L			10/16/24 03:16	5
Sulfate (SW846 9056A)	2200		50		mg/L			10/16/24 03:36	50
Total Dissolved Solids (SM 2540C)	8400		50		mg/L			10/11/24 08:07	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-630492/1-A
Matrix: Water
Analysis Batch: 630781

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 630492

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100		ug/L		10/11/24 14:00	10/15/24 04:36	1

Lab Sample ID: LCS 240-630492/2-A
Matrix: Water
Analysis Batch: 630781

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 630492

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1000	1040		ug/L		104	80 - 120		

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-630492/1-A
Matrix: Water
Analysis Batch: 630799

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 630492

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000		ug/L		10/11/24 14:00	10/14/24 15:28	1
Iron	100	U	100		ug/L		10/11/24 14:00	10/14/24 15:28	1

Lab Sample ID: LCS 240-630492/3-A
Matrix: Water
Analysis Batch: 630799

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 630492

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			25000	25000		ug/L		100	80 - 120		
Iron			5000	5050		ug/L		101	80 - 120		

Lab Sample ID: 240-212734-1 MS
Matrix: Water
Analysis Batch: 630799

Client Sample ID: MW-108A
Prep Type: Total Recoverable
Prep Batch: 630492

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	390000		25000	409000	4	ug/L		60	80 - 120		
Iron	640		5000	5750		ug/L		102	80 - 120		

Lab Sample ID: 240-212734-1 MSD
Matrix: Water
Analysis Batch: 630799

Client Sample ID: MW-108A
Prep Type: Total Recoverable
Prep Batch: 630492

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	390000		25000	414000	4	ug/L		80	80 - 120	1	20
Iron	640		5000	5820		ug/L		104	80 - 120	1	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-630745/3
Matrix: Water
Analysis Batch: 630745

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0		mg/L			10/15/24 15:06	1
Fluoride	0.050	U	0.050		mg/L			10/15/24 15:06	1
Sulfate	1.0	U	1.0		mg/L			10/15/24 15:06	1

Lab Sample ID: LCS 240-630745/4
Matrix: Water
Analysis Batch: 630745

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.3		mg/L		101	90 - 110		
Fluoride			2.50	2.64		mg/L		106	90 - 110		
Sulfate			50.0	52.1		mg/L		104	90 - 110		

Lab Sample ID: MB 240-631516/3
Matrix: Water
Analysis Batch: 631516

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0		mg/L			10/18/24 16:13	1
Fluoride	0.050	U	0.050		mg/L			10/18/24 16:13	1
Sulfate	1.0	U	1.0		mg/L			10/18/24 16:13	1

Lab Sample ID: LCS 240-631516/4
Matrix: Water
Analysis Batch: 631516

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.9		mg/L		102	90 - 110		
Fluoride			2.50	2.65		mg/L		106	90 - 110		
Sulfate			50.0	53.0		mg/L		106	90 - 110		

Lab Sample ID: MB 240-631953/3
Matrix: Water
Analysis Batch: 631953

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.0	U	1.0		mg/L			10/22/24 21:51	1

Lab Sample ID: LCS 240-631953/4
Matrix: Water
Analysis Batch: 631953

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate			50.0	49.5		mg/L		99	90 - 110		

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

Lab Sample ID: MB 240-630381/1
Matrix: Water
Analysis Batch: 630381

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10		mg/L			10/11/24 08:07	1

Lab Sample ID: LCS 240-630381/2
Matrix: Water
Analysis Batch: 630381

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			721	596		mg/L		83	80 - 120		

Lab Sample ID: 240-212734-9 DU
Matrix: Water
Analysis Batch: 630381

Client Sample ID: MW-102
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1600			1580		mg/L				1	20

Metals

Prep Batch: 630492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212734-1	MW-108A	Total Recoverable	Water	3005A	
240-212734-2	DUP-01	Total Recoverable	Water	3005A	
240-212734-3	MW-104	Total Recoverable	Water	3005A	
240-212734-4	MW-101	Total Recoverable	Water	3005A	
240-212734-5	MW-107	Total Recoverable	Water	3005A	
240-212734-6	MW-105	Total Recoverable	Water	3005A	
240-212734-7	MW-103	Total Recoverable	Water	3005A	
240-212734-8	MW-106	Total Recoverable	Water	3005A	
240-212734-9	MW-102	Total Recoverable	Water	3005A	
240-212734-10	QUARRY SUMP	Total Recoverable	Water	3005A	
240-212734-11	QUARRY DISCHARGE	Total Recoverable	Water	3005A	
MB 240-630492/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-630492/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-630492/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-212734-1 MS	MW-108A	Total Recoverable	Water	3005A	
240-212734-1 MSD	MW-108A	Total Recoverable	Water	3005A	

Analysis Batch: 630781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212734-1	MW-108A	Total Recoverable	Water	6010D	630492
240-212734-2	DUP-01	Total Recoverable	Water	6010D	630492
240-212734-3	MW-104	Total Recoverable	Water	6010D	630492
240-212734-4	MW-101	Total Recoverable	Water	6010D	630492
240-212734-5	MW-107	Total Recoverable	Water	6010D	630492
240-212734-6	MW-105	Total Recoverable	Water	6010D	630492
240-212734-7	MW-103	Total Recoverable	Water	6010D	630492
240-212734-8	MW-106	Total Recoverable	Water	6010D	630492
240-212734-9	MW-102	Total Recoverable	Water	6010D	630492
240-212734-10	QUARRY SUMP	Total Recoverable	Water	6010D	630492
240-212734-11	QUARRY DISCHARGE	Total Recoverable	Water	6010D	630492
MB 240-630492/1-A	Method Blank	Total Recoverable	Water	6010D	630492
LCS 240-630492/2-A	Lab Control Sample	Total Recoverable	Water	6010D	630492

Analysis Batch: 630799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212734-1	MW-108A	Total Recoverable	Water	6020B	630492
240-212734-2	DUP-01	Total Recoverable	Water	6020B	630492
240-212734-3	MW-104	Total Recoverable	Water	6020B	630492
240-212734-4	MW-101	Total Recoverable	Water	6020B	630492
240-212734-5	MW-107	Total Recoverable	Water	6020B	630492
240-212734-6	MW-105	Total Recoverable	Water	6020B	630492
240-212734-7	MW-103	Total Recoverable	Water	6020B	630492
240-212734-8	MW-106	Total Recoverable	Water	6020B	630492
240-212734-9	MW-102	Total Recoverable	Water	6020B	630492
240-212734-10	QUARRY SUMP	Total Recoverable	Water	6020B	630492
240-212734-11	QUARRY DISCHARGE	Total Recoverable	Water	6020B	630492
MB 240-630492/1-A	Method Blank	Total Recoverable	Water	6020B	630492
LCS 240-630492/3-A	Lab Control Sample	Total Recoverable	Water	6020B	630492
240-212734-1 MS	MW-108A	Total Recoverable	Water	6020B	630492
240-212734-1 MSD	MW-108A	Total Recoverable	Water	6020B	630492

Metals

Analysis Batch: 632139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212734-5	MW-107	Total Recoverable	Water	6020B	630492

General Chemistry

Analysis Batch: 630381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212734-1	MW-108A	Total/NA	Water	SM 2540C	
240-212734-2	DUP-01	Total/NA	Water	SM 2540C	
240-212734-3	MW-104	Total/NA	Water	SM 2540C	
240-212734-4	MW-101	Total/NA	Water	SM 2540C	
240-212734-5	MW-107	Total/NA	Water	SM 2540C	
240-212734-6	MW-105	Total/NA	Water	SM 2540C	
240-212734-7	MW-103	Total/NA	Water	SM 2540C	
240-212734-8	MW-106	Total/NA	Water	SM 2540C	
240-212734-9	MW-102	Total/NA	Water	SM 2540C	
240-212734-10	QUARRY SUMP	Total/NA	Water	SM 2540C	
240-212734-11	QUARRY DISCHARGE	Total/NA	Water	SM 2540C	
MB 240-630381/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-630381/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-212734-9 DU	MW-102	Total/NA	Water	SM 2540C	

Analysis Batch: 630745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212734-8	MW-106	Total/NA	Water	9056A	
240-212734-8	MW-106	Total/NA	Water	9056A	
240-212734-9	MW-102	Total/NA	Water	9056A	
240-212734-9	MW-102	Total/NA	Water	9056A	
240-212734-10	QUARRY SUMP	Total/NA	Water	9056A	
240-212734-10	QUARRY SUMP	Total/NA	Water	9056A	
240-212734-11	QUARRY DISCHARGE	Total/NA	Water	9056A	
240-212734-11	QUARRY DISCHARGE	Total/NA	Water	9056A	
MB 240-630745/3	Method Blank	Total/NA	Water	9056A	
LCS 240-630745/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 631516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212734-1	MW-108A	Total/NA	Water	9056A	
240-212734-1	MW-108A	Total/NA	Water	9056A	
240-212734-2	DUP-01	Total/NA	Water	9056A	
240-212734-2	DUP-01	Total/NA	Water	9056A	
240-212734-3	MW-104	Total/NA	Water	9056A	
240-212734-3	MW-104	Total/NA	Water	9056A	
240-212734-4	MW-101	Total/NA	Water	9056A	
240-212734-4	MW-101	Total/NA	Water	9056A	
240-212734-5	MW-107	Total/NA	Water	9056A	
240-212734-5	MW-107	Total/NA	Water	9056A	
240-212734-6	MW-105	Total/NA	Water	9056A	
240-212734-6	MW-105	Total/NA	Water	9056A	
240-212734-7	MW-103	Total/NA	Water	9056A	
MB 240-631516/3	Method Blank	Total/NA	Water	9056A	
LCS 240-631516/4	Lab Control Sample	Total/NA	Water	9056A	

QC Association Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

General Chemistry

Analysis Batch: 631953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212734-7	MW-103	Total/NA	Water	9056A	
MB 240-631953/3	Method Blank	Total/NA	Water	9056A	
LCS 240-631953/4	Lab Control Sample	Total/NA	Water	9056A	

Client Sample ID: MW-108A

Lab Sample ID: 240-212734-1

Date Collected: 10/07/24 09:30

Matrix: Water

Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 05:18
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 15:34
Total/NA	Analysis	9056A		5	631516	JMR	EET CLE	10/18/24 17:52
Total/NA	Analysis	9056A		20	631516	JMR	EET CLE	10/18/24 18:11
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Client Sample ID: DUP-01

Lab Sample ID: 240-212734-2

Date Collected: 10/07/24 00:00

Matrix: Water

Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 05:23
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 15:48
Total/NA	Analysis	9056A		5	631516	JMR	EET CLE	10/18/24 18:31
Total/NA	Analysis	9056A		20	631516	JMR	EET CLE	10/18/24 18:51
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Client Sample ID: MW-104

Lab Sample ID: 240-212734-3

Date Collected: 10/07/24 10:20

Matrix: Water

Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 05:27
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 15:51
Total/NA	Analysis	9056A		2	631516	JMR	EET CLE	10/18/24 19:11
Total/NA	Analysis	9056A		10	631516	JMR	EET CLE	10/18/24 20:10
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Client Sample ID: MW-101

Lab Sample ID: 240-212734-4

Date Collected: 10/07/24 11:08

Matrix: Water

Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 05:31
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 15:59
Total/NA	Analysis	9056A		1	631516	JMR	EET CLE	10/18/24 20:30

Lab Chronicle

Client: TRC Environmental Corporation.
Job ID: 240-212734-1
Project/Site: CCR DTE Sibley Quarry

Client Sample ID: MW-101
Lab Sample ID: 240-212734-4
Date Collected: 10/07/24 11:08
Matrix: Water
Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	631516	JMR	EET CLE	10/18/24 20:49
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Client Sample ID: MW-107
Lab Sample ID: 240-212734-5
Date Collected: 10/07/24 12:04
Matrix: Water
Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 05:44
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 16:02
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		10	632139	AJC	EET CLE	10/23/24 09:38
Total/NA	Analysis	9056A		100	631516	JMR	EET CLE	10/18/24 21:09
Total/NA	Analysis	9056A		1000	631516	JMR	EET CLE	10/18/24 21:29
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Client Sample ID: MW-105
Lab Sample ID: 240-212734-6
Date Collected: 10/07/24 12:51
Matrix: Water
Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 05:48
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 16:05
Total/NA	Analysis	9056A		5	631516	JMR	EET CLE	10/18/24 21:48
Total/NA	Analysis	9056A		50	631516	JMR	EET CLE	10/18/24 22:08
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Client Sample ID: MW-103
Lab Sample ID: 240-212734-7
Date Collected: 10/07/24 13:46
Matrix: Water
Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 05:53
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 16:07
Total/NA	Analysis	9056A		2	631516	JMR	EET CLE	10/18/24 22:28
Total/NA	Analysis	9056A		20	631953	JMR	EET CLE	10/22/24 22:25
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-212734-1

Client Sample ID: MW-106

Lab Sample ID: 240-212734-8

Date Collected: 10/08/24 07:45

Matrix: Water

Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 05:57
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 16:10
Total/NA	Analysis	9056A		2	630745	JMR	EET CLE	10/16/24 00:39
Total/NA	Analysis	9056A		20	630745	JMR	EET CLE	10/16/24 00:58
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Client Sample ID: MW-102

Lab Sample ID: 240-212734-9

Date Collected: 10/08/24 09:00

Matrix: Water

Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 06:02
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 16:13
Total/NA	Analysis	9056A		1	630745	JMR	EET CLE	10/16/24 01:18
Total/NA	Analysis	9056A		10	630745	JMR	EET CLE	10/16/24 01:38
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Client Sample ID: QUARRY SUMP

Lab Sample ID: 240-212734-10

Date Collected: 10/08/24 09:30

Matrix: Water

Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 06:06
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 16:16
Total/NA	Analysis	9056A		5	630745	JMR	EET CLE	10/16/24 01:58
Total/NA	Analysis	9056A		50	630745	JMR	EET CLE	10/16/24 02:57
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Client Sample ID: QUARRY DISCHARGE

Lab Sample ID: 240-212734-11

Date Collected: 10/08/24 09:40

Matrix: Water

Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6010D		1	630781	RKT	EET CLE	10/15/24 06:11
Total Recoverable	Prep	3005A			630492	XWS6	EET CLE	10/11/24 14:00
Total Recoverable	Analysis	6020B		1	630799	AJC	EET CLE	10/14/24 16:19
Total/NA	Analysis	9056A		5	630745	JMR	EET CLE	10/16/24 03:16

Lab Chronicle

Client: TRC Environmental Corporation.
Job ID: 240-212734-1
Project/Site: CCR DTE Sibley Quarry

Client Sample ID: QUARRY DISCHARGE
Lab Sample ID: 240-212734-11

Date Collected: 10/08/24 09:40
Matrix: Water
Date Received: 10/10/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		50	630745	JMR	EET CLE	10/16/24 03:36
Total/NA	Analysis	SM 2540C		1	630381	TAV2	EET CLE	10/11/24 08:07

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation.
Job ID: 240-212734-1
Project/Site: CCR DTE Sibley Quarry

Laboratory: Eurofins Cleveland

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

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

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

MICHIGAN 190 Chain of Custody Record

1.2 / 1.3

eurofins | Environment Testing

Client Information	Sampler: Javier Jasso	Lab PM: Brooks, Kris M	Carrier Tracking No(s):	COC No: 240-124491-43411.1
Client Contact: Jacob Krenz	Phone: 734 904 3310	E-Mail: Kris.Brooks@et.eurofinsus.com	State of Origin:	Page: Page of
Company: TRC Environmental Corporation.	PWSID:	Analysis Requested		Job #:
Address: 1540 Eisenhower Place	Due Date Requested:			Preservation Codes: D - HNO3 N - None
City: Ann Arbor	TAT Requested (days):			
State, Zip: MI, 48108-7080	Compliance Project: Δ Yes Δ No			
Phone: 313-971-7080(Tel) 313-971-9022(Fax)	PO #: 214272			
Email: JKrenz@trccompanies.com	WO #: 553931.0002			240-212734 COC
Project Name: CCR DTE Sibley Quarry	Project #: 24016805			Other:
Site: Michigan	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B Bo, 6020 Ca, Fe	2540C_Calcd - TDS	9056A_28D - Chloride, Fluoride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N		
MW-108-1	10/7/24	0932	G	Water	N	N	X	X	X	3	
Dup #01	" "	—	G	Water	N	N	X	X	X	3	
MW 104	" "	1020	G	Water	N	N	X	X	X	3	
MW-101	" "	1052	G	Water	N	N	X	X	X	3	
MW-107	" "	1204	G	Water	N	N	X	X	X	3	
MW-105	" "	1251	G	Water	N	N	X	X	X	3	
MW-103	" "	1346	G	Water	N	N	X	X	X	3	
MW-106	10/8/24	0745	G	Water	N	N	X	X	X	3	
MW-102	" "	0900	G	Water	N	N	X	X	X	3	
Quarry Sump	" "	0930	G	Water	N	N	X	X	X	3	
Quarry Discharge	" "	0940	G	Water	N	N	X	X	X	3	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/8/24 1100	TRC	TRC Shuttle 1100	10/8/24	TRC
	10/9/24 1217	TRC		10/9/24 1217	FEDEX
	10/9/24 1300	FEDEX	MELISSA LOAR	10-10-24 8AM	

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

Cooler Temperature(s) °C and Other Remarks:

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client TRC Site Name _____ Cooler unpacked by: MALISSA LOAR

Cooler Received on 10-10-24 Opened on 10-10-24

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # TC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 17 (CF +0.1 °C) Observed Cooler Temp. 1.2 °C Corrected Cooler Temp. 1.3 °C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4.	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12.	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13-17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC447997
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

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

Concerning _____

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

Samples processed by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container

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

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____

10/10/2024

Login Container Summary Report

240-212734

10/23/2024

Temperature readings. _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-108	240-212734-A-1	Plastic 60 mL - unpreserved				
MW-108	240-212734-B-1	Plastic 500ml - unpreserved				
MW-108	240-212734-C-1	Plastic 500ml - with Nitric Acid	<2			
DUP-01	240-212734-A-2	Plastic 60 mL - unpreserved				
DUP-01	240-212734-B-2	Plastic 500ml - unpreserved				
DUP-01	240-212734-C-2	Plastic 500ml - with Nitric Acid	<2			
MW-104	240-212734-A-3	Plastic 60 mL - unpreserved				
MW-104	240-212734-B-3	Plastic 500ml - unpreserved				
MW-104	240-212734-C-3	Plastic 500ml - with Nitric Acid	<2			
MW-101	240-212734-A-4	Plastic 60 mL - unpreserved				
MW-101	240-212734-B-4	Plastic 500ml - unpreserved				
MW-101	240-212734-C-4	Plastic 500ml - with Nitric Acid	<2			
MW-107	240-212734-A-5	Plastic 60 mL - unpreserved				
MW-107	240-212734-B-5	Plastic 500ml - unpreserved				
MW-107	240-212734-C-5	Plastic 500ml - with Nitric Acid	<2			
MW-105	240-212734-A-6	Plastic 60 mL - unpreserved				
MW-105	240-212734-B-6	Plastic 500ml - unpreserved				
MW-105	240-212734-C-6	Plastic 500ml - with Nitric Acid	<2			
MW-103	240-212734-A-7	Plastic 60 mL - unpreserved				
MW-103	240-212734-B-7	Plastic 500ml - unpreserved				
MW-103	240-212734-C-7	Plastic 500ml - with Nitric Acid	<2			
MW-106	240-212734-A-8	Plastic 60 mL - unpreserved				
MW-106	240-212734-B-8	Plastic 500ml - unpreserved				
MW-106	240-212734-C-8	Plastic 500ml - with Nitric Acid	<2			
MW-102	240-212734-A-9	Plastic 60 mL - unpreserved				
MW-102	240-212734-B-9	Plastic 500ml - unpreserved				
MW-102	240-212734-C-9	Plastic 500ml - with Nitric Acid	<2			
QUARRY SUMP	240-212734-A-10	Plastic 60 mL - unpreserved				
QUARRY SUMP	240-212734-B-10	Plastic 500ml - unpreserved				
QUARRY SUMP	240-212734-C-10	Plastic 500ml - with Nitric Acid	<2			
QUARRY DISCHARGE	240-212734-A-11	Plastic 60 mL - unpreserved				
QUARRY DISCHARGE	240-212734-B-11	Plastic 500ml - unpreserved				
QUARRY DISCHARGE	240-212734-C-11	Plastic 500ml - with Nitric Acid	<2			

ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/12/2024 7:34:57 PM

JOB DESCRIPTION

CCR DTE Sibley Quarry

JOB NUMBER

240-216225-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

Job Notes

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

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

Authorization

Generated
12/12/2024 7:34:57 PM

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

Table of Contents

Definitions/Glossary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Qualifiers

Metals

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

General Chemistry

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

Glossary

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

Job ID: 240-216225-1 Eurofins Cleveland

Job Narrative
240-216225-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt
The samples were received on 12/7/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.8°C.

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

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

Method Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

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

Protocol References:

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

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

Laboratory References:

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

Sample Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-216225-1	MW-102	Water	12/06/24 07:57	12/07/24 08:00
240-216225-2	MW-107	Water	12/05/24 09:42	12/07/24 08:00
240-216225-3	MW-108A	Water	12/05/24 11:08	12/07/24 08:00
240-216225-4	DUP-01	Water	12/05/24 00:00	12/07/24 08:00
240-216225-5	DUP-02	Water	12/05/24 00:00	12/07/24 08:00

Detection Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Client Sample ID: MW-102 — Lab Sample ID: 240-216225-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Calcium	250000		1000		ug/L	1		6020B	Total Recoverable
Iron	400		100		ug/L	1		6020B	Total Recoverable

Client Sample ID: MW-107 — Lab Sample ID: 240-216225-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Calcium	1300000		10000		ug/L	10		6020B	Total Recoverable
Iron	370		100		ug/L	1		6020B	Total Recoverable

Client Sample ID: MW-108A — Lab Sample ID: 240-216225-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	3200		40		mg/L	1		2540 C-2020	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-216225-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Calcium	1300000		10000		ug/L	10		6020B	Total Recoverable
Iron	550		100		ug/L	1		6020B	Total Recoverable

Client Sample ID: DUP-02 — Lab Sample ID: 240-216225-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	3600		40		mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Client Sample ID: MW-102

Date Collected: 12/06/24 07:57
Date Received: 12/07/24 08:00

Lab Sample ID: 240-216225-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	250000		1000		ug/L		12/09/24 14:00	12/10/24 23:34	1
Iron	400		100		ug/L		12/09/24 14:00	12/10/24 23:34	1

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Client Sample ID: MW-107

Date Collected: 12/05/24 09:42
Date Received: 12/07/24 08:00

Lab Sample ID: 240-216225-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1300000		10000		ug/L		12/09/24 14:00	12/11/24 19:09	10
Iron	370		100		ug/L		12/09/24 14:00	12/10/24 23:36	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Client Sample ID: MW-108A
Date Collected: 12/05/24 11:08
Date Received: 12/07/24 08:00

Lab Sample ID: 240-216225-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	3200		40		mg/L			12/11/24 10:33	1

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Client Sample ID: DUP-01

Date Collected: 12/05/24 00:00
Date Received: 12/07/24 08:00

Lab Sample ID: 240-216225-4

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1300000		10000		ug/L		12/09/24 14:00	12/11/24 19:17	10
Iron	550		100		ug/L		12/09/24 14:00	12/10/24 23:39	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

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

Lab Sample ID: 240-216225-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	3600		40		mg/L			12/11/24 10:33	1

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Method: 6020B - Metals (ICP/MS)

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

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1000	U	1000		ug/L		12/09/24 14:00	12/10/24 22:31	1
Iron	100	U	100		ug/L		12/09/24 14:00	12/10/24 22:31	1

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

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			25000	25200		ug/L		101	80 - 120		
Iron			5000	5200		ug/L		104	80 - 120		

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

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

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

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

Lab Sample ID: LCS 240-638381/2
Matrix: Water
Analysis Batch: 638381

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			242	230		mg/L		95	80 - 120		

QC Association Summary

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Metals

Prep Batch: 638086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216225-1	MW-102	Total Recoverable	Water	3005A	
240-216225-2	MW-107	Total Recoverable	Water	3005A	
240-216225-4	DUP-01	Total Recoverable	Water	3005A	
MB 240-638086/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-638086/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 638317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216225-1	MW-102	Total Recoverable	Water	6020B	638086
240-216225-2	MW-107	Total Recoverable	Water	6020B	638086
240-216225-4	DUP-01	Total Recoverable	Water	6020B	638086
MB 240-638086/1-A	Method Blank	Total Recoverable	Water	6020B	638086
LCS 240-638086/2-A	Lab Control Sample	Total Recoverable	Water	6020B	638086

Analysis Batch: 638439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216225-2	MW-107	Total Recoverable	Water	6020B	638086
240-216225-4	DUP-01	Total Recoverable	Water	6020B	638086

General Chemistry

Analysis Batch: 638381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216225-3	MW-108A	Total/NA	Water	2540 C-2020	
240-216225-5	DUP-02	Total/NA	Water	2540 C-2020	
MB 240-638381/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-638381/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: CCR DTE Sibley Quarry

Job ID: 240-216225-1

Client Sample ID: MW-102
Date Collected: 12/06/24 07:57
Date Received: 12/07/24 08:00

Lab Sample ID: 240-216225-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			638086	BN	EET CLE	12/09/24 14:00
Total Recoverable	Analysis	6020B		1	638317	AJC	EET CLE	12/10/24 23:34

Client Sample ID: MW-107
Date Collected: 12/05/24 09:42
Date Received: 12/07/24 08:00

Lab Sample ID: 240-216225-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			638086	BN	EET CLE	12/09/24 14:00
Total Recoverable	Analysis	6020B		1	638317	AJC	EET CLE	12/10/24 23:36
Total Recoverable	Prep	3005A			638086	BN	EET CLE	12/09/24 14:00
Total Recoverable	Analysis	6020B		10	638439	AJC	EET CLE	12/11/24 19:09

Client Sample ID: MW-108A
Date Collected: 12/05/24 11:08
Date Received: 12/07/24 08:00

Lab Sample ID: 240-216225-3
Matrix: Water

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

Client Sample ID: DUP-01
Date Collected: 12/05/24 00:00
Date Received: 12/07/24 08:00

Lab Sample ID: 240-216225-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			638086	BN	EET CLE	12/09/24 14:00
Total Recoverable	Analysis	6020B		1	638317	AJC	EET CLE	12/10/24 23:39
Total Recoverable	Prep	3005A			638086	BN	EET CLE	12/09/24 14:00
Total Recoverable	Analysis	6020B		10	638439	AJC	EET CLE	12/11/24 19:17

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

Lab Sample ID: 240-216225-5
Matrix: Water

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

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation.
Job ID: 240-216225-1
Project/Site: CCR DTE Sibley Quarry

Laboratory: Eurofins Cleveland

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

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

Eurofins Canton
180 S. Van Buren Ave

Barberton, OH 44203-3543
phone 330.497.9396 fax 330.497.0772

MICHIGAN
190

Chain of Custody Record

2.6/2.8

eurofins | Environment Testing America

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

Eurofins Environment Testing America

Client Contact	Project Manager: Vincent Buening	Site Contact:	Date: 12-5-24	COC No:
TRC Companies	Email: Vbuening@trccompanies.com	Lab Contact: Kris Brooks	Carrier:	1 of 1 COCs
1540 Eisenhower Place	Tel/Fax: 934-904-3302			TALS Project #:
Ann Arbor Michigan, 48108	Analysis Turnaround Time			Sampler:
734-971-7080 Phone	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
NA	TAT if different from Below ~~5 Days~~ 3 Days			Walk-in Client:
Project Name: DTE CCR Sibley Quarry Landfill	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Site: Michigan				Job / SDG No.:
P O # 214272				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020Total Iron (Fe)	2540C_Calcd - TDS	Sample Specific Notes:
MW-102	12-6-24	07:57	G	GW	1	N	N	X		
MW-107	12-5-24	09:42	G	GW	1	N	N	X		
MW-108A	12-5-24	11:08	G	GW	1	N	N		X	
DUP-01	12-5-24	—	G	GW	1	N	N	X		
DUP-02	12-5-24	—	G	GW	1	N	N		X	
								4	1	

240-216225 COC

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

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

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

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

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

Special Instructions/QC Requirements & Comments: TRC EDD Required

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by:	Company: TRC	Date/Time: 12-6-24 1538	Received by:	Company: EENA	Date/Time: 12/6/24
Relinquished by:	Company: EENA	Date/Time: 12/6/24	Received by:	Company: EENA	Date/Time: 12/7/24 8:00
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :**
Barberton Facility

Client TRC Site Name

Cooler Received on 12/7/24 Opened on 12/7/24

Cooler unpacked by: TF

FedEx. 1st Grd Exp UPS FAS (Waypoint) Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # E2 Foam Box Client Cooler Box Other

Packing material used. (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt +0.2 ☐ See Multiple Cooler Form

IR GUN # R21 (CF +0.1 °C) Observed Cooler Temp. 2.6 °C Corrected Cooler Temp 2.8 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes) No	
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes) No	NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)	
-Were tamper/custody seals intact and uncompromised?	Yes No	(NA)
3 Shippers' packing slip attached to the cooler(s)?	Yes (No)	
4. Did custody papers accompany the sample(s)?	(Yes) No	
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No	
7 Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes (No)	
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
11 Sufficient quantity received to perform indicated analyses?	(Yes) No	
12. Are these work share samples and all listed on the COC?	Yes (No)	
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	(Yes) No	NA pH Strip Lot# HC448976 450468
14 Were VOAs on the COC?	Yes (No)	
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes No	(NA)
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes (No)	
17 Was a LL Hg or Me Hg trip blank present?	Yes (No)	

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

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

19 SAMPLE CONDITION

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

Sample(s) were received in a broken container

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

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory

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

VOA Sample Preservation - Date/Time VOAs Frozen

12/7/2024

Login Container Summary Report

240-216225

12/12/2024

Temperature readings. _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-102	240-216225-A-1	Plastic 500ml - with Nitric Acid	<2			
MW-107	240-216225-A-2	Plastic 500ml - with Nitric Acid	<2			
MW-108A	240-216225-A-3	Plastic 500ml - unpreserved				
DUP-01	240-216225-A-4	Plastic 500ml - with Nitric Acid	<2			
DUP-02	240-216225-A-5	Plastic 500ml - unpreserved				

TRC

PROJECT NAME:	DTE CCR SQLF 1SA24
PROJECT NUMBER:	553931.0002.0000
PROJECT MANAGER:	Vincent Buening
SITE LOCATION:	803 Fort Street Trenton MI, 48183
DATES OF FIELDWORK:	4/8/2024 TO 4/9/2024
PURPOSE OF FIELDWORK:	Semiannual CCR Event
WORK PERFORMED BY:	Andrew Whaley, Elric Rinehart

4/9/24
SIGNED DATE

4/11/24
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME: DTE CCR SQLF 1SA24	DATE: 4/18/24	TIME ARRIVED: 0750
PROJECT NUMBER: 553931.0002.0000	AUTHOR: AW ER	TIME LEFT: 1530

WEATHER

TEMPERATURE: 50-70 °F WIND: 5-8 MPH VISIBILITY: Clear - Partly cloudy

WORK / SAMPLING PERFORMED

Check in w/ Site contact
Sitewide water levels
Calibrate YSI
Sample MW-105, MW-101, MW-102, MW-107, MW-103, and MW-106

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
~~No~~ Quarry Sump was under maintenence	Collect Sump sample on 4-9-2024 when in operation

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
Vincent Buening	TRC	Project Manager / Updates
Bob Haske	DTE	Site Contact: 734-716-3142 (Cell)

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	To Ground

4/9/24
SIGNED DATE

4/11/24
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME: DTE CCR SQLF 1SA24	DATE: 4/9/24	TIME ARRIVED: 0730
PROJECT NUMBER: 553931.0002.0000	AUTHOR: AW ER	TIME LEFT: 1100

WEATHER

TEMPERATURE: 49-73 °F WIND: 3-8 MPH VISIBILITY: Clear

WORK / SAMPLING PERFORMED

Check in with site contact - Calibrate YSI
Sample MW-108A, Quarry Sump, Quarry Discharge, and MW-104

Deliver LL Hg Samples to Pelab

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
Vincent Buening	TRC	Project Manager / Updates
Bob Haske	DTE	Site Contact: 734-716-3142 (Cell)

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	To Ground

SIGNED 4/9/24 DATE

CHECKED BY 4/11/24 DATE

TRC

EQUIPMENT SUMMARY

PROJECT NAME:	DTE CCR SQLF 1SA24	SAMPLER NAME:	Andrew Whaley, Elric Rinehart
PROJECT NO.:	553931.0002.0000		

WATER LEVEL MEASUREMENTS COLLECTED WITH:

HERON DIPPER-T	PROJECT DEDICATED
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

PRODUCT LEVEL MEASUREMENTS COLLECTED WITH:

NA	NA
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

DEPTH TO BOTTOM OF WELL MEASUREMENTS COLLECTED WITH:

NA	NA
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

PURGING METHOD

BLADDER PUMP (DEDICATED)	PROJECT DEDICATED
NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)

SAMPLING METHOD

BLADDER PUMP (DEDICATED)	PROJECT DEDICATED
NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)
NA	NA
NAME AND MODEL OF FILTERATION DEVICE	FILTER TYPE AND SIZE
DEDICATED POLY TUBING	☑ LOW-FLOW SAMPLING EVENT
TUBING TYPE	

PURGE WATER DISPOSAL METHOD

☑ GROUND ☐ DRUM ☐ POTW ☐ POLYTANK ☐ OTHER _____

DECONTAMINATION AND FIELD BLANK WATER SOURCE

STORE BOUGHT	STORE BOUGHT
POTABLE WATER SOURCE	DI WATER SOURCE
[signature] 4/9/24	[signature] 4/4/24
SIGNED DATE	CHECKED BY DATE

TRC

WATER LEVEL DATA

PROJECT NAME:	DTE CCR SQLF 1SA24	DATE 4/8/24
PROJECT NUMBER:	553931.0002.0000	AUTHOR: AW ER

WELL LOCATION	TIME	REFERENCE	DEPTH TO WATER (FEET)	DEPTH TO BOTTOM (FEET)	DEPTH TO PRODUCT (FEET)	WATER ELEVATION
MW-104	0817	TOC	118.50	NA	NA	NM
MW-103	0830	TOC	153.98	NA	NA	NM
MW-106	0820	TOC	113.80	NA	NA	NM
MW-105	0900	TOC	19.63	NA	NA	NM
MW-101	0855	TOC	163.80	NA	NA	NM
MW-102	0847	TOC	222.64	NA	NA	NM
MW-107	0838	TOC	155.20	NA	NA	NM
MW-108A	0757	TOC	51.43	NA	NA	NM

ALL WATER LEVELS MUST INCLUDE REFERENCE POINT AND TAPE CORRECTION FACTOR (E.G., 1.1 + 0.00 T/PVC).

SIGNED 4/9/24 DATE

CHECKED 4/11/24 DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DTE CCR SQLF 1SA24	MODEL:	YSI Pro Dss	SAMPLER:	AW ER
PROJECT NO.:	553931.0002.0000	SERIAL #:	PROJECT	DATE:	4/18/24

PH CALIBRATION CHECK

pH 7 (LOT #): G4332 (EXP. DATE): NOV/25 POST-CAL. READING / STANDARD	pH (4) 10 (LOT #): G4114 (EXP. DATE): NOV/25 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.02 / 7.02	4.00 / 4.00	☒ WITHIN RANGE	0905
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 4GA0971 (EXP. DATE): Jan/25 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1260 / 1260	19.0	☒ WITHIN RANGE	0917
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 23J1003/2 (EXP. DATE): Sep.24 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
233.5 / 233.5	17.8	☒ WITHIN RANGE	0917
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
9.75 / 9.75	15.2	☒ WITHIN RANGE	0920
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): 21GP0074 (EXP. DATE): 9/24 POST-CAL. READING / STANDARD	(LOT #): 21G1013 (EXP. DATE): 7/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.00 / 0.00	10.00 / 10.00	☒ WITHIN RANGE	0906
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES (1)
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

Separate Turbidity Meter LaMotte 2020t

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED _____ DATE 4/19/24

CHECKED BY _____ DATE 4/4/24

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DTE CCR SQLF 1SA24	MODEL:	YSI Pro DSS	SAMPLER:	AW ER
PROJECT NO.:	553931.0002.0000	SERIAL #:	PROJECT	DATE:	4/9/24

PH CALIBRATION CHECK

pH 7 (LOT #): 36K 1332 (EXP. DATE): NOV/25 POST-CAL. READING / STANDARD	pH (4) 10 (LOT #): 36K1164 (EXP. DATE): NOV/25 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.04 / 7.04	4.00 / 4.00	☒ WITHIN RANGE	0750
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 46A0971 (EXP. DATE): Jan/25 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1220 / 1220	17.3	☒ WITHIN RANGE	0753
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 23J1003112 (EXP. DATE): 9/28 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
232.1 / 232.1	17.0	☒ WITHIN RANGE	0756
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
9.49 / 9.49	16.6	☒ WITHIN RANGE	0758
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): 21020074 (EXP. DATE): 9/22 POST-CAL. READING / STANDARD	CALIBRATION READING (NTU) (LOT #): 21040103 (EXP. DATE): 7/22 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.00 / 0.00	10.0 / 10.0	☒ WITHIN RANGE	0800
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES [1]
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

Separate Turbidity Meter LaMotte 2020t

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED 4/9/24 DATE

CHECKED BY 4/4/24 DATE

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 1SA24	PREPARED			CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: AW ER	DATE: 4/18/24		BY: ER	DATE: 4/4/24

SAMPLE ID: MW-105	WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6"	☐ OTHER			
WELL MATERIAL:	☐ PVC	☑ SS	☐ IRON	☐ GALVANIZED STEEL	☐ OTHER
SAMPLE TYPE:	☑ GW	☐ WW	☐ SW	☐ DI	☐ LEACHATE ☐ OTHER

PURGING	TIME: 0924	DATE: 4/18/24	SAMPLE	TIME: 0944	DATE: 4/18/24
PURGE METHOD:	☑ PUMP	BLADDER PUMP (DEDICATED)	PH: 6.76 SU	CONDUCTIVITY: 8022	umhos/cm
	☐ BAILER		ORP: 41.5 mV	DO: 1.45	mg/L
DEPTH TO WATER: 19.63 T/ PVC			TURBIDITY: 1.4 NTU		
DEPTH TO BOTTOM NM T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM	☐ LITERS	☐ GALLONS	TEMPERATURE: 11.6 °C	OTHER: --	
VOLUME REMOVED: 4.0	☒ LITERS	☐ GALLONS	COLOR: Clear	ODOR: None	
COLOR: Clear	ODOR: None		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD	☒ DUP- 01	
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS: LL Hg collected		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0924	200	6.04	8103	111.4	2.80	3.24	11.7	19.70	INITIAL
929	↓	6.59	7852	31.4	1.52	2.71	11.6	↓	1.0
934		6.67	7995	43.6	1.48	2.21	11.6		2.0
939		6.73	8025	45.0	1.45	1.66	11.6		3.0
944		6.76	8022	41.5	1.45	1.4	11.6		4.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED	PRESERVATIVE CODES A - NONE	B - HNO3	C - H2SO4	D - NaOH	E - HCL	F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
2	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	4-19-24	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	A. Wlund	DATE SIGNED:	4-9-24

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 1SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: AW ER	DATE: 4/8/24	BY: AW	DATE: 4-9-24

SAMPLE ID: MW-101 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1025	DATE: 4/8/24	SAMPLE	TIME: 1050	DATE: 4/8/24
PURGE METHOD:	☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER		PH: 6.98 SU	CONDUCTIVITY: 1540	umhos/cm
			ORP: -27.2 mV	DO: 1.46	mg/L
DEPTH TO WATER:	163.80 T/ PVC		TURBIDITY: 1.58 NTU		
DEPTH TO BOTTOM	NM T/ PVC		☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	NM ☐ LITERS ☐ GALLONS		TEMPERATURE: 12.2 °C	OTHER: --	
VOLUME REMOVED:	5 ☒ LITERS ☐ GALLONS		COLOR: Clear	ODOR: None	
COLOR:	Cloudy ODOR: None		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD:	☑ GROUND ☐ DRUM ☐ OTHER		COMMENTS: LL Hg collected		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1025	200	6.51	1593	-14.1	3.01	17.7	12.4	163.80	INITIAL
1030		6.55	1480	-17.2	1.58	2.79	12.1		1.0
1035		6.75	1509	-18.0	1.5	1.81	12.1		2.0
1040		6.92	1526	-20.6	1.49	1.07	12.1		3.6
1045		6.97	1539	-27.4	1.46	0.47	12.1		4.0
1050		6.98	1540	-27.2	1.46	1.58	12.2		5.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	4-10-24	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	4/11/24

TRC WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 1SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: AW ER	DATE: 4/18/24	BY: EIR	DATE: 4/4/24

SAMPLE ID: MW-102 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1140	DATE: 4/18/24	SAMPLE	TIME: 1205	DATE: 4/18/24
PURGE METHOD:	☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER		PH: 6.91 SU	CONDUCTIVITY: 1426 umhos/cm	
			ORP: 57.2 mV	DO: 8.04 mg/L	
DEPTH TO WATER: 222.64 T/ PVC			TURBIDITY: 2.07 NTU		
DEPTH TO BOTTOM NM T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 12.2 °C	OTHER: --	
VOLUME REMOVED: 5.0 ☒ LITERS ☐ GALLONS			COLOR: Clear	ODOR: None	
COLOR: Clear	ODOR: None		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY AW ☒ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS: LL Hg collected		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1140	200	7.30	1536	33.1	9.00	21.3	11.9	222.64	INITIAL
1145	↓	6.81	1428	38.7	7.40	10.13	12.3	↓	1.0
1150		6.87	1419	45.4	7.96	6.59	12.2		2.0
1155		6.90	1423	49.9	8.02	4.17	12.2		3.0
1200		6.91	1423	52.5	8.04	1.62	12.2		4.0
1205		6.91	1426	57.2	8.04	2.07	12.2		5.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	4/10/24	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	A. Wlusf	DATE SIGNED:	4/9/24

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 1SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: AW ER	DATE: 4/18/24	BY: EL	DATE: 4/11/24

SAMPLE ID: MW-107 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1235	DATE: 4/18/24	SAMPLE	TIME: 1255	DATE: 4/18/24
PURGE METHOD:	☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER		PH: 6.86 SU	CONDUCTIVITY: 35776 umhos/cm	
			ORP: -268.6 mV	DO: 1.25 mg/L	
DEPTH TO WATER:	155.20 T/ PVC		TURBIDITY: 2.51 NTU		
DEPTH TO BOTTOM	NM T/ PVC		☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	NM ☐ LITERS ☐ GALLONS		TEMPERATURE: 12.1 °C	OTHER: --	
VOLUME REMOVED:	6.0 ☒ LITERS ☐ GALLONS		COLOR: Clear	ODOR: Strong	
COLOR:	Clear ODOR: Strong		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD:	☑ GROUND ☐ DRUM ☐ OTHER		COMMENTS: LL Hg collected		

TIME	PURGE RATE (ML/MIN)	PH (SU) 6.5-7.6	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU) 1.36 AW	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1235	~~300~~ 200	6.18	36727	-147.7	5.40	~~12.9~~ AW	12.7	~~1.36~~ AW	INITIAL
1240	↓	6.58	35932	-159.4	1.3	1.17	12.3	155.20	1.5
1245		6.83	35626	-249.7	1.25	1.12	12.1	↓	3.0
1250		6.85	35513	-261.6	1.25	2.57	12.2		4.5
1255	↓	6.86	35776	-268.6	1.25	2.51	12.1	↓	6.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 10 % ORP: +/- NA D.O.: +/- NA TURB: +/- 10 % or </= 5 TEMP.: +/- 0.5°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	4/10/24	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	A. Wlusf	DATE SIGNED:	4/9/24

WATER SAMPLE LOG

PROJECT NAME: DTE CCR SQLF 1SA24	PREPARED	CHECKED
PROJECT NUMBER: 553931.0002.0000	BY: AW ER DATE: 4/8/24	BY: ER DATE: 4/4/24

SAMPLE ID: MW-103 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1318	DATE: 4/8/24	SAMPLE	TIME: 1338	DATE: 4/8/24
PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER			PH: 7.05 SU	CONDUCTIVITY: 2430 umhos/cm	
			ORP: -272.3 mV	DO: 1.55 mg/L	
DEPTH TO WATER: 153.98 T/ PVC			TURBIDITY: 0.93 NTU		
DEPTH TO BOTTOM NM T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 12.3 °C	OTHER: --	
VOLUME REMOVED: 4.0 ☒ LITERS ☐ GALLONS			COLOR: Clear	ODOR: Moderate	
COLOR: Clear	ODOR: Slight		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS: LLHg		

TIME	PURGE RATE (ML/MIN)	PH (6.7-7.6 SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1318	200	7.17	2966	-120.9	4.12	0.00	13.3	153.98	INITIAL
1323		6.93	2447	-219.9	1.5	1.09	12.3		1.0
1328		7.06	2437	-252.7	1.56	1.44	12.2		2.0
1333		7.06	2430	-266.3	1.54	1.25	12.2		3.0
1338		7.05	2430	-272.3	1.55	0.93	12.3		4.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 4/10/24	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: A. Wilmoth	DATE SIGNED: 4/9/24

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 1SA24	PREPARED			CHECKED		
PROJECT NUMBER:	553931.0002.0000	BY: AW ER	DATE: 4/8/24		BY: ER	DATE: 4/11/24	

SAMPLE ID: MW-106 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1402	DATE: 4/8/24	SAMPLE	TIME: 1422	DATE: 4/8/24
PURGE METHOD:	☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER		PH: 7.03 SU	CONDUCTIVITY: 2328 umhos/cm	
			ORP: -277.1 mV	DO: 1.52 mg/L	
DEPTH TO WATER: 113.80 T/ PVC			TURBIDITY: 0.42 NTU		
DEPTH TO BOTTOM NM T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 12.6 °C	OTHER: --	
VOLUME REMOVED 6.0 ☒ LITERS ☐ GALLONS			COLOR: Clear	ODOR: Moderate	
COLOR: Clear ODOR: None			FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1402	~~500~~ 200	6.82	2385	-23.8	3.62	0.39	13.4	112.80	INITIAL
1407	↓	6.83	2335	-127.9	1.43	0.04	12.9	↓	1.5
1412		7.03	2337	-243.3	1.51	0.68	12.7		3.0
1417		7.04	2337	-263.8	1.52	0.86	12.5		4.5
1422	↓	7.03	2328	-277.1	1.52	0.42	12.6	↓	6.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	4/10/24	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	A. Wlud	DATE SIGNED:	4/9/24

WATER SAMPLE LOG

PROJECT NAME: DTE CCR SQLF 1SA24	PREPARED		CHECKED	
PROJECT NUMBER: 553931.0002.0000	BY: AW ER	DATE: 4/4/24	BY: ER	DATE: 4/4/24

SAMPLE ID: MW-108A	WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER			
WELL MATERIAL:	☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL		☐ OTHER	
SAMPLE TYPE:	☑ GW ☐ WW ☐ SW ☐ DI	☐ LEACHATE	☐ OTHER	

PURGING	TIME: 0805	DATE: 4/9/24	SAMPLE	TIME: 0830	DATE: 4/9/24
PURGE METHOD:	☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER		PH: 6.79 SU	CONDUCTIVITY: 4422 umhos/cm	
			ORP: -44.7 mV	DO: 1.92 mg/L	
DEPTH TO WATER: 51.43 T/ PVC			TURBIDITY: 0.79 NTU		
DEPTH TO BOTTOM NM T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 11.4 °C	OTHER: --	
VOLUME REMOVED: 7.5 ☒ LITERS ☐ GALLONS			COLOR: Clear	ODOR: None	
COLOR: Clear ODOR: None			FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS: LL Hg collected		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0805	300	5.66	4467	108.3	4.29	11.6	11.7	51.43	INITIAL
0810	↓	6.03	4576	31.7	2.07	0.87	11.4	↓	1.5
0815		6.60	4460	-36.5	1.98	0.72	11.4		3.0
0820		6.74	4414	-48.0	1.96	0.75	11.4		4.5
0825		6.78	4414	-47.4	1.94	0.86	11.4		6.0
0830	↓	6.79	4422	-44.7	1.92	0.79	11.4	↓	7.5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED		PRESERVATIVE CODES A - NONE	B - HNO3	C - H2SO4	D - NaOH	E - HCL	F -		
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 4/10/24	AIRBILL NUMBER: —			
COC NUMBER: —	SIGNATURE: A. Vlad	DATE SIGNED: 4/9/24			

TRC

WATER SAMPLE LOG

PROJECT NAME: DTE CCR SQLF 1SA24	PREPARED	CHECKED
PROJECT NUMBER: 553931.0002.0000	BY: AW ER DATE: 4/9/24	BY: EL DATE: 4/11/24

SAMPLE ID: Quarry Sump | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME:	DATE: 4/9/24

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: _____ T/ PVC

DEPTH TO BOTTOM _____ T/ PVC

WELL VOLUME: _____ ☐ LITERS ☐ GALLONS

VOLUME REMOVED: _____ ☐ LITERS ☐ GALLONS

COLOR: _____ ODOR: _____

TURBIDITY

☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 0910	DATE: 4/9/24

PH: 7.05 SU | CONDUCTIVITY: 8665 umhos/cm

ORP: -92.7 mV | DO: 7.69 mg/L

TURBIDITY: Over NTU

☐ NONE ☐ SLIGHT ☐ MODERATE ☒ VERY

TEMPERATURE: 12.7 °C | OTHER: --

COLOR: Very Cloudy | ODOR: Moderate

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP- _____

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
910	NM	7.05	8665	-92.7	7.69	Over	12.7	NA	INITIAL

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 10 % ORP: +/- NA D.O.: +/- NA TURB: +/- 10 % or </= 5 TEMP.: +/- 0.5°C

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 4/10/24	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: A. Wlusz	DATE SIGNED: 4/9/24

TRC

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 1SA24	PREPARED			CHECKED		
PROJECT NUMBER:	553931.0002.0000	BY:	AW ER	DATE: 4/9/24	BY:	EIL	DATE: 4/11/24

SAMPLE ID: Quarry Discharge | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME:	DATE:

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: _____ T/ PVC

DEPTH TO BOTTOM _____ T/ PVC

WELL VOLUME: _____ ☐ LITERS ☐ GALLONS

VOLUME REMOVED: _____ ☐ LITERS ☐ GALLONS

COLOR: _____ ODOR: _____

TURBIDITY

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 0940	DATE: 4/9/24

PH: 7.55 SU | CONDUCTIVITY: 8890 umhos/cm

ORP: 63.0 mV | DO: 11.49 mg/L

TURBIDITY: 31.2 NTU

☐ NONE ☐ SLIGHT ☒ MODERATE ☐ VERY

TEMPERATURE: 12.8 °C | OTHER: --

COLOR: Very cloudy | ODOR: Moderate

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP- _____

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0940	UM	7.55	8890	63.0	11.49	31.2	12.8	UM	INITIAL

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	courier	DATE SHIPPED:	4/10/24	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	A. Wlyk	DATE SIGNED:	4/9/24

TRC WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 1SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: AW ER	DATE: 4/9/24	BY: EIC	DATE: 4/11/24

SAMPLE ID: MW-104 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1002	DATE: 4/9/24	SAMPLE	TIME: 1017	DATE: 4/9/24

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 118.50 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 4.5 ☒ LITERS ☐ GALLONS

COLOR: Clear ODOR: None

TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: 7.03 SU | CONDUCTIVITY: 2302 umhos/cm

ORP: -189.4 mV | DO: 1.86 mg/L

TURBIDITY: 1.52 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 12.3 °C | OTHER: --

COLOR: Clear | ODOR: None

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP- _____

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU) 6.5-7.9	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1002	300	7.28	2370	-5.2	10.70	9.13	12.8	118.50	INITIAL
1007	↓	6.95	2291	-123.6	1.94	1.38	12.3	↓	1.5
1012		7.03	2289	-170.6	1.87	1.60	12.2		3.0
1017	↓	7.03	2302	-189.4	1.86	1.52	12.3	↓	4.5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 4/10/24	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: A. Wlud	DATE SIGNED: 4/9/24

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

MICHIGAN 190

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: A. Whaley, E. Rinehart	Lab PM: Brooks, Kris M	Carrier Tracking No(s):	COC No: 240-119185-31882.1
Client Contact: Jacob Krenz	Phone: 734-210-9259	E-Mail: Kris.Brooks@et.eurofinsus.com	State of Origin: MI	Page: Page 1 of 1
Company: TRC Environmental Corporation.	PWSID:			Job #:
Address: 1540 Eisenhower Place	Due Date Requested: Standard			
City: Ann Arbor	TAT Requested (days): Standard			
State, Zip: MI, 48108-7080	Compliance Project: Δ Yes Δ No			
Phone: 313-971-7080(Tel) 313-971-9022(Fax)	PO #: ~~109488 - 2023~~ ~~55393.0002~~			
Email: JKrenz@trccompanies.com	WO #: ~~518728.0002~~ 55393.0002			
Project Name: CCR DTE Sibley Quarry	Project #: 24016805			
Site: Michigan	SSOW#:			

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Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd - TDS	6010B, 6020	9056A_28D - Chloride, Fluoride and Sulfate											Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N												
MW-101	4/18/24	1050	G	Water	N	N	X	X	X											3	
MW-102	4/18/24	1205	G	Water	N	N	X	X	X											3	
MW-103	4/18/24	1338	G	Water	N	N	X	X	X											3	
MW-104	4/19/24	1017	G	Water	N	N	X	X	X											3	
MW-105	4/18/24	0944	G	Water	N	N	X	X	X											3	
MW-106	4/18/24	1422	G	Water	N	N	X	X	X											3	
MW-107	4/18/24	1255	G	Water	N	N	X	X	X											3	
MW-108A	4/19/24	0830	G	Water	N	N	X	X	X											3	
QUARRY SUMP	4/19/24	0910	G	Water	N	N	X	X	X											3	
QUARRY DISHCARGE	4/19/24	0940	G	Water	N	N	X	X	X											3	
DUP-01	4/18/24	—	G	Water	N	N	X	X	X											3	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 4/19/24 1220	Company: TRC	Received by: / Date/Time: / Company
Relinquished by:	Date/Time: 4/10/24 1242PM	Company: TRC	Received by: / Date/Time: / Company
Relinquished by:	Date/Time:	Company	Received by: / Date/Time: / Company

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

TRC

PROJECT NAME:	DTE CCR SQLF 2SA24
PROJECT NUMBER:	553931.0002.0000
PROJECT MANAGER:	Vincent Buening
SITE LOCATION:	803 Fort Street Trenton MI, 48183
DATES OF FIELDWORK:	10/7/2024 TO 10/8/2024
PURPOSE OF FIELDWORK:	Semiannual CCR Event
WORK PERFORMED BY:	Javier Jasso

10/9/24
SIGNED DATE

10/9/24
CHECKED BY DATE

REVISED 04/2019

TRC

GENERAL NOTES

PROJECT NAME:	DTE CCR SQLF 2SA24	DATE:	10/7/24	TIME ARRIVED:	Office
PROJECT NUMBER:	553931.0002.0000	AUTHOR:	JJ	TIME LEFT:	1400

WEATHER		
TEMPERATURE: 56 °F	WIND: 10 MPH	VISIBILITY: Overcast

WORK / SAMPLING PERFORMED

Water levels
Wells Sampled = MW 100A, Dup#01, MW-104, MW-101, MW 107
MW-105, MW-103

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
Vincent Buening	TRC	Project Manager / Updates
Bob Haske	DTE	Site Contact: 734-716-3142 (Cell)

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	To Ground

10/8/24
SIGNED DATE

10/9/24
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME:	DTE CCR SQLF 2SA24	DATE: 10/8/24	TIME ARRIVED: 0830
PROJECT NUMBER:	553931.0002.0000	AUTHOR: JJ	TIME LEFT: 0950

WEATHER		
TEMPERATURE: 44 °F	WIND: 10 MPH	VISIBILITY: Over Cast

WORK / SAMPLING PERFORMED

Wells Sample MW-106, MW 102 Quarry Sump
Quarry Discharge

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
Vincent Buening	TRC	Project Manager / Updates
Bob Haske	DTE	Site Contact: 734-716-3142 (Cell)

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	To Ground

10/9/24
SIGNED DATE

10/9/24
CHECKED BY DATE

TRC

EQUIPMENT SUMMARY

PROJECT NAME:	DTE CCR SQLF 2SA24	SAMPLER NAME:	Javier Jasso
PROJECT NO.:	553931.0002.0000		

WATER LEVEL MEASUREMENTS COLLECTED WITH:

NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)
HERON DIPPER-T	PROJECT DEDICATED

PRODUCT LEVEL MEASUREMENTS COLLECTED WITH:

NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)
NA	NA

DEPTH TO BOTTOM OF WELL MEASUREMENTS COLLECTED WITH:

NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)
NA	NA

PURGING METHOD

NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)
BLADDER PUMP (DEDICATED)	PROJECT DEDICATED

SAMPLING METHOD

NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)
BLADDER PUMP (DEDICATED)	PROJECT DEDICATED
NAME AND MODEL OF FILTERATION DEVICE	FILTER TYPE AND SIZE
NA	NA
TUBING TYPE	☑ LOW-FLOW SAMPLING EVENT
DEDICATED POLY TUBING	

PURGE WATER DISPOSAL METHOD

☑ GROUND ☐ DRUM ☐ POTW ☐ POLYTANK ☐ OTHER _____

DECONTAMINATION AND FIELD BLANK WATER SOURCE

POTABLE WATER SOURCE	DI WATER SOURCE
STORE BOUGHT	STORE BOUGHT
SIGNED	CHECKED BY
10/9/24 DATE	10/9/24 DATE

REVISED 04/2019

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	MODEL:	YSI ProDSS	SAMPLER:	JJ
PROJECT NO.:	553931.0002.0000	SERIAL #:	TRC A2	DATE:	10/7/24

PH CALIBRATION CHECK

pH 7 (LOT #): 26J0916 (EXP. DATE): 10/25 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 1660 1317 (EXP. DATE): 4/26 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
700 / 700	400 / 400	☒ WITHIN RANGE	0820
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 416 E07694 (EXP. DATE): 5/25 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1309 / 1309	20	☒ WITHIN RANGE	0820
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 23J1003172 (EXP. DATE): 9/26 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
230 / 230	20	☒ WITHIN RANGE	0820
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
9.21 / 9.21	18	☐ WITHIN RANGE	0822
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): A80917 (EXP. DATE): 4/25 POST-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0 / 0	/	☒ WITHIN RANGE	0820
100 / 100	/	☒ WITHIN RANGE	0820
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION
(LOT #):
(EXP. DATE):

☑ STANDARD SOLUTION (S)
LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS		CALIBRATION RANGES (1)	
☐	pH	pH:	+/- 0.2 S.U.
☐	COND	COND:	+/- 1% OF CAL. STANDARD
☐	ORP	ORP:	+/- 25 mV
☐	D.O.	D.O.:	VARIES
☐	TURB	TURB:	+/- 5% OF CAL. STANDARD
☐	_____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER	
☐	_____		

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED [signature] 10/9/24 DATE

CHECKED BY [signature] 10/9/24 DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	MODEL: YSI ProDSS	SAMPLER: JJ
PROJECT NO.:	553931.0002.0000	SERIAL #: TRC A2	DATE: 10/8/24

PH CALIBRATION CHECK

pH 7 (LOT #): 30J5916 (EXP. DATE): 10/25 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 460D137 (EXP. DATE): 4/25 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☑ WITHIN RANGE	0635
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 460E0164 (EXP. DATE): 6/25 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1304 / 1376	20	☐ WITHIN RANGE	0635
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 22J1003127 (EXP. DATE): 4/25 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
238 / 238	20	☑ WITHIN RANGE	0637
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
9.01 / 9.01	18	☑ WITHIN RANGE	0641
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): A20C47 (EXP. DATE): 4/25 POST-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0 / 0	/	☐ WITHIN RANGE	0637
100 / 100	/	☐ WITHIN RANGE	0637
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS		CALIBRATION RANGES (1)	
☐	pH	pH:	+/- 0.2 S.U.
☐	COND	COND:	+/- 1% OF CAL. STANDARD
☐	ORP	ORP:	+/- 25 mV
☐	D.O.	D.O.:	VARIES
☐	TURB	TURB:	+/- 5% OF CAL. STANDARD
☐	_____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER	
☐	_____		

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED 10/9/24 DATE

CHECKED BY 10/9/24 DATE

TRC

WATER LEVEL DATA

PROJECT NAME:	DTE CCR SQLF 2SA24	DATE:	10/7/2021
PROJECT NUMBER:	553931.0002.0000	AUTHOR:	JJ

WELL LOCATION	TIME	REFERENCE	DEPTH TO WATER (FEET)	DEPTH TO BOTTOM (FEET)	DEPTH TO PRODUCT (FEET)	WATER ELEVATION
MW-104	0710		118.10			
MW-103	0730		154.2			
MW-106	0737		114.00			
MW-105	0805		23.10			
MW-101	0905		103.40			
MW-102	~~0800~~					
MW-107	0746		191.10			
MW-108A	0845		52.50			
MW-102	0807		220.90			

ALL WATER LEVELS MUST INCLUDE REFERENCE POINT AND TAPE CORRECTION FACTOR
(E.G., 1.1 + 0.00 T/PVC).

SIGNED 10/9/2021 DATE

CHECKED 10-9-21 DATE

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: JJ	DATE: 10/4/24	BY:	DATE: 10/9/24

SAMPLE ID: MW 108 A — WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0905	DATE: 10/7/24	SAMPLE	TIME: 0930	DATE: 10/7/24
PURGE METHOD: ☑ PUMP ☐ BAILER	BLADDER PUMP (DEDICATED)		PH: 6.95 SU	CONDUCTIVITY: 6336 umhos/cm	
			ORP: -215 mV	DO: 0.76 mg/L	
DEPTH TO WATER: 52.05 T/ PVC			TURBIDITY: 7.0 NTU		
DEPTH TO BOTTOM ____ T/ PVC			☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: N/A ☐ LITERS ☐ GALLONS			TEMPERATURE: 12.1 °C	OTHER: --	
VOLUME REMOVED: 5 ☑ LITERS ☐ GALLONS			COLOR: Clear	ODOR:	
COLOR: Clear	ODOR: Slight		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY ☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
			QC SAMPLE: ☐ MS/MSD	☒ DUP- 101	
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0905	200	6.96	6303	230	9.31	5.0	14.3	52.05 T	INITIAL
0910		6.72	6336	-205	1.35	5.0	12.3	5305 T	1
0915		6.95	6315	-220	0.96	7.0	12.1	5305 T	2
0920		6.95	6314	-215	0.86	7.0	12.1	5305 T	3
0925		6.95	6337	-215	0.80	7.0	12.1	5305 T	4
0930		6.95	6336	-215	0.76	7.0	12.1	5305 T	5
0935								5305 T	6

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
2	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
2	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	10/9/24

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: JJ	DATE: 10/8/24	BY: CA	DATE: 10/9/24

SAMPLE ID: MW-104 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0945	DATE: 10/7/24	SAMPLE	TIME: 1030	DATE: 10/7/24

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 118.4 T/ PVC

DEPTH TO BOTTOM _____ T/ PVC

WELL VOLUME: NA ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 5 ☑ LITERS ☐ GALLONS

COLOR: clear ODOR: none

TURBIDITY ☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: 7.30 SU | CONDUCTIVITY: 3203 umhos/cm

ORP: -320 mV | DO: 0.60 mg/L

TURBIDITY: 0.65 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 12.4 °C | OTHER: --

COLOR: Clear | ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP- _____

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0945	200	7.66	3215	-164	10.0	6.5	15.8	118	INITIAL
1000		6.91	3226	-212	6.50	4.0	13.0	118	1
1005		7.14	3209	-285	1.00	1.0	12.4	118	2
1010		7.30	3201	-320	076	075	12.4	118	3
1015		7.29	3203	-320	067	075	12.5	118	4
1020		7.30	3203	-320	066	065	12.3	118	5
1025								118	6

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	10/9/24

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: JJ	DATE: 10/9/24	BY: EL	DATE: 10/9/24

SAMPLE ID: MW 101 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1043	DATE: 10/7/24	SAMPLE	TIME: 1106	DATE: 10/7/24
PURGE METHOD:	☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER		PH: 7.39 SU	CONDUCTIVITY: 2106 umhos/cm	
			ORP: -259 mV	DO: 0.71 mg/L	
DEPTH TO WATER	10.46 T/ PVC		TURBIDITY: 7.0 NTU		
DEPTH TO BOTTOM	_____ T/ PVC		☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	NM ☐ LITERS ☐ GALLONS		TEMPERATURE: 12.4 °C	OTHER: --	
VOLUME REMOVED:	5 ☑ LITERS ☐ GALLONS		COLOR: Clear	ODOR:	
COLOR:	Clear ODOR: Slight		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP- _____		
DISPOSAL METHOD:	☑ GROUND ☐ DRUM ☐ OTHER		COMMENTS: water bubbler malfunctioning		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1043	200	7.57	2161	-203	8.5	5.0	12.6	10.46	INITIAL
1048		7.46	2124	-201	1.00	4.3	12.6		1
1053		7.43	2113	-245	0.87	6.7	12.4		2
1058		7.39	2110	-259	0.81	7.0	12.4		3
1103		7.39	2110	-259	0.75	7.0	12.3		4
1108		7.39	2106	-259	0.75	7.0	12.4		5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	10/9/24

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: JJ	DATE: 10/4/24	BY: EH	DATE: 10/9/24

SAMPLE ID: MW-107 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1134	DATE: 10/7/24	SAMPLE	TIME: 1204	DATE: 10/7/24
PURGE METHOD: ☑ PUMP ☐ BAILER	BLADDER PUMP (DEDICATED)		PH: 7.15 SU	CONDUCTIVITY: 48995 umhos/cm	
			ORP: -340 mV	DO: 0.50 mg/L	
DEPTH TO WATER: 151.16 T/ PVC			TURBIDITY: 3.2 NTU		
DEPTH TO BOTTOM _____ T/ PVC			☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 13.4 °C	OTHER: --	
VOLUME REMOVED: 12 ☑ LITERS ☐ GALLONS			COLOR: Clear	ODOR: yes	
COLOR: Clear	ODOR: none		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP- _____		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS: water level meter malfunctioning		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1134	200	7.67	49343	-118	10.0	4.3	12.4	151.16	INITIAL
1139		6.94	50370	-259	2.48	2.9	13.4		1
1144		6.77	50132	-290	1.00	2.7	13.5		2
1149		6.96	49400	-330	0.61	3.0	13.4		3
1154		7.15	49000	-340	0.54	3.2	13.4		4
1159		7.15	49000	-340	0.52	3.2	13.4		5
1204		7.15	48995	-340	0.50	3.2	13.4		6

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 10 % ORP: +/- NA D.O.: +/- NA TURB: +/- 10 % or </= 5 TEMP.: +/- 0.5°C

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED: 10/9/24

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: JJ	DATE: 11/4/24	BY: EK	DATE: 10/9/24

SAMPLE ID: MW-105 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1221	DATE: 10/7/24	SAMPLE	TIME: 1251	DATE: 10/7/24

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

PH: 7.40 SU | CONDUCTIVITY: 11905 umhos/cm

ORP: 294.9 mV | DO: 0.58 mg/L

DEPTH TO WATER: 23.10 T/ PVC | TURBIDITY: 2.5 NTU

DEPTH TO BOTTOM _____ T/ PVC | ☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

WELL VOLUME: _____ ☐ LITERS ☐ GALLONS | TEMPERATURE: 14.0 °C | OTHER: --

VOLUME REMOVED: 6 ☑ LITERS ☐ GALLONS | COLOR: Clear | ODOR: none

COLOR: Clear ODOR: Slight | FILTRATE (0.45 um) ☐ YES ☑ NO

TURBIDITY | FILTRATE COLOR: NA | FILTRATE ODOR: NA

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY | QC SAMPLE: ☐ MS/MSD ☐ DUP- _____

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER | COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1221	200	6.91	12045	-231	9.2	5.1	16.3	22.5	INITIAL
1226		7.64	11000	-264	1.61	3.4	14.0	2260	1
1231		7.44	11784	-305	065	2.8	14.0	2260	2
1236		7.40	11695	-280	062	2.5	14.0	2260	3
1241		7.40	11915	-255	058	2.4	14.0	2260	4
1246		7.40	11900	-255	058	2.5	14.0	2260	5
1251		7.40	11905	-294.9	056	2.5	14.0	2260	6

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
6	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	10/9/24

TRC WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: JJ	DATE: 10/1/24	BY: EPL	DATE: 10/9/24

SAMPLE ID: MW-103 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1321	DATE: 10/7/24	SAMPLE	TIME: 1346	DATE: 10/7/24
PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER			PH: 7.05 SU	CONDUCTIVITY: 3376 umhos/cm	
			ORP: -348 mV	DO: 0.70 mg/L	
DEPTH TO WATER: 159.20 T/ PVC			TURBIDITY: 7.80 NTU		
DEPTH TO BOTTOM _____ T/ PVC			☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 12.9 °C	OTHER: --	
VOLUME REMOVED: 5 ☑ LITERS ☐ GALLONS			COLOR: Clear	ODOR: Non	
COLOR: Clear	ODOR: Non		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY ☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
			QC SAMPLE: ☐ MS/MSD ☐ DUP- _____		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS: water Level meter not working		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1321	200	8.16	3756	-179	9.29	14.5	12.4	159.20	INITIAL
1326		7.25	3385	-196	8.43	12.1	13.5		1
1331		7.06	3356	-310	1.10	7.80	12.9		2
1336		7.05	3369	-347.5	0.74	7.80	12.9		3
1341		7.25	3372	-347.5	0.72	7.80	12.8		4
1346		7.25	3376	-348	0.70	7.80	12.9		5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED: 10/9/24

TRC WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: JJ	DATE: 10/9/24	BY: ER	DATE: 10/9/24

SAMPLE ID: MW-06 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0625	DATE: 10/8/24	SAMPLE	TIME: 0745	DATE: 10/8/24

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 114.64 T/ PVC

DEPTH TO BOTTOM _____ T/ PVC

WELL VOLUME: _____ ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 10 ☑ LITERS ☐ GALLONS

COLOR: clear ODOR: slight

TURBIDITY ☐ NONE ☑ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: 7.05 SU | CONDUCTIVITY: 3236 umhos/cm

ORP: -350 mV | DO: 0.70 mg/L

TURBIDITY: 20 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 12.3 °C | OTHER: --

COLOR: Clear | ODOR: _____

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP- _____

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0625	200	6.46	1727	232	9.21	42	15.0	114.64	INITIAL
0700		6.40	3204	-164	1.86	36	12.4	114.64	1
0705		6.41	3196	-270	0.93	37	12.2	114.64	2
0710		6.60	3200	-300	0.78	45	11.8	114.64	3
0715		6.74	3207	-320	0.73	60	12.1	114.64	4
0720		6.95	3215	-340	0.82	60	12.3	114.64	5
0725		7.05	3233	-345	0.72	38	12.2	114.64	6
0730		7.05	3236	-349	0.71	20	12.3	114.64	7
0735		7.05	3233	-350	0.70	20	12.3	114.64	8
0740		7.05	3235	-350	0.70	20	12.3	114.64	9

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	10/9/24

TRC

WATER SAMPLE LOG

(CONTINUED FROM PREVIOUS PAGE)

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED			CHECKED		
PROJECT NUMBER:	553931.0002.0000	BY:	JJ	DATE: 10/4/24	BY: ER	DATE:	10/1/24

SAMPLE ID: MW-106

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0911	200	7.05	3236	-3.10	0.70	2.0	12.3	114.66	1.0

SIGNATURE: 10/9/24

DATE SIGNED: _____

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: JJ	DATE: 10/4/24	BY: ER	DATE: 10/9/24

SAMPLE ID: MW 103 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0815	DATE: 10/8/24	SAMPLE	TIME: 0900	DATE: 10/8/24
PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER			PH: 7.00 SU	CONDUCTIVITY: 2039 umhos/cm	
			ORP: -180 mV	DO: 3.08 mg/L	
DEPTH TO WATER: 220.70 T/ PVC			TURBIDITY: 30 NTU		
DEPTH TO BOTTOM _____ T/ PVC			☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: _____ ☐ LITERS ☐ GALLONS			TEMPERATURE: 11.4 °C	OTHER: --	
VOLUME REMOVED: 9 ☑ LITERS ☐ GALLONS			COLOR: Clear	ODOR: none	
COLOR: Clear	ODOR: none		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY ☐ NONE ☐ SLIGHT ☑ MODERATE ☐ VERY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
			QC SAMPLE: ☐ MS/MSD ☐ DUP- _____		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0815	200	6.57	2033	-208	2.75	60	11.3	220.70	INITIAL
0830		6.90	2033	-192	3.24	60	11.3	224.00	1
0815		7.00	2039	-174	4.07	58	11.3	224.00	2
0830		7.00	2037	-173.5	4.00	50	11.4	224.00	3
0831		7.00	2038	-185	3.15	50	11.4	224.00	4
0836		7.00	2039	-188	3.00	30	11.4	224.00	5
0845		7.00	2036	-182	3.00	30	11.4	224.00	6
0850		7.00	2036	-180	3.08	30	11.4	224.00	7
0855		7.00	2038	-180	3.08	30	11.4	224.00	8
0900		7.00	2039	-180	3.08	30	11.4	224.00	9

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or **</= 5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	10/9/24

WATER SAMPLE LOG

PROJECT NAME: DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER: 553931.0002.0000	BY: JJ	DATE: 10/4/24	BY: ER	DATE: 10/9/24

SAMPLE ID: Quarry Sump | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME:	DATE:

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: T/ PVC

DEPTH TO BOTTOM T/ PVC

WELL VOLUME: ☐ LITERS ☐ GALLONS

VOLUME REMOVED: ☑ LITERS ☐ GALLONS

COLOR: ODOR:

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 0930	DATE: 10/8/24

PH: 7.11 SU CONDUCTIVITY: 12531 umhos/cm

ORP: -215 mV DO: 2.20 mg/L

TURBIDITY: 41 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.3 °C OTHER: --

COLOR: Clear ODOR: Clear

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

0.0.2

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
									INITIAL

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED: 10/9/24

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: JJ	DATE: 10/9/24	BY: ER	DATE: 10/9/24

SAMPLE ID: Quarry Discharge — WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME:	DATE:	SAMPLE	TIME: 0940	DATE: 10/8/24

PURGE METHOD: ☑ PUMP ☐ BAILER — BLADDER PUMP (DEDICATED)

DEPTH TO WATER: ____ T/ PVC

DEPTH TO BOTTOM: ____ T/ PVC

WELL VOLUME: ____ ☐ LITERS ☐ GALLONS

VOLUME REMOVED: ____ ☑ LITERS ☐ GALLONS

COLOR: ____ ODOR: ____

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: 7.71 SU — CONDUCTIVITY: 12163 umhos/cm

ORP: -147 mV — DO: 8.11 mg/L

TURBIDITY: 106 NTU

☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.6 °C — OTHER: --

COLOR: Clear — ODOR: None

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA — FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP- ____

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
									INITIAL

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	60mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED: 10/9/24

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: JAVIER JASSO	Lab PM: Brooks, Kris M	Carrier Tracking No(s):	COC No: 240-124491-43411.1
Client Contact: Jacob Krenz	Phone: 734 904 3310	E-Mail: Kris.Brooks@et.eurofinsus.com	State of Origin:	Page: Page of
Company: TRC Environmental Corporation.	PWSID:			Job #:
Address: 1540 Eisenhower Place	Due Date Requested:			
City: Ann Arbor	TAT Requested (days):			
State, Zip: MI, 48108-7080	Compliance Project: Δ Yes Δ No			
Phone: 313-971-7080(Tel) 313-971-9022(Fax)	PO #: 214272			
Email: JKrenz@trccompanies.com	WO #: 553931.0002			
Project Name: CCR DTE Sibley Quarry	Project #: 24016805			
Site: Michigan	SSOW#:			

Analysis Requested

Preservation Codes:
D - HNO3
N - None
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B Bo, 6020 Ca, Fe	2540C_Calcd - TDS	9056A_28D - Chloride, Fluoride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	N	N	X	
MW-108-1	10/7/24	093	G	Water	N	N	X	X	X	3	
Dup #01	"	—	G	Water	N	N	X	X	X	3	
MW 104	"	1020	G	Water	N	N	X	X	X	3	
MW-101	"	102	G	Water	N	N	X	X	X	3	
MW-107	"	1204	G	Water	N	N	X	X	X	3	
MW-105	"	1291	G	Water	N	N	X	X	X	3	
MW-103	"	1346	G	Water	N	N	X	X	X	3	
MW-106	10/8/24	0745	G	Water	N	N	X	X	X	3	
MW-102	"	0900	G	Water	N	N	X	X	X	3	
Quarry Sump	"	0930	G	Water	N	N	X	X	X	3	
Quarry Discharge	"	0940	G	Water	N	N	X	X	X	3	

10 of 19

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

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

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

Special Instructions/QC Requirements:

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	10/8/24 1100	TRC	TRC Stn 11CW	10/8/24	TRC
Relinquished by:	10/9/24 12:17	TRC		10/9/24 1257	FedEx
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 05/06/2024

TRC

PROJECT NAME:	DTE CCR SQLF 2SA24 Verification
PROJECT NUMBER:	553931.0002.0000
PROJECT MANAGER:	Vincent Buening
SITE LOCATION:	803 Fort Street Trenton MI, 48183
DATES OF FIELDWORK:	12/5/2024
PURPOSE OF FIELDWORK:	Semiannual Verification CCR GW Monitoring Event
WORK PERFORMED BY:	Andrew Whaley

12-6-24
SIGNED DATE

12/9/24
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME:	DTE CCR SQLF 2SA24 Verific	DATE: 12-05-2024	TIME ARRIVED: 0800
PROJECT NUMBER:	553931.0002.0000	AUTHOR: AW	TIME LEFT: 11:30

WEATHER		
TEMPERATURE: 20 °F	WIND: 5-15 MPH	VISIBILITY: Clear

WORK / SAMPLING PERFORMED

Sign in at job trailer
Calibrate YSI
Sample MW-107 and MW-108A
(DUP-01) (DUP-02)

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
Bladder pump control box unable to reach sufficient pressure to bring up water at MW102 due to depth of water	Return on 12/6 w/ different control box. Wasn't available at time of sampling

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
Vincent Buening	TRC	Project Manager / Updates
Bob Haske	DTE	Site Contact: 734-716-3142 (Cell)

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	To Ground

SIGNED 12-6-24 DATE

CHECKED BY 12/9/24 DATE

TRC

GENERAL NOTES

PROJECT NAME:	DTE CCR SQLF 2SA24 Verific	DATE: 12-6-24	TIME ARRIVED: 07:00
PROJECT NUMBER:	553931.0002.0000	AUTHOR: AW	TIME LEFT: 08:15

WEATHER

TEMPERATURE: 21 °F WIND: 5-10 MPH VISIBILITY: Overcast - snow

WORK / SAMPLING PERFORMED

Check in @ job trailer
Calibrate Insitu
Sample MW-102

Samples delivered to Lab service center

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
None	

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
Vincent Buening	TRC	Project Manager / Updates
Bob Haske	DTE	Site Contact: 734-716-3142 (Cell)

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	To Ground

12-6-24
SIGNED DATE

12/9/24
CHECKED BY DATE

TRC

EQUIPMENT SUMMARY

PROJECT NAME:	DTE CCR SQLF 2SA24 Veri	SAMPLER NAME:	Andrew Whaley
PROJECT NO.:	553931.0002.0000		

WATER LEVEL MEASUREMENTS COLLECTED WITH:

NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)
HERON DIPPER-T	PROJECT DEDICATED

PRODUCT LEVEL MEASUREMENTS COLLECTED WITH:

NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)
NA	NA

DEPTH TO BOTTOM OF WELL MEASUREMENTS COLLECTED WITH:

NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)
NA	NA

PURGING METHOD

NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)
BLADDER PUMP (DEDICATED)	PROJECT DEDICATED

SAMPLING METHOD

NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)
BLADDER PUMP (DEDICATED)	PROJECT DEDICATED
NAME AND MODEL OF FILTERATION DEVICE	FILTER TYPE AND SIZE
NA	NA
TUBING TYPE	☑ LOW-FLOW SAMPLING EVENT
DEDICATED POLY TUBING	

PURGE WATER DISPOSAL METHOD

☑ GROUND ☐ DRUM ☐ POTW ☐ POLYTANK ☐ OTHER _____

DECONTAMINATION AND FIELD BLANK WATER SOURCE

POTABLE WATER SOURCE	DI WATER SOURCE
STORE BOUGHT	STORE BOUGHT
SIGNED	CHECKED BY
12-6-24 DATE	12/9/24 DATE

REVISED 04/2019

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DTE CCR SQLF 2SA24 Verification	MODEL: YSI ProDSS	SAMPLER: AW
PROJECT NO.:	553931.0002.0000	SERIAL #: RENTAL	DATE: 12-5-24

PH CALIBRATION CHECK

pH 7 (LOT #): 4GB 1040 (EXP. DATE): 4/26 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 4GH1156 (EXP. DATE): 8/26 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	0814
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 4GH1723 (EXP. DATE): 8/25 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1330 / 1330	22.4	☒ WITHIN RANGE	0817
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 4G11619 (EXP. DATE): 1/25 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
220 / 220	25.0	☒ WITHIN RANGE	0821
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
8.22 / 8.22	24.0	☒ WITHIN RANGE	0826
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): / (EXP. DATE): / POST-CAL. READING / STANDARD	(LOT #): 24E2401499 (EXP. DATE): 5/25 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0 / 0	100 / 100	☒ WITHIN RANGE	0830
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES (1)
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

None

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED _____ DATE 12-6-24

CHECKED BY _____ DATE 12/9/24

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DTE CCR SQLF 2SA24 Verification	MODEL: IN-SITU AQUATROLL 600	SAMPLER: AW
PROJECT NO.:	553931.0002.0000	SERIAL #: TRC A2	DATE: 12-6-24

PH CALIBRATION CHECK

pH 7 (LOT #): 4GB1040 (EXP. DATE): 2/26 POST-CAL. READING / STANDARD	pH 4 10 (LOT #): 4GH1156 (EXP. DATE): 8/26 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	0710
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 4G1117 23 (EXP. DATE): 8/25 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1011 / 1011	10.07	☒ WITHIN RANGE	0714
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
231.2 / 231.2	10.18	☒ WITHIN RANGE	0717
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
11.05 / 11.05	10.80	☒ WITHIN RANGE	0721
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	(LOT #): 24FZH61184 (EXP. DATE): 5/25 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0 / 0	124 / 124	☒ WITHIN RANGE	0725
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES [1]
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

None

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED 12-6-24 DATE

CHECKED BY 12/19/24 DATE

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24 Verific	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: AW	DATE: 12-6-24	BY: LG	DATE: 12/9/24

SAMPLE ID: MW-102 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0742	DATE: 12-6-24	SAMPLE	TIME: 07:57	DATE: 12-6-24
PURGE METHOD:	☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER		PH: 6.75 SU	CONDUCTIVITY: 1358.0	umhos/cm
			ORP: 77.6 mV	DO: 0.89	mg/L
DEPTH TO WATER:	247.11 T/ PVC		TURBIDITY: 1.42 NTU		
DEPTH TO BOTTOM	NM T/ PVC		☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	NM ☐ LITERS ☐ GALLONS		TEMPERATURE: 10.73 °C	OTHER: --	
VOLUME REMOVED:	3.0 ☑ LITERS ☐ GALLONS		COLOR: Clear	ODOR: None	
COLOR:	Clear ODOR: None		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	PH 6.5-7.6 (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
07:42 ~~0742~~	200	6.52	1367.2	116.5	2.40	2.86	10.87	247.11	INITIAL
07:47	↓	6.70	1360.7	90.6	1.60	2.11	10.83	↓	1.0
07:52		6.72	1360.9	83.9	1.24	0.75	10.64		2.0
07:57		6.75	1358.0	77.6	0.89	1.42	10.73		3.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Lab Drop-off	DATE SHIPPED:	12-6-24	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	A. Wilmoth	DATE SIGNED:	12-6-24

TRC

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24 Verific	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: AW	DATE: 12-5-24	BY: HG	DATE: 12/09/24

SAMPLE ID: MW-107 | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0917	DATE: 12-5-24	SAMPLE	TIME: 0942	DATE: 12-5-24

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 152.20 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NA ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 7.5 ☑ LITERS ☐ GALLONS

COLOR: Clear ODOR: Moderate

TURBIDITY: ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: 6.94 SU | CONDUCTIVITY: 35600 umhos/cm

ORP: -334.2 mV | DO: 0.02 mg/L

TURBIDITY: 9.55 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 10.0 °C | OTHER: --

COLOR: Tinted black | ODOR: Moderate

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☒ DUP- DUP-01

COMMENTS: Build up on probe from edges of well casing

TIME	PURGE RATE (ML/MIN)	PH (SU) 6.5-7.6	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0917	300	6.16	31,604	-6.7	4.40	2.27	9.3	153.20	INITIAL
0922		6.49	35,338	-260.4	0.50	3.85	9.6		1.5
0927		6.83	35,580	-304.9	0.16	9.09	10.2		3.0
0932		6.90	35,370	-320.7	0.05	8.76	10.4		4.5
0937		6.44	35,521	-330.8	0.02	9.23	10.2		6.0
0942		6.94	35600	-334.2	0.02	9.55	10.0		7.5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 10 % ORP: +/- NA D.O.: +/- NA TURB: +/- 10 % or </= 5 TEMP.: +/- 0.5°C

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
2	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Lab Drop-off	DATE SHIPPED:	12-6-24	AIRBILL NUMBER:	+2
COC NUMBER:	—	SIGNATURE:	A. Wlmf	DATE SIGNED:	12-6-24

WATER SAMPLE LOG

PROJECT NAME:	DTE CCR SQLF 2SA24 Verific	PREPARED		CHECKED	
PROJECT NUMBER:	553931.0002.0000	BY: AW	DATE: 12.5.24	BY: [illegible]	DATE: 12/9/24

SAMPLE ID: MW-108A | WELL DIAMETER: ☐ 2" ☑ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☐ PVC ☑ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1038	DATE: 12-5-24

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 52.70 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 9.0 ☑ LITERS ☐ GALLONS

COLOR: Clear ODOR: Slight

TURBIDITY: ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 11:08	DATE: 12-5-24

PH: 6.93 SU CONDUCTIVITY: 4737 umhos/cm

ORP: -276.0 mV DO: 0.00 mg/L

TURBIDITY: 3.82 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 10.5 °C OTHER: --

COLOR: Clear ODOR: None

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☒ DUP- 02

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH 6.7-7.0 (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
10:38	300	7.26	4839	-250.5	2.05	1.98	10.7	52.70	INITIAL
10:43		7.27	4763	-296.8	0.15	2.72	10.4		1.5
10:48		~~7.30~~ 6.97	4800	-283.5	0.03	4.98	10.3		3.0
10:53		7.08	4782	-281.4	0.01	4.70	10.4		4.5
10:58		6.98	4757	-278.2	0.00	4.50	10.5		6.0
11:03		6.96	4742	-276.4	0.00	4.37	10.4		7.5
11:08		6.93	4737	-276.0	0.00	3.82	10.5		9.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **NA** D.O.: +/- **NA** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	500mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
	500mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Lab Drop-off	DATE SHIPPED:	12-6-24	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	A. Wing	DATE SIGNED:	12-6-24

Eurofins Canton
180 S. Van Buren Ave

Barberton, OH 44203-3543
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

eurofins | Environment Testing America

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

Eurofins Environment Testing America

Client Contact	Project Manager: Vincent Buening	Site Contact:	Date: 12-5-24	COC No:
TRC Companies	Email: Vbuening@trccompanies.com	Lab Contact: Kris Brooks	Carrier:	1 of 1 COCs
1540 Eisenhower Place	Tel/Fax: 934-904-3302			TALS Project #:
Ann Arbor Michigan, 48108	**Analysis Turnaround Time**			Sampler:
734-971-7080 Phone	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
NA	TAT if different from Below ~~5 Days~~ 3 Days			Walk-in Client:
Project Name: DTE CCR Sibley Quarry Landfill	☐ 2 weeks			Lab Sampling:
Site: Michigan	☐ 1 week			Job / SDG No.:
P O # 214272	☐ 2 days ☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020Total Iron (Fe)	2540C_Calcd - TDS	Sample Specific Notes:
MW-102	12-6-24	07:57	G	GW	1	N	N	X		
MW-107	12-5-24	09:42	G	GW	1	N	N	X		
MW-108A	12-5-24	11:08	G	GW	1	N	N		X	
DUP-01	12-5-24	—	G	GW	1	N	N	X		
DUP-02	12-5-24	—	G	GW	1	N	N		X	
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other								4	1	

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

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

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

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

Special Instructions/QC Requirements & Comments: TRC EDD Required

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company: TRC	Date/Time: 12-6-24 1338	Received by:	Company: EEN	Date/Time: 12/6/24
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Appendix C
Data Quality Reviews

Laboratory Data Quality Review
Groundwater Monitoring Event April 2024 (Detection Monitoring)
DTE Electric Company Sibley Quarry Landfill (DTE SQLF)

Groundwater samples were collected by TRC for the April 2024 sampling event. Samples were analyzed for anions, total metals, and total dissolved solids by Eurofins Cleveland, located in Barberton, Ohio. The laboratory analytical results are reported in laboratory reports 240-202632-1 and 240-202632-2.

During the April 2024 sampling event, a groundwater sample was collected from each of the following wells:

- MW-101
- MW-102
- MW-103
- MW-104
- MW-105
- MW-106
- MW-107
- MW-108A
- QUARRY SUMP
- QUARRY DISCHARGE

Each sample was analyzed for one or more of the following constituents:

Analyte Group	Method
Anions (Chloride, Fluoride, Sulfate)	SW846 9056A
Total Boron	SW846 3005A/6010D
Total Arsenic, Calcium, and/or Iron	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 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 as well as iron and arsenic will be utilized for the purposes of an assessment monitoring program.
- Data are usable for the purposes of the assessment monitoring program.
- When the data are evaluated through an assessment monitoring statistical program, findings below may be used to support the removal of outliers.

QA/QC Sample Summary

- Target analytes were not detected in the method blanks.
- An equipment blank and field blank were not submitted with this data set.
- MS/MSD analyses were performed on sample MW-101 for total boron, calcium, and iron. The percent recovery for calcium in the MS was below the acceptance limits. However, the result for calcium in the parent sample was >4x the spike concentration; therefore, this is no impact on data usability due to this issue.
- A laboratory duplicate analysis was performed on sample MW-106 for TDS. The relative percent difference (RPD) met the acceptance criteria.
- Samples DUP-01/MW-105 were submitted as a field duplicate pair with this data set; all criteria were met.
- Boron was reported with an RL (100 µg/L) lower than required in the QAPP (200 µg/L). Boron was detected in sample MW-102 (120 µg/L) below the QAPP-specified RL.

Laboratory Data Quality Review
Groundwater Monitoring Event October 2024 (Detection Monitoring)
DTE Electric Company Sibley Quarry Landfill (DTE SQLF)

Groundwater samples were collected by TRC for the October 2024 sampling event. Samples were analyzed for anions, total metals, and total dissolved solids by Eurofins Environment Testing America (Eurofins), located in Barberton, Ohio. The laboratory analytical results are reported in laboratory report 240-212734-1.

During the October 2024 sampling event, a groundwater sample was collected from each of the following wells:

- MW-101
- MW-102
- MW-103
- MW-104
- MW-105
- MW-106
- MW-107
- MW-108A
- QUARRY SUMP
- QUARRY DISCHARGE

Each sample was analyzed for the following constituents:

Analyte Group	Method
Anions (Chloride, Fluoride, Sulfate)	SW846 9056A
Total Boron	SW846 3005A/6010D
Total Calcium and Iron	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 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 as well as iron will be utilized for the purposes of an assessment monitoring program.
- Data are usable for the purposes of the assessment monitoring program.
- When the data are evaluated through an assessment monitoring statistical program, findings below may be used to support the removal of outliers.

QA/QC Sample Summary

- Target analytes were not detected in the method blanks.
- An equipment blank and field blank were not submitted with this data set.
- MS/MSD analyses were performed on sample MW-108A for total calcium and iron. The percent recovery for calcium in the MS was below the acceptance limits. However, the result for calcium in the parent sample was >4x the spike concentration; therefore, there is no impact on data usability due to this issue.
- Laboratory duplicate analysis was performed on sample MW-102 for TDS. The relative percent difference (RPD) met the acceptance criteria.
- Samples DUP-01/MW-108A were submitted as the field duplicate pair with this data set; all criteria were met with the following exception:
  - The RPD for TDS in samples DUP-01 and MW-108A was above 30%. Therefore, the positive results for TDS in all groundwater samples in this data set should be considered estimated, as summarized in the attached table, Attachment A.
- Boron was reported with an RL (100 µg/L) lower than the QAPP-specified RL (200 µg/L). Boron was detected in sample MW-102 (130 µg/L) below the QAPP-specified RL.

- The nondetect RL for fluoride in sample MW-107 (5.0 mg/L) was higher than the QAPP-specific RL (0.05 mg/L) due to dilution required due to sample matrix (i.e., elevated concentrations of chloride and sulfate).

Attachment A
Summary of Data Non-Conformances for Groundwater Analytical Data
CCR DTE Sibley Quarry
Trenton, Michigan

Samples	Collection Date	Analyte	Non-Conformance/Issue
MW-108A	10/7/2024	TDS	Field duplicate variability (relative percent difference greater than acceptance criteria); potential uncertainty exists for the listed results.
DUP-01			
MW-104			
MW-101			
MW-107			
MW-105			
MW-103			
MW-106	10/8/2024		
MW-102			
QUARRY SUMP			
QUARRY DISCHARGE			

Laboratory Data Quality Review
Groundwater Monitoring Event December 2024 (Detection Verification Monitoring)
DTE Electric Company Sibley Quarry Landfill (DTE SQLF)

Groundwater samples were collected by TRC for the December 2024 sampling event. Samples were analyzed for total calcium and iron and/or total dissolved solids by Eurofins Cleveland, located in Barberton, Ohio. The laboratory analytical results are reported in laboratory report 240-216225-1.

During the December 2024 verification event, a groundwater sample was collected from each of the following wells:

- MW-102
- MW-107
- MW-108A

Each sample was analyzed for one or more of the following constituents:

Analyte Group	Method
Total Calcium and Iron	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 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 as well as iron will be utilized for the purposes of an assessment monitoring program.
- Data are usable for the purposes of the assessment monitoring program.
- When the data are evaluated through an assessment monitoring statistical program, findings below may be used to support the removal of outliers.

QA/QC Sample Summary

- Target analytes were not detected in the method blanks.
- An equipment blank and field blank were not submitted with this data set.
- LCS recoveries for all target analytes were within laboratory control limits.
- MS/MSD and laboratory duplicate analyses were not performed on a sample from this data set.
- Samples DUP-01/MW-107 and DUP-02/MW-108A were submitted as the field duplicate pairs with this data set; all criteria were met with the following exception:
  - In field duplicate pair DUP-01/MW-107 , the result for iron was <5x the RL in the parent sample (MW-107) and was >5x the RL in the duplicate sample (DUP-01); the absolute difference (180 µg/L) was greater than the RL (100 µg/L). Therefore, the positive results for iron should be considered estimated in samples MW-102, MW-107, and DUP-01, as summarized in the attached table, Attachment A.

Attachment A
Summary of Data Non-Conformances for Groundwater Analytical Data
CCR DTE Sibley Quarry
Trenton, Michigan

Samples	Collection Date	Analyte	Non-Conformance/Issue
MW-102	12/6/2024	Iron	Field duplicate variability (one result <5x the reporting limit [RL] and other result > 5x the RL; absolute difference greater than the RL); potential uncertainty exists for the listed results.
MW-107	12/5/2024		
DUP-01	12/5/2024		