

Ms. Christine Matlock
Senior Environmental Engineer
Hazardous Waste Section
Waste Management & Radiological Protection Division
Michigan Department of Environment, Great Lakes, and Energy
525 West Allegan Street
Constitution Hall, Atrium North
Lansing, MI 48909

Arcadis of Michigan, LLC
28550 Cabot Drive
Suite 500
Novi
Michigan 48377
Phone: 248 994 2240
www.arcadis.com

Date: September 19, 2023

Our Ref: 30171056

Subject:

2023 Semi-Annual Groundwater Monitoring Report

RACER Lansing - Plants 2, 3 and 6

Lansing, Michigan

Dear Ms. Matlock,

Arcadis of Michigan, LLC (Arcadis) completed the first and second quarter 2023 gauging, groundwater monitoring, and sampling activities to support the on-going Resource Conservation and Recovery Act (RCRA) Corrective Action process on behalf of the Revitalizing Auto Communities Environmental Response (RACER) at the RACER Trust Plants 2, 3, and 6 (Site) located in Lansing, Michigan.

This Semi-Annual Report summarizes groundwater monitoring completed between January and June 2023. The first quarter groundwater monitoring was conducted consistent with the requirements of the 2019 Revised Interim Groundwater Monitoring Work Plan (IGMP; Arcadis 2019b, as revised) approved by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) on July 25, 2019. The second quarter event was completed consistent with the revised 2023 IGMP, approved by EGLE on May 23, 2023 (Arcadis 2023b). The storm sewer monitoring program, included as part of the 2023 IGMP, was approved by EGLE separately on January 26, 2023, and was implemented during both quarterly events.

- First quarter 2023 - included a quarterly event completed between February 13 to 17, 2023. Groundwater samples were collected from a total of 53 wells.
- Second quarter 2023 - included a semi-annual site-wide groundwater gauging event, with gauging of light nonaqueous phase liquid (LNAPL) wells and quarterly / semi-annual sampling completed from May 15 through 24, 2023. Groundwater elevations were collected from a total of 226 monitoring wells, LNAPL gauging was completed at a total of 22 wells, and groundwater samples were collected from a total of 83 wells.
- Storm sewer sampling for per- and polyfluoroalkyl substances (PFAS) was completed during the first and second quarter of 2023 on February 7 and April 25, respectively.

The sampling frequencies and analytes for each well are included in **Tables 1A** and **1B**. The locations of all monitoring wells are provided on **Figures 1A, 1B, and 1C**. The following deviations from the IGMP were observed during the first and second quarter 2023 monitoring activities:

- **MW-03-08** is a perched monitoring well with flush-mount construction located in a low-lying area of Plant 6. The well was unable to be accessed due to standing water in second quarter 2023. MW-03-08 is utilized for annual groundwater elevation monitoring and biennial volatile organic compounds (VOC) monitoring. Arcadis will evaluate modifying this well and/or the ground surface near the well to prevent future submersion.
- **MW-14-69** was dry in second quarter 2023 and has been dry since installation in 2014. This monitoring well was installed in an area of Plant 6 with limited perched groundwater with the intent of verifying whether saturated conditions existed and if the well would produce enough water for sampling and is checked annually.
- **MW-18-96** was installed in shallow fill material at Plant 3 and contained water during development and initial sampling; however, the well has been dry since June 2020. No samples were collected at this location in second quarter 2023. The continued absence of groundwater at this well location suggests the clay in this area of the Site is a barrier to groundwater flow.
- **MW-19-110** was installed in August 2019 at the request of the EGLE in an area of Plant 3 with limited perched groundwater with the intent of verifying whether saturated conditions existed and if the well would produce enough water for sampling. Since installation in 2019, the well has had either low water levels or been dry, resulting in no groundwater samples collected. No samples were collected at this location in second quarter 2023.
- **MW-19-113** was installed in August 2019 at the request of the EGLE in an area of Plant 3 with limited perched groundwater with the intent of verifying whether saturated conditions exist and if the well would produce enough water for sampling. Since installation in 2019, the well has had either very limited water or been dry, resulting in no groundwater samples collected. No samples were collected at this location in second quarter 2023.
- **MW-22-159** was installed off-site to the east of Plant 6 and contained water during development, however, the well has been dry since December 2022. No samples were collected at this location in second quarter 2023.

These wells will next be gauged, if possible, during fourth quarter 2023 and sampled as specified in the 2023 Revised IGMP (Arcadis 2023b).

Site Activities

Quarterly groundwater sampling was completed in first quarter 2023. Quarterly and semi-annual groundwater sampling and semi-annual site-wide groundwater gauging was completed in second quarter 2023.

Groundwater Gauging

Site-wide gauging will occur semi-annually beginning in 2023. Therefore, the first gauging event was conducted second quarter 2023 and the second event will be conducted in fourth quarter 2023. A summary of gauging data is provided in **Table 3**. A comprehensive report including groundwater elevation contour maps, groundwater elevation trend graphs, and groundwater analytical stability analysis will be provided as part of the *2023 Annual Groundwater Monitoring Report* to be submitted in the first half of 2024.

Groundwater Sampling

During the second quarter 2023, site-wide gauging was completed using an electronic water level meter. LNAPL wells were gauged using an oil/water interface probe. All gauging was completed within 24 hours with few exceptions due to access or other issues. Gauging methods were consistent with the 2023 revised IGMP (Arcadis 2023b).

The groundwater sampling matrix is provided as part of the 2019 Revised IGMP and the 2023 Revised IGMP (**Table 1A** and **1B**, respectively). Groundwater samples were submitted for analysis for one or more of the following parameters:

- Target compound list (TCL) VOCs using United States Environmental Protection Agency (USEPA) Method SW8260B, Revision 2 or SW8260C, Revision 3.
- 1,4-Dioxane using USEPA Method SW8260B-SIM (Merit Laboratories).
- PFAS using USEPA Method 537 modified with isotope dilution (DoD QSM 5.3).

All groundwater samples were collected in a manner consistent with the low-flow sampling techniques outlined in the Arcadis Technical Guidance Instruction (TGI) for low-flow sample collection (Arcadis 2020), and generally consistent with EGLE's Remediation and Redevelopment Division (RRD) Op Memo 2, Attachment 5 (EGLE 2004). Samples collected for 1,4-dioxane, VOCs, and general chemistry were submitted under chain of custody protocol to Merit Laboratories (Merit) located in Lansing, Michigan. Samples collected for PFAS analyses were submitted to Pace Analytical Laboratory located in West Columbia, South Carolina. Groundwater low-flow sampling logs are included as **Attachment 1**. Laboratory analytical reports and data validation reports will be included in the 2023 Annual Groundwater Monitoring Report.

Quality control (QC) samples were collected during the sampling event and included the following:

- One duplicate sample per every ten samples.
- One matrix spike and matrix spike duplicate (MS/MSD) sample per every 20 samples.
- One field blank sample per sampler per sampling event.
- One equipment blank sample per pump per sampling event, as well as additional equipment blank samples from the water level meters used in wells with samples analyzed for PFAS.
- Additionally, trip blanks were included with each cooler containing samples for VOC analysis.

Storm Sewer Sampling

Storm sewer sampling is completed quarterly to confirm the effectiveness of storm sewer modifications and abandonments completed in Fall 2018, Winter 2019/2020, Fall 2020, and Spring 2021 (Arcadis 2021b). Storm sewer sampling was completed prior to sewer modifications and abandonments in 2017 at Plant 2 and in 2019 on Plants 2 and 6. Samples are collected from each of the three Plant outfalls according to the Arcadis technical guidance instruction (TGI) document for PFAS sample collection and analyzed using USEPA Method 537 modified with isotope dilution (DoD QSM 5.3).

Results

A summary table of the groundwater analytical data collected during the January to June 2023 reporting period is presented in **Table 2**. As a frame of reference, figures showing exceedances of EGLE Part 201 Residential Drinking Water (DW) criteria and Part 201 Groundwater-Surface Water Interface (GSI) criteria, are provided as **Figures 2** through **7**. Results of activities completed during the first and second quarter 2023 monitoring events are summarized in the following sections.

LNAPL Gauging

LNAPL thicknesses were generally consistent with previous observations and are provided in **Table 3**. LNAPL gauging will continue semi-annually through 2023 and the next gauging event will be completed in fourth quarter 2023.

Groundwater Analytical Results

Groundwater analytical results are summarized in **Table 2** with exceedances of Part 201 Residential DW criteria highlighted in gray and summarized on **Figures 2** through **7**. Results were compared to Residential DW criteria to provide a frame of reference. Results of the first and second quarter 2023 sampling event are summarized below.

- **Perched 1,4-Dioxane:** Although not part of the approved 2019 IGMP (**Table 1A**) or 2023 IGMP (**Table 1B**), perched groundwater in the MW-14-58R area was sampled for 1,4-dioxane during the first and second quarter 2023 sampling events as part of an ongoing investigation. Prescribed sampling of perched groundwater for 1,4-dioxane will next be completed as part of annual groundwater sampling event scheduled for fourth quarter 2023.
 - MW-14-58R Area: A summary of the 2022 MW-14-58R area investigation and proposed additional investigation activities for 2023 was provided in the *MW-14-58R Area Data Summary and Proposed Additional Work* submitted on February 3, 2023 (Arcadis 2023a). Perched 1,4-dioxane sampling was completed in the vicinity of MW-14-58R during the first and second quarter (**Figure 2**). The results were generally consistent with the results summarized in the 2022 Annual Groundwater Monitoring Report, except for MW-22-157, which increased in concentration from 5 µg/L during the first quarter to 44 µg/L during the second quarter. This well will be sampled next in third quarter 2023 and analytical results will be reviewed with EGLE to determine if additional investigation is required.
- **Lower 1,4-Dioxane:** A biosparge remedy has been implemented for the lower 1,4-dioxane plume per the *Interim Measures Work Plan: Lower 1,4-Dioxane Biosparge* work plan (Arcadis 2018). The lower 1,4-dioxane biosparge system has been operating at Plant 3 since 2019 and Plant 2 since 2020.

Performance monitoring demonstrates treatment of the lower 1,4-dioxane plume within the radius of influence of the biosparge wells on Plants 2 and 3 and shows indication of downgradient flushing. System performance reporting will continue on an annual basis. Performance monitoring activities for the biosparge system completed in 2023 will be summarized in the 2023 *Lower 1,4-Dioxane Biosparge Update Report* planned to be submitted in the first quarter 2024.

The results at the perimeter of the lower 1,4-dioxane plume (**Figure 3**) were reviewed for potential changes:

- An overall increase in 1,4-dioxane was observed across the site during the second quarter 2023 sampling event. The reason for the increase between first and second quarter is unclear, we will continue to monitor these wells per the IGMP.
- Northern extent on Plant 3: Deep overburden well MW-13-27 was sampled at the request of EGLE and although non-detect historically, this well exceeds DW criteria (10 µg/L). Nearby wells such as MW-13-26 and MW-13-30 that were also sampled had non-detect 1,4-dioxane results. These wells will be sampled during the next semi-annual event scheduled for the fourth quarter 2023 and the results will be reviewed with EGLE.
- Southern Extent (the toe, Plant 2) – The lower 1,4-dioxane plume is defined to the south (MW-16-74, MW-16-75 MW-16-77, and MW-16-78) and southeast (MW-20-130, MW-21-140, and MW-21-141). These results suggest no significant expansion has occurred at the southern toe of the lower 1,4-dioxane plume since 2018. Future migration to the southeast is not expected due to the operation of the biosparge system and because of geologic conditions described as part of the *Lower 1,4-Dioxane Conceptual Site Model* report (Arcadis 2021a).
- Northeast Lobe (Plant 2) – Increasing and/or stable concentrations were observed within the northeast lobe of the lower 1,4-dioxane plume on Plant 2 during 2018-2021. Since then, stable to decreasing concentrations have been observed, likely attributable to the operation of the biosparge system.
- An updated plume stability analysis, including statistical evaluation of lower 1,4-dioxane concentrations will be completed as part of the 2023 Annual Groundwater Monitoring Report.
- **VOCs (other than 1,4-dioxane):** Of the eighteen wells that were sampled for VOCs, three perched monitoring wells had concentrations that exceeded the DW criteria (**Figure 4**).
 - *Plant 6 entrance at the intersection of Stanley and Osborn Streets:* Vinyl chloride has been detected on-site at monitoring well MW-20-131 and off-site at MW-20-132 at concentrations above the DW criteria and the Site-Specific Vapor Intrusion to Indoor Air Criteria (SSVIAC). A summary of the VI evaluation was provided to EGLE in June 2022 (Arcadis 2022). Consistent with the follow-up discussion with EGLE, an additional monitoring well MW-22-154 was installed in September to the northeast of MW-20-132 to define the extent of SSVIAC exceedances. MW-22-154 was non-detect for VOCs in first and second quarter 2023. Soil vapor sampling at SVMP-20-01, located between the Plant 6 entrance and the residential properties located to the northeast, has been non-detect for vinyl chloride and has shown no other exceedances of the SSVIAC both first and second quarter 2023.
 - *Weathered bedrock wells MW-14-61, MW-17-86, and MW-19-120:* located in the lower 1,4-dioxane plume on Plant 2, are monitored for VOCs semi-annually due to previously observed low detections of chlorinated VOCs (e.g., 1,2-DCE, chloroethane) potentially related to leakage from the perched zone. VOCs were not detected at MW-14-61, MW-17-86, and MW-19-120 in 2021, 2022, or in first or second quarter 2023.
 - *Western Plant 2 property boundary:* As part of the MW-14-58R area evaluation, several of the area monitoring wells were sampled for VOCs. Perched well MW-22-156 exceeded DW Criteria for 1,1-DCE (7 µg/L) with concentrations of 25 µg/L and then 38 µg/L, in first and second quarter 2023, respectively. A Work Plan detailing the next phase of investigation and delineation activities in the vicinity of MW-14-58R was submitted under separate cover.

- **Metals:** No metals analysis was completed during the first or second quarter 2023 groundwater monitoring events. Select monitoring wells will be sampled and analyzed for metals during the upcoming annual sampling event to be completed in fourth quarter 2023 (Arcadis 2023b).
- **PFAS:** Overall, PFAS results are consistent with those found in the 2019 PFAS addendum and the 2022 Annual Groundwater Monitoring Report (Arcadis 2019a; 2023c).
 - Perfluorooctane sulfonic acid (PFOS) concentrations exceeded the GSI criterion 12 nanograms per liter [ng/L]) and/or the DW criterion (16 ng/L) at a total of twelve perched monitoring well locations at all three plants (**Figure 5**). PFOS impacts are currently defined at each plant by the perimeter or off-site monitoring well network.
 - Perfluorooctanoic acid (PFOA) concentrations exceeded the DW criterion of 8 ng/L at a total of seventeen perched monitoring wells at all three plants (**Figure 6**). PFOA impacts are currently defined at each plant by the perimeter or off-site monitoring well network.
 - Perfluorononanoic acid (PFNA) concentrations exceeded the DW criterion value of 6 ng/L at one perched monitoring well at Plant 2 and two perched monitoring wells located at Plant 6 (**Figure 7**). The highest concentration of PFNA was 220 ng/L observed in central Plant 6 source area at well P6-SB-07.
 - The only detections of perfluorohexanesulfonic acid (PFHxS) that exceed the DW criterion value (51 ng/L) were concentrations of 260 and 250 ng/L in perched well MW-21-139 in the Plant 2 PFAS source area and 100 ng/L in perched well MW-18-103 located along the northern boundary of Dunneback Park east of Plant 3. The PFHxS detected at MW-18-103 appears to be isolated and may be related to an off-site source to the north where large quantities of roofing shingles are stored, processed, and recycled.
 - Sporadic low detections of perfluorobutanesulfonic acid (PFBS) and perfluorohexanoic acid (PFHxA) observed in monitoring wells during the first and/or second quarter groundwater monitoring event are one to two orders of magnitude below their DW criteria of 420 ng/L for PFBS and 400,000 ng/L for PFHxA.
 - In addition to PFOS, PFOA, PFNA, PFHxS, PFBS, and PFHxA, other PFAS compounds have been detected at the Site, however there are no established criteria for comparison. In general, these concentrations appear to correlate with, but be lower than PFOS and PFOA concentrations and decrease with distance from PFOS and PFOA source areas.
 - As a general note, one PFAS sample set from the June sampling event were received by the lab out of temperature due to delays in shipping and transport. PFAS is stable and therefore not sensitive to temperature like other COCs. The lab results are flagged appropriately in the report, but the analytical results are confirmed to be reliable and representative. These well locations will be sampled next during fourth quarter 2023 and results will be reviewed and compared to ensure consistency between the events.

Groundwater Elevation Monitoring

Groundwater elevations collected from the second quarter gauging event are summarized on **Table 4**. Groundwater elevation contour maps, hydrographs, and plume stability evaluation will be completed as part of the *2023 Annual Groundwater Monitoring Report* planned to be submitted in the first half of 2024.

Ms. Christine Matlock
EGLE
September 19, 2023

Storm Sewer Analytical Results

Storm sewer PFAS analytical results for first and second quarter 2023 are summarized on **Tables 5 through 7** with exceedances of Rule 57 criteria highlighted in gray. First and second quarter data are also summarized on **Figures 8 through 10**. Results of the first and second quarter 2023 sampling events are summarized below.

- No exceedances occurred on Plant 2 in first and second quarter 2023.
- No exceedances occurred on Plant 3 in first and second quarter 2023.
- Rule 57 criteria for PFOS was exceeded on Plant 6 as listed below. No other exceedances occurred on Plant 6 in first and second quarter 2023.
 - Osborn-MH-1 exceeded in first and second quarter with detections of 43.0 and 16.0 ng/L, respectively.
 - Verlinden-MH-5 exceeded in the second quarter with a detection of 13.0 ng/L.

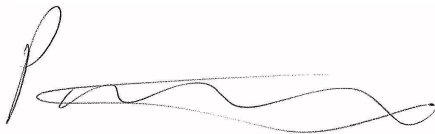
Conclusions

The first quarter and second quarter 2023 monitoring results do not suggest significant changes to the Site groundwater conditions. The 1,4-dioxane concentrations in weathered bedrock increased first to second quarter but are within the historical range and show stable to decreasing long-term 1,4-dioxane trends within biosparge performance monitoring wells. The storm sewer sampling indicates the storm sewer modifications at Plant 2 and 3 have successfully reduced PFAS discharge to concentrations at or below the Rule 57 criteria. Plant 6 modifications have reduced PFAS concentrations to near Rule 57 Criteria and will continue to be monitored for changes.

Groundwater monitoring will continue during the third and fourth quarters of 2023 per the EGLE approved revised 2023 IGMP matrix and storm sewer PFAS monitoring will continue quarterly. The 2023 Annual Monitoring Report will be prepared following the fourth quarter sampling event and will include a summary of all 2023 groundwater and storm sewer monitoring activities and analytical results, validated analytical reports, updated groundwater elevation contour figures, and an updated plume stability analysis.

If you should have any questions regarding the enclosed data, please do not hesitate to contact David Favero at dfavero@racertrust.com (734.879.9525) or Patrick Curry at patrick.curry@arcadis.com (810.225.1926)

Sincerely,
Arcadis of Michigan, LLC



Patrick J. Curry, PG
Technical Expert / Associate Vice President

Email: patrick.curry@arcadis.com
Direct Line: 810 225 1926

Ms. Christine Matlock
EGLE
September 19, 2023

CC. Shaun Shields, EGLE
Joe Rogers, EGLE
Dave Favero, RACER Trust
Randy Seida, Westside Water
Alec Malvetis, City of Lansing
Brad Beck, Lansing Township
Cheryl Loudon, LBWL
Angie Cosman, Ingham County Drain Commission
Lansing Public Library

Enclosures:

Tables

Table 1A – Revised Interim Groundwater Monitoring Summary – Revised May 2019
Table 1B – Revised Interim Groundwater Monitoring Summary – Revised May 2023
Table 2 – Summary of Groundwater Analytical Results – January through June 2023
Table 3 – Summary of LNAPL Thickness – May 2023
Table 4 – Summary of Groundwater Elevations – May 2023
Table 5 – Summary of Plant 2 Storm Sewer Sampling Results
Table 6 – Summary of Plant 3 Storm Sewer Sampling Results
Table 7 – Summary of Plant 6 Storm Sewer Sampling Results

Figures

Figure 1A – Summary of Plant 2 Monitoring Well Locations
Figure 1B – Summary of Plant 6 Monitoring Well Locations
Figure 1C – Summary of Plant 3 Monitoring Well Locations
Figure 2 – Summary of 1,4-Dioxane Analytical Results in Perched Wells – January through June 2023
Figure 3 – Summary of 1,4-Dioxane Analytical Results in Lower Wells – January through June 2023
Figure 4 – Summary of VOC Analytical Results – January through June 2023
Figure 5 – Summary of PFOS Analytical Results – January through June 2023
Figure 6 – Summary of PFOA Analytical Results – January through June 2023
Figure 7 – Summary of PFNA Analytical Results – January through June 2023
Figure 8 – Plant 2 PFAS Storm Sewer Sampling Analytical Results
Figure 9 – Plant 3 PFAS Storm Sewer Sampling Analytical Results
Figure 10 – Plant 6 PFAS Storm Sewer Sampling Analytical Results

Attachments

Attachment 1 – Low-Flow Groundwater Sampling Logs – January to June 2023

Ms. Christine Matlock
EGLE
September 19, 2023

References

- Arcadis. 2018. Interim Measures Work Plan: Lower 1,4-Dioxane Biosparge. October 19, 2018.
- Arcadis 2019a. Plant 6 PFAS Investigation Summary – Phase 2. RACER Trust Site, Lansing, Michigan. August 23.
- Arcadis. 2019b. Revised Interim Groundwater Monitoring Work Plan - 2019. RACER Trust, Lansing, Michigan, Plants 2, 3, and 6. October 28.
- Arcadis 2020. TGI – Low-Flow Groundwater Purging and Sampling Procedures for Monitoring Wells. May 8.
- Arcadis 2021a. Lower 1,4-Dioxane Conceptual Site Model. Lansing Industrial Land, Lansing, Michigan. January 6.
- Arcadis. 2021b. Plants 2 and 6 Sewer Modifications Completion Update Report. Lansing Industrial and, Lansing, Michigan. September.
- Arcadis. 2022. Plant 6 Vapor Intrusion Investigation Summary. RACER Trust Industrial Land, Plant 6, Lansing, Michigan. June 23.
- Arcadis. 2023a. MW-14-58R Area Data Summary and Proposed Additional Work, RACER Trust Plant 2, Lansing, Michigan. February 3.
- Arcadis. 2023b. Revised 2023 Interim Groundwater Monitoring Work Plan, RACER Trust, Plants 2, 3, & 6, Lansing, Michigan. May 23.
- Arcadis. 2023c. 2022 Annual Groundwater Monitoring Report. RACER Trust Lansing Industrial Land, Lansing, Michigan. June 6.
- EGLE. 2004. RRD Op Memo 2, Attachment 5 - Michigan Department of Environmental Quality. Remediation and Redevelopment Division. Operational Memorandum No.2. Sampling and Analysis – Attachment 5. October 22.

Tables

| Well | Gauging* | Analyte | | | | | Primary Function | Reason(s) for Change |
|--|----------|---------|------------------|-----------------|-------|------|--|--|
| | | VOCs | 1,4-Dioxane | Select Metals** | SVOCs | PFAS | | |
| Plant 2 | | | | | | | | |
| <i>Perched</i> | | | | | | | | |
| MW-01(2) | A | B | | | | | VOC monitoring | VOC Change from A to B. MTBE is detected consistently below criteria. No other VOCs detected |
| MW-02(2) | Abandon | | | | | | | consistent non-detects / do not need 4 wells in Area 1 |
| MW-03(2) | Abandon | | | | | | | consistent non-detects / do not need 4 wells in Area 1 |
| MW-12-09 | A | B | A | | | SA | VOC monitoring, perched 1,4-dioxane monitoring, PFAS monitoring | |
| MW-12-18 | SA | B | | | | SA | VOC monitoring, PFAS monitoring | VOC change from SA to B / 1,1-DCE at 1 to 2 ug/L is the only VOC detected / Removed Metals Analysis / Consistent Non-Detects |
| P2-MW-04 | A | | A | | | Qd | perched 1,4-dioxane monitoring, SVOC evaluation | |
| P2-SB-20 | A | | | | | | groundwater elevation monitoring | Removed VOC, 1,4-d Analysis / Consistently non-detect for at least the past 6 years |
| LMW-12-01 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / No LNAPL Observed for 4 Quarters |
| LMW-12-02 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Max LNAPL Thickness Observed in 4 Quarters was 0.04 feet. |
| LMW-12-03D | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Eliminate LNAPL Removal |
| LMW-12-03S | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Max LNAPL Thickness Observed in 4 Quarters was 0.01 feet. |
| LMW-12-04 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Max LNAPL Thickness Observed in 4 Quarters was 0.02 feet. |
| LMW-12-05 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Max LNAPL Thickness Observed in 4 Quarters was 0.18 feet. |
| LMW-12-06 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / No LNAPL Observed for 4 Quarters |
| LMW-12-07 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Max LNAPL Thickness Observed in 4 Quarters was 0.02 feet. |
| LMW-12-08 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA |
| LMW-14-12D | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Eliminate LNAPL Removal |
| LMW-14-13D | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / No LNAPL Observed for One Year |
| LMW-14-14D | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / No LNAPL Observed Monthly for One Year |
| LMW-14-15D | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Eliminate LNAPL Removal |
| LMW-15-16D | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Eliminate LNAPL Removal |
| LMW-15-17D | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / Max LNAPL Thickness Observed During Monthly Checks for One Year was 0.01 feet. |
| PMW-01 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA |
| PMW-02 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA |
| PMW-03 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA / No LNAPL Observed for 4 Quarters |
| P2-SB-37 | SA | | | | | | LNAPL Monitoring | Reduce LNAPL gauging to SA |
| MW-12-07 | A | | | | | | groundwater elevation monitoring | Removed VOC Analysis / Has always been non-detect for VOCs |
| MW-12-08 | A | | | | | | groundwater elevation monitoring | Reduce LNAPL gauging to SA |
| MW-12-17 | Abandon | | | | | | | Consistent non-detects / do not need 4 wells in Area 1 |
| P2-MW-02 | A | | | | | | groundwater elevation monitoring | Removed VOC Analysis / Consistently non-detect for VOCs |
| P2-MW-03 | A | | | | | | groundwater elevation monitoring | |
| P2-SB-03 | A | | | | | | groundwater elevation monitoring | Removed VOC and 1,4-D Analysis / Consistently non-detect for VOCs and 1,4-D |
| P2-SB-06 | A | | | | | | groundwater elevation monitoring | Removed VOC and SVOC Analysis / Consistently non-detect for VOCs and SVOCs |
| MW-14-54 | A | B | | | | | VOC monitoring, SVOC evaluation | VOC change from A to B / Stable Trends. Removed SVOC Analysis / Consistent Non-Detects |
| MW-14-55 | A | B | | | | | VOC monitoring | VOC change from A to B / Intermittent VOC detections are consistently below criteria |
| MW-14-57 | A | | A | | | | perched 1,4-dioxane monitoring | Remove VOCs/ Intermittent VOC detections are consistently below criteria |
| MW-14-58 | SA | B | A | | | SA | perched 1,4-dioxane monitoring, PFAS Monitoring | VOC Analysis changed to biennial / VOCs never detected 1,4-D Change from SA to A / Stable trend |
| MW-14-59 | SA | B | A | | | Qd | perched 1,4-dioxane monitoring, SVOC monitoring, PFAS monitoring | VOC change from A to B / 1,1-DCE exceeds DW but has been stable for 5 years |
| MW-14-60 | SA | B | A | | | Qd | perched 1,4-dioxane monitoring, SVOC monitoring, PFAS monitoring | VOC change from A to B / VC exceeds DW but has been stable for 3 years |
| MW-14-62 | SA | B | A | | | Qd | perched 1,4-dioxane monitoring, SVOC monitoring, PFAS Monitoring | VOC change from A to B / Intermittent VOC detections are consistently below criteria |
| <i>Deep Overburden and Weathered Bedrock</i> | | | | | | | | |
| MW-13-43 | SA | | SA | | | | lower 1,4-dioxane monitoring | |
| MW-13-45 | SA | | SA | | | | lower 1,4-dioxane monitoring | |
| MW-13-51 | A | | A | | | | lower 1,4-dioxane monitoring | |
| MW-14-56 | A | | A | | | SA | lower 1,4-dioxane monitoring / PFAS monitoring | 1,4-D change from B to A / Increased Monitoring of Plume Removed VOC Analysis / Consistent Non-Detects Removed Metals Analysis / No exceedances 1,4-D Change from SA to A / APC plume / Added PFAS |
| MW-14-61 | SA | A | SA | | | Qd | lower 1,4-dioxane monitoring, VOC, SVOC & PFAS monitoring | VOC change from SA to A / Single detections of 1,1,1-TCA and Chloroethane below criteria / Added SVOCs/PFAS |
| MW-14-63 | A | | A | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections 1,4-D Change from SA to A / No detections |
| MW-15-72 | SA | A | SA | | | Qd | lower 1,4-dioxane monitoring/VOC, SVOC, PFAS monitoring | Added SVOC / PFAS Analysis |
| MW-15-73 | A | | A | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections Removed Metals Analysis / No metal exceedances 1,4-D Change from SA to A / APC plume |
| MW-16-74 | SA | | SA | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections |
| MW-16-75 | SA | | SA | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections |
| MW-16-76 | A | | A | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections 1,4-D Change from SA to A / No 1,4-D exceedances |
| MW-16-77 | SA | | SA | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections 1,4-D Change from SA to A / No 1,4-D exceedances |
| MW-16-78 | SA | | SA | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections |
| MW-16-79 | SA | | SA | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections |
| MW-16-80 | SA | | SA | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections |
| MW-16-81 | SA | A | SA | | | SA | lower 1,4-dioxane monitoring / PFAS monitoring | VOCs change from SA to A / No VOC detections 1,4-D Change from Q to SA/ >4 samples collected |
| MW-16-82 | SA | | SA | | | | lower 1,4-dioxane monitoring | VOCs removed / No VOC detections 1,4-D Change from Q to SA / >4 samples collected |
| MW-16-83 | A | | A | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections 1,4-D Change from SA to A / No 1,4-D detections |
| MW-16-84 | SA | A | SA | | | | lower 1,4-dioxane monitoring | VOCs change from SA to A / No VOC detections 1,4-D Change from Q to SA/ >4 samples collected |
| MW-16-85 | SA | A | SA | | | | lower 1,4-dioxane monitoring | VOC change from SA to A / No VOC detections |
| MW-17-86 | SA | A | SA | | | | lower 1,4-dioxane monitoring | Well added / VOC to A |
| MW-19-115 | SA | | SA | | | | lower 1,4-dioxane monitoring | Well added |
| MW-19-116 | SA | | SA | | | | lower 1,4-dioxane monitoring | Well added |
| MW-19-117 | SA | | SA | | | | lower 1,4-dioxane monitoring | Well added |
| PW-14-01 | SA | | SA | | | | lower 1,4-dioxane monitoring | |
| PW-14-02 | SA | B | SA | | | | lower 1,4-dioxane monitoring | VOC change from SA to B / No VOC detections |
| TW-14-02 | SA | B | SA | | | | lower 1,4-dioxane monitoring | VOC change from SA to B / No VOC detections |
| <i>Bedrock</i> | | | | | | | | |
| MW-12-01 | A | | A ⁽¹⁾ | | | | bedrock 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections 1,4-D Change from SA to A / No 1,4-D detections > DW |
| MW-12-02 | A | | A ⁽¹⁾ | | | | bedrock 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections 1,4-D Change from SA to A / No 1,4-D detections >DW |
| MW-12-05R | A | | A ⁽¹⁾ | | | | bedrock 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections 1,4-D Change from SA to A / No 1,4-D detections >DW |
| MW-13-44 | A | | A ⁽¹⁾ | | | | bedrock 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections 1,4-D Change from SA to A / No 1,4-D detections >DW |
| MW-12-06 | A | | A ⁽¹⁾ | | | | bedrock 1,4-dioxane monitoring | Removed VOC Analysis / No VOC detections 1,4-D Change from SA to A / No 1,4-D detections |
| MW-17-87 | A | | A ⁽¹⁾ | | | | bedrock 1,4-dioxane monitoring | Well added |
| MW-19-118S | A | | A ⁽¹⁾ | | | | bedrock 1,4-dioxane monitoring | New nested deep bedrock well / 1,4-Dioxane only |
| MW-19-118D | A | | A ⁽¹⁾ | | | | bedrock 1,4-dioxane monitoring | New nested deep bedrock well / 1,4-Dioxane only |
| MW-19-125 | A | | A ⁽¹⁾ | | | | bedrock 1,4-dioxane monitoring | Proposed deep bedrock well / 1,4-Dioxane only |
| <i>Lansing Township Wells</i> | | | | | | | | |
| TWP-03 | - | | A ⁽¹⁾ | | | | Municipal Well 1,4-dioxane monitoring | |
| TWP-04 | - | | A ⁽¹⁾ | | | | Municipal Well 1,4-dioxane monitoring | |
| TWP-05 | - | | A ⁽¹⁾ | | | | Municipal Well 1,4-dioxane monitoring | |

Notes:

* Site wide gauging to alternate between semi-annual events to account for seasonal variability. Semi-annual gauging includes all wells sampled semi-annually.

** Select metals includes arsenic, nickel, lead, vanadium, chromium, and copper.

(1) = Analyzed for 1,4-dioxane via low-level USEPA Method 522

New wells will be added to the figures and incorporated into the annual monitoring once 4 samples are collected and a COC list is determined.

M = Monthly

Q = Quarterly

SA = Semi-annual

A = Annual

B = Biennial (starting 2nd quarter of 2020)

Qd = Quadrennial

| Well | Gauging* | Analyte | | | | | Primary Function | Reason(s) for Change | |
|--|----------|---------|------------------|-----------------|---------------------|-------|------------------|--|--|
| | | VOCs | 1,4-Dioxane | Select Metals** | Hexavalent Chromium | SVOCs | | | PFAS |
| Plant 3 | | | | | | | | | |
| <i>Perched</i> | | | | | | | | | |
| CH-14-RO | SA | | | A | A | | SA | metals monitoring, PFAS monitoring | Removed VOC Analysis / No VOC detections |
| MW-05(3) | A | A | | | | | | VOC monitoring | |
| MW-06(3) | Abandon | | | | | | | | Removed VOC & SVOC Analysis / ND or Decreasing Trend / Abandon - Redundant |
| UNK-09 | Abandon | | | | | | | | Remove Gauging/Abandon - Redundant |
| UNK-10 | A | A | | | | | | VOC monitoring | |
| UNK-11 | A | A | | | | | Qd | VOC monitoring, SVOC monitoring | Removed Metals Analysis / Stable to Decreasing Trend / Added SVOC Analysis |
| MW-13-31 | A | | | | | | | groundwater elevation monitoring | Removed Metals & SVOCs / Stable to Decreasing Trend / attributed to offsite |
| MW-13-32 | A | | | B | | | Qd | groundwater elevation monitoring/ SVOC & Metals monitoring | Perimeter monitoring for metals and SVOCs |
| MW-13-33 | Abandon | | | | | | | | Removed Metals Analysis / Stable to Decreasing Trend / Abandon |
| LMW-12-09 | SA | | | | | | | Reduce LNAPL gauging to SA | LNAPL Gauging will Occur SA/ Max LNAPL Thickness Observed in 4 Quarters was 0.04 feet. |
| LMW-12-10 | SA | | | | | | | Reduce LNAPL gauging to SA | LNAPL Gauging will Occur SA |
| LMW-12-11 | SA | | | | | | | Reduce LNAPL gauging to SA | LNAPL Gauging will Occur SA / No LNAPL Observed for 4 Quarters |
| UNK-13 | SA | | | | | | | Reduce LNAPL gauging to SA | Change LNAPL Gauging to SA |
| UNK-14 | SA | | | | | | | Reduce LNAPL gauging to SA | Change LNAPL Gauging to SA |
| MW-04(3) | A | | | | | | | groundwater elevation monitoring | |
| MW-12-19 | A | | | | | | | groundwater elevation monitoring | |
| P3-SB-07 | SA | | | | | | | groundwater elevation monitoring | Gauging used to evaluate bulkheading and PFAS area |
| P3-SB-28 | A | | | | | | Qd | groundwater elevation monitoring, SVOC monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend |
| MW-14-65 | A | | | | | | | groundwater elevation monitoring | Removed VOC and SVOC Analysis / ND |
| UNK-15 | Q | | | | | | | PFAS monitoring | |
| MW-18-88 | Q | A | | A | A | | Q | PFAS monitoring/ monitoring VOC & Metals | Well Added |
| MW-18-89 | Q | | | | | | Q | PFAS monitoring | Well Added |
| MW-18-90 | Q | | | | | | Q | PFAS monitoring | Well Added |
| MW-18-91 | Q | | | | | | Q | PFAS monitoring | Well Added |
| MW-18-92 | SA | | | | | | SA | PFAS monitoring | Well Added |
| MW-18-95 | Q | | | | | | Q | PFAS monitoring | Well Added |
| MW-18-96 | SA | | | | | | SA | PFAS monitoring | Well Added |
| MW-18-98 | Q | | | | | | Q | PFAS monitoring | Well Added |
| MW-18-99 | Q | | | | | | Q | PFAS monitoring | Well Added |
| MW-18-100 | SA | | | | | | SA | PFAS monitoring | Well Added |
| MW-18-102 | SA | | | | | | SA | PFAS monitoring | Well Added |
| MW-18-103 | Q | | | | | | Q | PFAS monitoring | Well Added |
| MW-18-104 | SA | | | | | | SA | PFAS monitoring | Well Added |
| MW-18-105 | Q | | | | | | Q | PFAS monitoring | Well Added |
| MW-18-106 | SA | | | | | | SA | PFAS monitoring | Well Added |
| MW-19-107 | SA | | | | | | SA | PFAS monitoring | Well Added |
| MW-19-108 | SA | | | | | | SA | PFAS monitoring | Well Added |
| MW-19-110 | SA | | | | | | SA | PFAS monitoring | New perched monitoring well installed August 2019 |
| MW-19-111 | SA | | | | | | SA | PFAS monitoring | New perched monitoring well installed August 2019 |
| MW-19-112 | SA | | | | | | SA | PFAS monitoring | New perched monitoring well installed August 2019 |
| MW-19-113 | SA | | | | | | SA | PFAS monitoring | New perched monitoring well installed August 2019 |
| MW-19-114 | SA | | | | | | SA | PFAS monitoring | New perched monitoring well installed August 2019 |
| <i>Deep Overburden and Weathered Bedrock</i> | | | | | | | | | |
| MW-12-20 | A | | B | | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / Stable to Decreasing Trend |
| MW-12-21 | SA | B | SA | | | | | lower 1,4-dioxane monitoring, VOC monitoring | VOC Changed from A to B / Stable to Decreasing Trend Removed Metals Analysis / Stable to Decreasing Trend |
| MW-13-22 | A | B | A | | | | | lower 1,4-dioxane monitoring, VOC monitoring | VOC Changed from A to B / Stable to Decreasing Trend Removed Metals Analysis / Stable to Decreasing Trend |
| MW-13-23 | A | | A | | | | | lower 1,4-dioxane monitoring | |
| MW-13-24 | A | | A | | | | | lower 1,4-dioxane monitoring | |
| MW-13-25 | SA | | SA | | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / Stable to Decreasing Trend |
| MW-13-26 | A | | | | | | | groundwater elevation monitoring | Remove B 1,4-d / 6 yrs ND |
| MW-13-29 | A | | A | | | | | lower 1,4-dioxane monitoring | |
| MW-13-30 | A | | | | | | | groundwater elevation monitoring | Remove B 1,4-d / 6 yrs ND |
| MW-13-34 | SA | B | SA | | | | | lower 1,4-dioxane monitoring, VOC monitoring, | VOC Changed from A to B / Stable to Decreasing Trend |
| MW-13-40 | A | | | | | | | groundwater elevation monitoring | Removed 1,4-dioxane, added MW-18-97 |
| MW-13-41 | A | B | | | | | | VOC monitoring | Added VOC Analysis Removed Metals Analysis / Stable to Decreasing Trend |
| MW-13-46 | SA | | SA | | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend |
| MW-13-48 | SA | B | SA | | | | | lower 1,4-dioxane monitoring, VOC monitoring | VOC Changed from A to B / Stable to Decreasing Trend |
| MW-13-49 | A | | A | | | | | lower 1,4-dioxane | Removed VOC Analysis / ND or Stable to Decreasing Trend |
| MW-19 | A | B | A | | | | | lower 1,4-dioxane monitoring | |
| MW-22 | A | | | | | | | metals monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend / Removed 1,4-D Analysis / Stable to Decreasing Trend |
| MW-23 | SA | | | | | | SA | PFAS monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend / Removed 1,4-D Analysis / Stable to Decreasing Trend / Add PFAS |
| MW-91-2 (abandoned) / MW-91-2R | SA | | A | A | A | | SA | lower 1,4-dioxane, PFAS and metals monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend MW-91-2 abandoned and replaced in August 2019 |
| MW-02-02(3) | A | | A | | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend / Removed Metals Analysis / Stable to Decreasing Trend |
| MW-02-04(3) | SA | | A | A | | | SA | lower 1,4-dioxane, PFAS and metals monitoring | Add PFAS |
| MW-02-01(3) | A | | | | | | | groundwater elevation monitoring | |
| MW-02-03(3) | A | | | | | | | groundwater elevation monitoring | |
| MW-04-03(3) | A | | | | | | | groundwater elevation monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend/VC attributed to offsite |
| MW-04-04(3) | A | | | | | | | groundwater elevation monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend/VC attributed to offsite |
| MW-13-27 | A | | | | | | | groundwater elevation monitoring | |
| MW-14-64 | A | | A | | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend |
| MW-15-71 | A | | B | | | | | lower 1,4-dioxane monitoring | 1,4-D Changed from A to B / Stable to Decreasing Trend |
| PW-14-03 | SA | | SA | | | | | lower 1,4-dioxane monitoring | Remove VOCs / Stable to Decreasing Trend |
| MW-18-93 | SA | | | | | | SA | Lower PFAS monitoring | Well Added |
| MW-18-94 | SA | | A | | | | SA | Lower PFAS, 1,4-Dioxane monitoring | Well Added |
| MW-18-97 | SA | | A | | | | SA | Lower PFAS monitoring | Well Added |
| MW-18-101 | SA | | | | | | SA | Lower PFAS monitoring | Well Added |
| MW-93-1 | A | | | | | | | groundwater elevation monitoring | |
| <i>Bedrock</i> | | | | | | | | | |
| MW-91-5 | SA | | A ⁽¹⁾ | | | | | bedrock monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend / 1,4-D Changed from SA to A / ND or Stable to Decreasing Trend |
| MW-91-6 | SA | | A ⁽¹⁾ | | | | | bedrock monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend / 1,4-D Changed from SA to A / ND or Stable to Decreasing Trend |
| MW-13-28 | SA | | A ⁽¹⁾ | | | | | bedrock monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend / 1,4-D Changed from SA to A / ND or Stable to Decreasing Trend |
| MW-13-38 | A | | A ⁽¹⁾ | | | | | bedrock monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend / 1,4-D Changed from SA to A / ND or Stable to Decreasing Trend |
| MW-13-39B | A | | | | | | | groundwater elevation monitoring | |
| MW-13-47 | SA | | A ⁽¹⁾ | | | | | bedrock monitoring | Removed VOC Analysis / Stable to Decreasing Trend 1,4-D Changed from SA to A / Stable to Decreasing Trend |
| MW-04-01(3) | Abandon | | | | | | | | Anomalous elevation in bedrock / no used for contouring or sampling |
| MW-04-02(3) | A | | | | | | | groundwater elevation monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend/VC attributed to offsite |
| MW-12-04 | A | | | | | | | groundwater elevation monitoring | |
| MW-13-37 | A | | A ⁽¹⁾ | | | | | 1,4-D monitoring | Added Annual 1,4-Dioxane |
| MW-88-1 | A | | | | | | | groundwater elevation monitoring | |
| MW-91-3 | A | | | | | | | bedrock monitoring | Removed VOC Analysis / ND or Stable to Decreasing Trend/VC attributed to offsite |
| MW-91-4 | A | | | | | | | groundwater elevation monitoring | Removed VOC Analysis / Stable to Decreasing Trend |
| MW-19-119S | A | | A ⁽¹⁾ | | | | | bedrock monitoring | New nested deep bedrock well / 1,4-Dioxane only |
| MW-19-119D | A | | A ⁽¹⁾ | | | | | bedrock monitoring | New nested deep bedrock well / 1,4-Dioxane only |

Notes:
 * Site wide gauging to alternate between semi-annual events to account for seasonal variability. Semi-annual gauging includes all wells sampled semi-annually.
 ** Select metals includes arsenic, nickel, lead, vanadium, chromium, and copper.
 (1) - Analyzed for 1,4-dioxane via low-level USEPA Method 522
 Q = quarterly
 SA = semi-annual
 A = annual
 B = biennial (starting 2nd quarter of 2020)
 Qd = Quadrennial

| Well | Gauging* | Analyte | | | | | Primary Function | Reason(s) for Change |
|--|----------|---------|-------------|-----------------|-------|------|---|---|
| | | VOCs | 1,4-Dioxane | Select Metals** | SVOCs | PFAS | | |
| Plant 6 | | | | | | | | |
| <i>Perched</i> | | | | | | | | |
| MW-02-03(6) | A | B | A | | | Qd | perched 1,4-dioxane monitoring, SVOC monitoring | VOC Changed from A to B / Stable to Decreasing Trend |
| MW-03-04 | A | | | | | | groundwater elevation monitoring | Removed VOC, 1,4-d Analysis / Stable to Decreasing Trend |
| MW-03-06 | A | B | A | | | | perched 1,4-dioxane monitoring | VOC Changed from A to B / Stable to Decreasing Trend Removed Metals and SVOC Analysis / Stable to Decreasing Trend |
| MW-03-08 | A | B | | | | | perched VOC monitoring | VOC Changed from A to B / removed 1,4-d / Stable to Decreasing Trend |
| MW-04-05(6) | A | | | | | A | perched PFAS monitoring | Removed VOC, 1,4-d and Metals Analysis / Stable to Decreasing Trend |
| MW-12-11 | A | | | | | A | PFAS monitoring | Removed Metals Analysis / Stable to Decreasing Trend / PFAS Stability |
| MW-12-12 | Q | | | | | Q | PFAS monitoring | Removed Metals Analysis / Stable to Decreasing Trend / PFAS Stability |
| MW-12-13 | Q | | | A | | Q | PFAS monitoring | Metals Changed from SA to A / Stable to Decreasing Trend / PFAS Stability |
| MW-12-16 | A | | | | | | groundwater elevation monitoring | Removed VOC Analysis / Stable to Decreasing Trend Removed Metals / Stable to Decreasing Trend attributed to offsite |
| MW-13-35 | A | | | | | | groundwater elevation monitoring | Removed VOC Analysis / Stable to Decreasing Trend Removed Metals / Stable to Decreasing Trend attributed to offsite/ Retain well for potential PFAS monitoring |
| MW-13-36R | Q | | | A | | Q | Metals and PFAS monitoring | Metals Changed from SA to A / Stable to Decreasing Trend / PFAS Stability |
| MWBP-10-UST1-4 | Abandon | | | | | | | Only used for groundwater elevation monitoring. High well density in Area 7 |
| MWBP-10A-UST1-4 | Abandon | | | | | | | Only used for groundwater elevation monitoring. High well density in Area 8 |
| MWBP-10-UST5-6 | A | B | | B | | | VOCs/metal monitoring | VOC Changed from A to B / Stable to Decreasing Trends Metals Changed from SA to B / Stable to Decreasing Trends |
| MWBP-11-UST1-4 | A | B | | B | | | VOCs/metal monitoring | VOC Changed from A to B / Stable to Decreasing Trends |
| MWBP-12A-UST1-4 | Abandon | | | | | | | Consistently non detect for VOCs/stable metals. High well density in area 7. |
| MWBP-12-UST1-4 | A | B | | B | | Qd | VOCs/metal monitoring, SVOC monitoring | VOC Changed from A to B / Stable to Decreasing Trends |
| P6-SB-18 | A | | | | | | groundwater elevation monitoring | |
| P6-SB-37 | A | | | | | | groundwater elevation monitoring | |
| MW-02-02(6) | Abandon | | | | | | | Only used for groundwater elevation monitoring. |
| MW-03-02 | A | | | | | | groundwater elevation monitoring | Removed Metals Analysis / Stable to Decreasing Trend |
| MW-03-05 | A | B | A | | | | perched 1,4-dioxane monitoring, VOCs monitoring | VOC Changed from A to B / Stable to Decreasing Trend |
| MW-12-10R | A | | | | | | groundwater elevation monitoring | |
| MW-12-14 | A | | | | | | groundwater elevation monitoring | |
| MW-12-15 | | | | | | | | Removed VOC Analysis / Stable to Decreasing Trend Removed Metals / Stable to Decreasing Trend attributed to offsite/ Retain well for potential PFAS monitoring |
| MWBP-12-UST5-6 | Abandon | | | | | | | Consistently non detect for VOCs/stable metals. High well density in area 7. |
| MWBP-13A-UST1-4 | Abandon | | | | | | | Consistently non detect for VOCs/stable metals. High well density in area 7. |
| P6-MW-01 | A | | | | | | groundwater elevation monitoring | |
| P6-SB-07 | Q | | | | | Qd | PFAS monitoring, SVOCs monitoring | PFAS Stability |
| P6-SB-21 | A | | | | | | groundwater elevation monitoring | |
| P6-SB-35 | A | | | | | | groundwater elevation monitoring | |
| SME-MW-02 | Abandon | | | | | | | Only used for groundwater elevation monitoring. |
| MW-14-66 | A | | | B | | | metals monitoring | Removed VOC Analysis / Stable to Decreasing Trend / Added PFAS |
| MW-14-67 | Q | | | B | | Q | metals monitoring, PFAS Monitoring | Removed VOC Analysis / Stable to Decreasing Trend |
| MW-14-70 | Q | | | | | Q | PFAS monitoring | PFAS Stability |
| MW-14-68 | A | | | | | | PFAS monitoring | Dry Since Installation in 2014 / Continue to check Annually |
| MW-14-69 | A | | | | | | PFAS monitoring | Dry Since Installation in 2014 / Continue to check Annually |
| <i>Deep Overburden and Weathered Bedrock</i> | | | | | | | | |
| MW-13-52 | A | | A | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / Stable to Decreasing Trend 1,4-D Changed from B to A |
| MW-13-53 | A | | A | | | | lower 1,4-dioxane monitoring | Removed VOC Analysis / Stable to Decreasing Trend 1,4-D Changed from B to A |
| <i>Bedrock</i> | | | | | | | | |
| MW-04-01(6) | A | | B | | | | bedrock 1,4-dioxane monitoring | Removed VOC Analysis / Stable to Decreasing Trend |
| MW-04-04R | A | | B | | | A | bedrock 1,4-dioxane monitoring, PFAS Monitoring | Removed VOC Analysis / Stable to Decreasing Trend |
| MW-04-06R | A | | B | | | A | bedrock 1,4-dioxane monitoring, PFAS Monitoring | Removed VOC Analysis / Stable to Decreasing Trend |
| MW-12-03 | A | | | | | | groundwater elevation monitoring | |
| MW-13-50 | A | | B | | | | bedrock 1,4-dioxane monitoring | Removed VOC Analysis / Stable to Decreasing Trend |

* Site wide gauging to alternate between semi-annual events to account for seasonal variability. Semi-annual gauging includes all wells sampled semi-annually.

** Select metals includes arsenic, nickel, lead, vanadium, chromium, and copper.

Q = quarterly

SA = semi-annual

A = annual

B = biennial (starting 2nd quarter of 2020)

Qd = Quadrennial

Table 1B
 Revised Interim Groundwater Monitoring Summary
 Revised May 2023
 RACER Trust Plants 2, 3, and 6 - Lansing, Michigan



| Well | Screen Interval (ft bgs) | Gauging* | Analyte | | | | Primary Function |
|--|--------------------------|----------|---------|-------------|-------|----|--|
| | | | VOCs | 1,4-Dioxane | SVOCs | | |
| Plant 2 | | | | | | | |
| <i>Perched</i> | | | | | | | |
| LMW-12-01 | 7-12 | SA | | | | | LNAPL Monitoring |
| LMW-12-02 | 5-10 | SA | | | | | LNAPL Monitoring |
| LMW-12-03D | 17.3-22.3 | SA | | | | | LNAPL Monitoring |
| LMW-12-03S | 4-9 | SA | | | | | LNAPL Monitoring |
| LMW-12-04 | 16-21 | SA | | | | | LNAPL Monitoring |
| LMW-12-05 | 7-12 | SA | | | | | LNAPL Monitoring |
| LMW-12-06 | 4-9 | SA | | | | | LNAPL Monitoring |
| LMW-12-07 | 4-9 | SA | | | | | LNAPL Monitoring |
| LMW-12-08 | 8-13 | SA | | | | | LNAPL Monitoring |
| LMW-14-12D | 18-23 | SA | | | | | LNAPL Monitoring |
| LMW-14-13D | 17.5-22.5 | SA | | | | | LNAPL Monitoring |
| LMW-14-14D | 18-23 | SA | | | | | LNAPL Monitoring |
| LMW-14-15D | 18-23 | SA | | | | | LNAPL Monitoring |
| LMW-15-16D | 19.5-24.5 | SA | | | | | LNAPL Monitoring |
| LMW-15-17D | 20-25 | SA | | | | | LNAPL Monitoring |
| MW-01(2) | 10-20 | SA | B | | | | VOC sentinel |
| MW-12-07 | 10-15 | SA | | | | | Groundwater elevation monitoring |
| MW-12-08 | 19-24 | SA | | | | | Groundwater elevation monitoring |
| MW-12-09 | 14-19 | SA | B | B | | A | VOC Sentinel, perched 1,4-dioxane sentinel, PFAS sentinel |
| MW-12-18 | 28-33 | SA | B | | | A | VOC sentinel, PFAS sentinel |
| MW-14-54 | 14-19 | SA | B | | | | VOC monitoring |
| MW-14-55 | 13-18 | SA | Qd | | | | VOC monitoring |
| MW-14-57 | 15-20 | SA | | A | | | Perched 1,4-dioxane monitoring |
| MW-14-58R | 22-27 | SA | B | A | | A | Perched 1,4-dioxane monitoring, PFAS Monitoring |
| MW-14-59 | 12-17 | SA | B | A | Qd | A | Perched 1,4-dioxane monitoring, SVOC evaluation, PFAS monitoring |
| MW-14-60 | 15-20 | SA | B | A | Qd | A | Perched 1,4-dioxane monitoring, SVOC evaluation, PFAS monitoring |
| MW-14-62 | 12-17 | SA | B | A | Qd | A | Perched 1,4-dioxane monitoring, PFAS Monitoring |
| MW-21-139 | 7-12 | SA | | SA | | SA | Perched 1,4-dioxane monitoring |
| MW-22-153 | 25-30 | SA | Q | Q | | | Perched 1,4-dioxane monitoring |
| MW-22-155 | 25.5-30.5 | SA | | Q | | | Perched 1,4-dioxane monitoring |
| MW-22-156 | 23-28 | SA | | Q | | | Perched 1,4-dioxane monitoring |
| MW-22-157 | 24-29 | SA | | Q | | | Perched 1,4-dioxane monitoring |
| P2-MW-02 | 31-41 | SA | | | | A | Groundwater elevation monitoring |
| P2-MW-03 | 27-32 | SA | | | | | Groundwater elevation monitoring |
| P2-MW-04 | 26-36 | SA | | A | Qd | A | Perched 1,4-dioxane monitoring, SVOC evaluation |
| P2-SB-03 | 14-19 | SA | | | | | Groundwater elevation monitoring |
| P2-SB-06 | 24-29 | SA | | | | | Groundwater elevation monitoring |
| P2-SB-20 | 8-13 | SA | | | | | Groundwater elevation monitoring |
| P2-SB-37 | 5-10 | SA | | | | | LNAPL Monitoring |
| PMW-01 | 2.59-7.59 | SA | | | | | LNAPL Monitoring |
| PMW-02 | 2.59-7.59 | SA | | | | | LNAPL Monitoring |
| PMW-03 | 1.2-6.2 | SA | | | | | LNAPL Monitoring |
| Deep Overburden and Weathered Bedrock | | | | | | | |
| MW-13-43 | 72-77 | SA | | SA | | | Lower 1,4-dioxane monitoring |
| MW-13-45 | 72-77 | SA | | SA | | | Lower 1,4-dioxane monitoring |
| MW-13-51 | 77-87 | SA | | | | | Lower 1,4-dioxane sentinel |
| MW-14-56 | 71-76 | SA | | A | | A | Lower 1,4-dioxane sentinel |
| MW-14-61 | 70-75 | SA | A | SA | Qd | A | Lower 1,4-dioxane sentinel, SVOC Monitoring, PFAS Monitoring |
| MW-14-63 | 68-73 | SA | | A | | | Lower 1,4-dioxane sentinel |
| MW-15-72 | 63-68 | SA | B | SA | Qd | A | Lower 1,4-dioxane monitoring |
| MW-15-73 | 78-83 | SA | | B | | | Lower 1,4-dioxane monitoring |
| MW-16-74 | 66-71 | SA | | A | | | Lower 1,4-dioxane sentinel |
| MW-16-75 | 66-71 | SA | | A | | | Lower 1,4-dioxane sentinel |
| MW-16-76 | 70-75 | SA | | A | | | Lower 1,4-dioxane sentinel |
| MW-16-77 | 66-71 | SA | | A | | | Lower 1,4-dioxane sentinel |
| MW-16-78 | 68-73 | SA | | A | | | Lower 1,4-dioxane sentinel |

| Well | Screen Interval (ft bgs) | Gauging* | Analyte | | | | Primary Function |
|-------------------------------|--------------------------|----------|---------|------------------|-------|----|---|
| | | | VOCs | 1,4-Dioxane | SVOCs | | |
| Plant 2 | | | | | | | |
| MW-16-80 | 68-73 | SA | | A | | | Lower 1,4-dioxane monitoring |
| MW-16-81 | 70-75 | SA | B | SA | | A | Lower 1,4-dioxane monitoring |
| MW-16-82 | 70-75 | SA | | A | | | Lower 1,4-dioxane monitoring |
| MW-16-83 | 71-76 | SA | | B | | | Lower 1,4-dioxane sentinel |
| MW-16-84 | 72-77 | SA | A | SA | | | Lower 1,4-dioxane monitoring |
| MW-16-85 | 74-79 | SA | B | SA | | | Lower 1,4-dioxane monitoring |
| MW-17-86 | 73-78 | SA | B | SA | | | Lower 1,4-dioxane monitoring |
| MW-19-115 | 72.5-77.5 | SA | | SA | | | Lower 1,4-dioxane monitoring |
| MW-19-116 | 65-70 | SA | | SA | | | Lower 1,4-dioxane monitoring |
| MW-19-117 | 54-59 | SA | | SA | | | Lower 1,4-dioxane monitoring |
| MW-19-120 | 66-71 | SA | A | SA | | | Lower 1,4-dioxane monitoring |
| MW-19-121 | 66-71 | SA | | SA | | | |
| MW-19-122 | 59-64 | SA | | SA | | | |
| MW-19-123 | 66-71 | SA | | SA | | | |
| MW-19-124 | 65-70 | SA | | SA | | | |
| MW-20-126 | 69-74 | SA | | SA | | | |
| MW-20-127 | 72-77 | SA | | SA | | | |
| MW-20-128 | 65-70 | SA | | SA | | | |
| MW-20-129 | 64-69 | SA | | SA | | | |
| MW-20-130 | 63-68 | SA | | SA | | SA | PFAS Sentinel |
| MW-21-140 | 67-72 | SA | | SA | | | Lower 1,4-dioxane monitoring |
| MW-21-142 | 71.5-76.5 | SA | | SA | | | Lower 1,4-dioxane monitoring |
| PW-14-01 | 71.6-76.8 | SA | | SA | | | Lower 1,4-dioxane monitoring |
| PW-14-02 | 75-80 | SA | Qd | SA | | | Lower 1,4-dioxane monitoring |
| TW-14-02 | 67-72 | SA | Qd | SA | | | Lower 1,4-dioxane monitoring |
| TW-15-12 | 73-78 | SA | | SA | | | |
| Bedrock | | | | | | | |
| MW-12-01 | 87-110 | SA | | B ⁽¹⁾ | | | Bedrock sentinel |
| MW-12-02 | 87-110 | SA | | B ⁽¹⁾ | | | Bedrock sentinel |
| MW-12-05R | 100-112 | SA | | A ⁽¹⁾ | | | Bedrock sentinel |
| MW-12-06 | 80.6-99.5 | SA | | A ⁽¹⁾ | | | Bedrock sentinel |
| MW-13-44 | 96-115 | SA | | A ⁽¹⁾ | | | Bedrock sentinel |
| MW-17-87 | 100-112 | SA | | A ⁽¹⁾ | | | Bedrock sentinel |
| MW-19-118D | 175-190 | SA | | A ⁽¹⁾ | | | Bedrock sentinel |
| MW-19-118S | 145-160 | SA | | A ⁽¹⁾ | | | Bedrock sentinel |
| MW-19-125 | 100-115 | SA | | A ⁽¹⁾ | | | Bedrock sentinel |
| Lansing Township Wells | | | | | | | |
| TWP-03 | - | - | | A ⁽¹⁾ | | | Municipal Well |
| TWP-04 | - | - | | A ⁽¹⁾ | | | Municipal Well |
| TWP-05 | - | - | | A ⁽¹⁾ | | | Municipal Well |
| Storm Sewer | | | | | | | |
| P2-MH-2 | - | - | | | | Q | PFAS sewer monitoring |
| P2-MH-9 | - | - | | | | Q | PFAS sewer monitoring, typically dry, no sample |
| P2-MH-W | - | - | | | | Q | PFAS sewer monitoring |

Notes:

Wells shown in gray shading are part of biosparge performance monitoring, not part of previous formal IGMP submission. Additional details included in Table 7.

* Site wide gauging to alternate between semi-annual events to account for seasonal variability. Semi-annual gauging includes all wells sampled semi-annually.

** Select metals includes arsenic, nickel, lead, vanadium, chromium, and copper.

(1) = Analyzed for 1,4-dioxane via low-level USEPA Method 522

New wells will be added to the figures and incorporated into the annual monitoring once 4 samples are collected and a COC list is determined.

ft bgs = feet below ground surface

M = Monthly

Q = Quarterly

SA = Semi-annual

A = Annual (2Q or 4Q of each year, each year rotates which quarter)

B = Biennial (starting 2nd quarter of 2020)

Qd = Quadrennial (every 4 years, starting 2020)

Table 1B
Revised Interim Groundwater Monitoring Summary
Revised December 2022
RACER Trust Plants 2, 3, and 6 - Lansing, Michigan



| Well | Screen Interval (ft bgs) | Gauging* | Analyte | | | | | Primary Function | |
|--|--------------------------|----------|---------|-------------|-----------------|---------------------|-------|------------------|---|
| | | | VOCs | 1,4-Dioxane | Select Metals** | Hexavalent Chromium | SVOCs | | PFAS |
| Plant 3 | | | | | | | | | |
| <i>Perched</i> | | | | | | | | | |
| CH-14-RO | 7-12 | SA | | | Qd | Qd | | A | Metals monitoring |
| LMW-12-09 | 3-8 | SA | | | | | | | LNAPL Monitoring |
| LMW-12-10 | 14-19 | SA | | | | | | | LNAPL Monitoring |
| LMW-12-11 | 15-20 | SA | | | | | | | LNAPL Monitoring |
| MW-05(3) | 10-15 | SA | B | | | | | | VOC sentinel |
| MW-13-31 | 5-10 | SA | | | | | | | Groundwater elevation monitoring |
| MW-13-32 | 5-10 | SA | | | Qd | | Qd | | Groundwater elevation monitoring / perimeter SVOC & Metals monitoring |
| MW-14-65 | 5-10 | SA | | | | | | | Groundwater elevation monitoring |
| MW-18-88 | 6-11 | SA | B | | Qd | Qd | | SA | PFAS monitoring / sentinel VOC & Metals |
| MW-18-89 | 7-12 | SA | | | | | | A | PFAS monitoring |
| MW-18-90 | 15-20 | SA | | | | | | A | PFAS monitoring |
| MW-18-91 | 7-12 | SA | | | | | | A | PFAS monitoring |
| MW-18-92 | 23-28 | SA | | | | | | A | PFAS sentinel |
| MW-18-95 | 4.5-9.5 | SA | | | | | | SA | PFAS monitoring |
| MW-18-96 | 7-12 | SA | | | | | | A | PFAS sentinel |
| MW-18-98 | 7-12 | SA | | | | | | SA | PFAS sentinel |
| MW-18-99 | 9-14 | SA | | | | | | SA | PFAS sentinel |
| MW-18-100 | 8-13 | SA | | | | | | SA | PFAS sentinel |
| MW-18-102 | 10-15 | SA | | | | | | A | PFAS sentinel |
| MW-18-103 | 5-10 | SA | | | | | | A | PFAS monitoring |
| MW-18-104 | 5-10 | SA | | | | | | A | PFAS sentinel |
| MW-18-105 | 6-11 | SA | | | | | | SA | PFAS monitoring |
| MW-18-106 | 5-10 | SA | | | | | | | PFAS sentinel |
| MW-19-107 | 23-28 | SA | | | | | | SA | PFAS sentinel |
| MW-19-108 | 23-28 | SA | | | | | | SA | PFAS sentinel |
| MW-19-110 | 8-13 | SA | | | | | | A | PFAS sentinel |
| MW-19-111 | 20-25 | SA | | | | | | SA | PFAS sentinel |
| MW-19-112 | 9-14 | SA | | | | | | A | PFAS sentinel |
| MW-19-113 | 16-21 | SA | | | | | | A | PFAS sentinel |
| MW-19-114 | 6-11 | SA | | | | | | A | PFAS sentinel |
| P3-SB-07 | 11-16 | SA | | | | | | | Groundwater elevation monitoring |
| P3-SB-28 | 8-13 | SA | | | | | | Qd | Groundwater elevation monitoring |
| UNK-10 | 11-16 | SA | | | | | | | VOC sentinel |
| UNK-11 | 6.5-11.5 | SA | | | | | | Qd | VOC monitoring/SVOCs monitoring, VOCs sentinel well |
| UNK-15 | 11-16 | SA | | | | | | SA | PFAS monitoring |
| <i>Deep Overburden and Weathered Bedrock</i> | | | | | | | | | |
| MW-02-01(3) | 59-69 | SA | | | | | | | Groundwater elevation monitoring |
| MW-02-02(3) | 74-84 | SA | | B | | | | | Lower 1,4-dioxane sentinel |
| MW-02-03(3) | 79-89 | SA | | | | | | | Groundwater elevation monitoring |
| MW-02-04(3) | 76-86 | SA | | B | Qd | | | A | Lower 1,4-dioxane/PFAS/metals sentinel |
| MW-04-03(3) | 80-90 | SA | | | | | | | Groundwater elevation monitoring |
| MW-04-04(3) | 72-82 | SA | | | | | | | Groundwater elevation monitoring |
| MW-12-20 | 75-80 | SA | | B | | | | | Lower 1,4-dioxane sentinel |
| MW-12-21 | 70-75 | SA | B | SA | | | | | Lower 1,4-dioxane monitoring |
| MW-13-22 | 89-94 | SA | B | A | | | | | Lower 1,4-dioxane monitoring |
| MW-13-23 | 69-74 | SA | | B | | | | | Lower 1,4-dioxane sentinel |
| MW-13-24 | 69-74 | SA | | B | | | | | Lower 1,4-dioxane sentinel |
| MW-13-25 | 67-72 | SA | | A | | | | | Lower 1,4-dioxane monitoring |
| MW-13-26 | 72-77 | SA | | | | | | | Groundwater elevation monitoring |
| MW-13-27 | 67-72 | SA | | | | | | | Groundwater elevation monitoring |
| MW-13-29 | 68-73 | SA | | A | | | | | Lower 1,4-dioxane monitoring |
| MW-13-30 | 72-77 | SA | | | | | | | Groundwater elevation monitoring |
| MW-13-34 | 74-79 | SA | B | SA | | | | | Lower 1,4-dioxane monitoring |
| MW-13-40 | 72-77 | SA | | | | | | | Groundwater elevation monitoring |
| MW-13-41 | 77-82 | SA | B | | | | | | lower VOC sentinel |
| MW-13-46 | 68-73 | SA | | A | | | | | Lower 1,4-dioxane monitoring |

Table 1B
Revised Interim Groundwater Monitoring Summary
Revised December 2022
RACER Trust Plants 2, 3, and 6 - Lansing, Michigan



| Well | Screen Interval (ft bgs) | Gauging* | Analyte | | | | | Primary Function |
|--------------------|--------------------------|----------|---------|------------------|-----------------|---------------------|-------|---|
| | | | VOCs | 1,4-Dioxane | Select Metals** | Hexavalent Chromium | SVOCs | |
| Plant 3 | | | | | | | | |
| MW-13-48 | 65-70 | SA | B | SA | | | | Lower 1,4-dioxane monitoring |
| MW-13-49 | 73-78 | SA | | B | | | | Lower 1,4-dioxane monitoring |
| MW-14-64 | 98.6-103.6 | SA | | B | | | | Lower 1,4-dioxane sentinel |
| MW-15-71 | 110-115 | SA | | B | | | | Lower 1,4-dioxane sentinel |
| MW-18-93 | 77.5-82.5 | SA | | | | | A | Lower PFAS Sentinel |
| MW-18-94 | 72-77 | SA | | | | | A | Lower PFAS, 1,4-Dioxane Sentinel |
| MW-18-97 | 85-90 | SA | | | | | A | Lower PFAS Sentinel |
| MW-18-101 | 80-85 | SA | | B | | | SA | Lower PFAS Sentinel |
| MW-19 | 55-65 | SA | | B | | | | Lower 1,4-dioxane sentinel |
| MW-22 | 52.5-62.5 | SA | | | | | | Groundwater elevation monitoring |
| MW-23 | 52-62 | SA | | | | | A | PFAS sentinel |
| MW-91-2R | 75-80 | SA | | B | Qd | Qd | A | Lower 1,4-dioxane, PFAS and metals sentinel |
| MW-93-1 | 65-75 | SA | | | | | | Groundwater elevation monitoring |
| PW-14-03 | 85-90 | SA | | SA | | | | Lower 1,4-dioxane monitoring |
| TW-14-06 | 82-87 | SA | | SA | | | | |
| TW-15-11 | 85-90 | SA | | SA | | | | |
| Bedrock | | | | | | | | |
| MW-04-01(3) | 95-105 | - | | | | | | No longer part of sampling or gauging |
| MW-04-02(3) | 126-136 | SA | | | | | | Groundwater elevation monitoring |
| MW-12-04 | 77-100 | SA | | | | | | Groundwater elevation monitoring |
| MW-13-28 | 99-115.5 | SA | | A ⁽¹⁾ | | | | Bedrock sentinel |
| MW-13-37 | 97-112 | SA | | B ⁽¹⁾ | | | | 1,4-D sentinel |
| MW-13-38 | 107-124 | SA | | B ⁽¹⁾ | | | | Bedrock sentinel |
| MW-13-39B | 97-112 | SA | | | | | | Groundwater elevation monitoring |
| MW-13-47 | 99-119 | SA | | B ⁽¹⁾ | | | | Bedrock sentinel |
| MW-19-119D | 180-195 | SA | | A ⁽¹⁾ | | | | Bedrock sentinel |
| MW-19-119S | 145-160 | SA | | A ⁽¹⁾ | | | | Bedrock sentinel |
| MW-88-1 | 103.5-140 | SA | | | | | | Groundwater elevation monitoring |
| MW-91-3 | 105-117 | SA | | | | | | Bedrock sentinel |
| MW-91-4 | 116-132.5 | SA | | | | | | Groundwater elevation monitoring |
| MW-91-5 | 112.5-128 | SA | | B ⁽¹⁾ | | | | Bedrock sentinel |
| MW-91-6 | 82-98 | SA | | B ⁽¹⁾ | | | | Bedrock sentinel |
| Storm Sewer | | | | | | | | |
| P3-MH-284 | - | - | | | | | Q | PFAS sewer monitoring |
| P3-MH-NE | - | - | | | | | Q | PFAS sewer monitoring, typically dry, no sample |

Notes:

Wells shown in gray shading are part of biosparge performance monitoring, not part of previous formal IGMP submission. Additional details included in Table 7.

* Site wide gauging to alternate between semi-annual events to account for seasonal variability. Semi-annual gauging includes all wells sampled semi-annually.

** Select metals includes arsenic, nickel, lead, vanadium, chromium, and copper.

(1) - Analyzed for 1,4-dioxane via low-level USEPA Method 522

ft bgs = feet below ground surface

Q = quarterly

SA = semi-annual

A = annual

B = biennial (starting 2nd quarter of 2020)

Qd = Quadrennial

Table 1B
Revised Interim Groundwater Monitoring Summary
Revised December 2022
RACER Trust Plants 2, 3, and 6 - Lansing, Michigan



| Well | Screen Interval (ft bgs) | Gauging* | Analyte | | | | | Primary Function |
|--|--------------------------|----------|---------|-------------|-----------------|-------|---|------------------|
| | | | VOCs | 1,4-Dioxane | Select Metals** | SVOCs | PFAS | |
| Plant 6 | | | | | | | | |
| Perched | | | | | | | | |
| MW-02-02(6) | 35-45 | SA | B | A | | Qd | Perched 1,4-dioxane monitoring, SVOC evaluation | |
| MW-03-02 | 30-40 | SA | | | | | Groundwater elevation monitoring | |
| MW-03-04 | 33-43 | SA | | | | | Groundwater elevation monitoring | |
| MW-03-05 | 35-45 | SA | B | A | | | Perched 1,4-dioxane sentinel | |
| MW-03-06 | 30-40 | SA | B | A | | | Perched 1,4-dioxane sentinel | |
| MW-03-08 | 35-45 | SA | | | | | Perched VOC monitoring | |
| MW-04-05(6) | 20-30 | SA | SA | | | | A Perched PFAS sentinel | |
| MW-12-10R | 10-15 | SA | | | | | A Groundwater elevation monitoring, PFAS | |
| MW-12-11 | 13-18 | SA | | | | | A PFAS Sentinel | |
| MW-12-12 | 13-18 | SA | | | | | SA PFAS monitoring | |
| MW-12-13 | 18.5-23.5 | SA | | | Qd | | SA PFAS monitoring | |
| MW-12-14 | 25-30 | SA | | | | | Groundwater elevation monitoring | |
| MW-12-15 | 18-23 | - | | | | | Potential PFAS Monitoring if needed/ No gauging necessary | |
| MW-12-16 | 28-33 | SA | | | | | Boundary monitoring | |
| MW-13-35 | 25-30 | - | | | | | Potential PFAS Monitoring if needed/ No gauging necessary | |
| MW-13-36R | 5.5-10.5 | SA | | | Qd | | SA PFAS monitoring | |
| MW-14-66 | 14-19 | SA | | | Qd | | Metals sentinel | |
| MW-14-67 | 13-18 | SA | | | Qd | | A Metals/PFAS sentinel | |
| MW-14-69 | 41-46 | SA | | | | | Groundwater elevation monitoring | |
| MW-14-70 | 16-21 | SA | | | | | A PFAS Sentinel | |
| MW-20-131 | 5-10 | SA | SA | | | | SA PFAS monitoring | |
| MW-20-132 | 6-11 | SA | SA | | | | SA PFAS monitoring | |
| MW-21-133 | 10-15 | SA | | | | | SA PFAS monitoring | |
| MW-21-134 | 11-16 | SA | | | | | SA PFAS monitoring | |
| MW-21-135 | 22-27 | SA | | | | | SA PFAS monitoring | |
| MW-21-136 | 9-14 | SA | | | | | A PFAS monitoring | |
| MW-21-137 | 7-12 | SA | | | | | A PFAS monitoring | |
| MW-21-138 | 24-29 | SA | | | | | A PFAS monitoring | |
| MW-22-143 | 26-31 | SA | | | | | Q PFAS monitoring | |
| MW-22-144 | 19.5-24.5 | SA | | | | | Q PFAS monitoring | |
| MW-22-145 | 10.5-15.5 | SA | | | | | Q PFAS monitoring | |
| MW-22-146 | 5.5-10.5 | SA | | | | | Q PFAS monitoring | |
| MW-22-147 | 7.5-12.5 | SA | | | | | Q PFAS monitoring | |
| MW-22-148 | 24.5-29.5 | SA | | | | | Q PFAS monitoring | |
| MW-22-149 | 5.5-10.5 | SA | | | | | Q PFAS monitoring | |
| MW-22-150 | 13-18 | SA | | | | | Q PFAS monitoring | |
| MW-22-151 | 13-18 | SA | | | | | Q PFAS monitoring | |
| MW-22-152 | 10-15 | SA | SA | | | | Q PFAS monitoring | |
| MW-22-154 | 16-11 | SA | Q | | | | VOCs monitoring | |
| MW-22-158 | 16-21 | SA | | | | | Q PFAS monitoring | |
| MW-22-159 | 26-31 | SA | | | | | Q PFAS monitoring | |
| MW-22-160 | 14-19 | SA | | | | | Q PFAS monitoring | |
| MWBP-10-UST5-6 | 28-38 | SA | | | Qd | | VOCs/metal monitoring | |
| MWBP-11-UST1-4 | 9-19 | SA | | | Qd | | VOCs/metal monitoring | |
| MWBP-12-UST1-4 | 15-25 | SA | B | | Qd | Qd | VOCs/metal monitoring, SVOC evaluation | |
| P6-MW-01 | 23-28 | SA | | | | | Groundwater elevation monitoring | |
| P6-SB-07 | 15-20 | SA | | | | Qd | A PFAS monitoring | |
| P6-SB-18 | 3-8 | SA | | | | | Groundwater elevation monitoring | |
| P6-SB-21 | 3-8 | SA | | | | | Groundwater elevation monitoring | |
| P6-SB-35 | 3-8 | SA | | | | | Groundwater elevation monitoring | |
| P6-SB-37 | 5-10 | SA | | | | | Groundwater elevation monitoring | |
| Deep Overburden and Weathered Bedrock | | | | | | | | |
| MW-13-52 | 70-80 | SA | | B | | | Lower 1,4-dioxane sentinel | |
| MW-13-53 | 73-83 | SA | | | | | Lower 1,4-dioxane sentinel | |
| MW-21-141 | 72-77 | SA | | SA | | | Lower 1,4-dioxane sentinel | |
| Bedrock | | | | | | | | |

Table 1B
Revised Interim Groundwater Monitoring Summary
Revised December 2022
RACER Trust Plants 2, 3, and 6 - Lansing, Michigan



| Well | Screen Interval (ft bgs) | Gauging* | Analyte | | | | | Primary Function |
|--------------------|--------------------------|----------|---------|-------------|-----------------|-------|------|----------------------------------|
| | | | VOCs | 1,4-Dioxane | Select Metals** | SVOCs | PFAS | |
| Plant 6 | | | | | | | | |
| MW-04-01(6) | 78-88 | SA | | B | | | | Bedrock sentinel |
| MW-04-04R | 82-110 | SA | | B | | | A | Bedrock sentinel |
| MW-04-06R | 74-99.5 | SA | | B | | | A | Bedrock sentinel |
| MW-12-03 | 57-80 | SA | | | | | | Groundwater elevation monitoring |
| MW-13-50 | 85-107 | SA | | B | | | | Bedrock sentinel |
| Storm Sewer | | | | | | | | |
| Osborn-MH-1 | - | - | | | | | Q | PFAS sewer monitoring |
| Verlinden-MH-1 | - | - | | | | | | PFAS sewer monitoring |
| Verlinden-MH-2 | - | - | | | | | | PFAS sewer monitoring |
| Verlinden-MH-3 | - | - | | | | | | PFAS sewer monitoring |
| Verlinden-MH-4 | - | - | | | | | | PFAS sewer monitoring |
| Verlinden-MH-5 | - | - | | | | | Q | PFAS sewer monitoring |
| MichAve-MH-3 | - | - | | | | | Q | PFAS sewer monitoring |
| MichAve-MH-4 | - | - | | | | | | PFAS sewer monitoring |

Notes:

* Site wide gauging to alternate between semi-annual events to account for seasonal variability. Semi-annual gauging includes all wells sampled semi-annually.

** Select metals includes arsenic, nickel, lead, vanadium, chromium, and copper.

***TAL metals defined in Table 3 of the Quality Assurance Project Plan (ARCADIS 2011b).

ft bgs = feet below ground surface

Q = quarterly

SA = semi-annual

A = annual

B = biennial (starting 2nd quarter of 2020)

Qd = Quadrennial

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Location ID: | P201 | | | MW-04-05(6) | MW-12-12 | MW-12-12 | MW-12-13 | MW-12-13 | MW-12-21 | MW-12-21 | MW-13-22 | MW-13-22 | MW-13-26 | MW-13-27 | MW-13-29 | MW-13-30 | MW-13-34 | MW-13-34 | MW-13-36R | |
|---|-------------|------------------|------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|--|
| Date Collected: | Residential | P201 Groundwater | | 05/23/23 | 02/15/23 | 05/24/23 | 02/15/23 | 05/24/23 | 02/17/23 | 05/19/23 | 02/17/23 | 05/19/23 | 05/20/23 | 05/20/23 | 05/23/23 | 05/20/23 | 02/17/23 | 05/19/23 | 02/14/23 | |
| Sample Name: | Drinking | Surface Water | | MW-04-05(6)_052323 | MW-12-12_021523 | MW-12-12_052423 | MW-12-13_021523 | MW-12-13_052423 | MW-12-21_021723 | MW-12-21_051923 | MW-13-22_021723 | MW-13-22_051923 | MW-13-26_052023 | MW-13-27_052023 | MW-13-29_052323 | MW-13-30_052023 | MW-13-34_021723 | MW-13-34_051923 | MW-13-36R_021423 | |
| Sample Depth (ft. bgs): | Water | Interface | Units | 20-30 | 13-18 | 13-18 | 18.5-23.5 | 18.5-23.5 | 70-75 | 70-75 | 89-94 | 89-94 | 72-77 | 67-72 | 68-73 | 72-77 | 74-79 | 74-79 | 5.5-10.5 | |
| Field Parameters | | | | | | | | | | | | | | | | | | | | |
| pH | 6.5 to 8.5 | 6.5 to 9.0 | s.u. | 7.43 | 7.69 | 7.49 | 7.49 | 7.49 | 6.90 | 6.85 | 6.87 | 6.81 | 7.00 | 6.82 | 6.44 | 6.79 | 7.03 | 7.05 | 11.98 | |
| Conductivity | -- | -- | mS/cm | 2.21 | 0.74 | 0.82 | 0.73 | 0.58 | 1.10 | 1.85 | 2.03 | 2.01 | 1.11 | 1.96 | 3.00 | 1.25 | 1.62 | 2.33 | 1.91 | |
| Turbidity | -- | -- | NTU | 1.30 | 9.21 | 3.00 | 4.20 | 1.80 | 55.00 | 8.79 | 9.05 | 8.57 | 9.92 | 9.41 | 118.00 | 16.90 | 119.00 | 14.80 | 2.59 | |
| Dissolved oxygen (DO) | -- | -- | mg/L | 0.09 | 0.49 | 0.15 | 4.59 | 0.70 | 1.60 | 0.77 | 0.98 | 1.39 | 0.36 | 0.79 | 3.51 | 0.90 | 0.16 | 0.99 | 0.56 | |
| Temperature | -- | -- | Deg C | 13.6 | 10.1 | 11.5 | 8.4 | 11.5 | 5.6 | 18.1 | 3.4 | 17.6 | 12.3 | 12.1 | 18.9 | 11.7 | 8.0 | 15.0 | 7.3 | |
| Oxidation reduction potential (ORP) | -- | -- | millivolts | -115.3 | 40.6 | 23.8 | 61.5 | 5.6 | -2.8 | -48.7 | -21.9 | -5.1 | -10.1 | -27.2 | 124.5 | -35.1 | -26.7 | -80.0 | -389.6 | |
| Volatile Organics (via EPA Method SW5030C/8260C) | | | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 880 | 740 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,1-Dichloroethene | 7.0 | 130 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,1,1-Trichloroethane | 200 | 89 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,1,1,2-Tetrachloroethane | 77 | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,1,2-Trichloroethane | 5.0 | 330 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,1,2,2-Tetrachloroethane | 8.5 | 78 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.2 | -- | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2-Dibromoethane (Ethylene dibromide) | 0.05 | 5.7 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2-Dichloroethane | 5.0 | 360 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2-Dichloropropane | 5.0 | 230 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2,3-Trichlorobenzene | -- | -- | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2,3-Trichloropropane | 42 | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2,3-Trimethylbenzene | -- | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,2,4-Trimethylbenzene | 63 | 17 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,3,5-Trimethylbenzene | 72 | 45 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 1,4-Dioxane | 7.2 | 280 | µg/L | NA | NA [NA] | NA | NA | NA | 141 | 167 [162] | 171 | 179 | <1 | 10 | 9.0 | <1 | 85 [87] | 109 | NA | |
| 2-Butanone (Methyl ethyl ketone) (MEK) | 13,000 | 2,200 | µg/L | <25 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 2-Hexanone | 1,000 | -- | µg/L | <50 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 2-Phenylbutane (sec-Butylbenzene) | 80 | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | 1,800 | -- | µg/L | <50 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Acetone | 730 | 1,700 | µg/L | <50 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Acrylonitrile | 2.6 | 2.0 | µg/L | <2 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Benzene | 5.0 | 200 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Bromobenzene | 18 | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Bromodichloromethane | 80 | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Bromoform | 80 | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Bromomethane (Methyl bromide) | 10 | 5.0 | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Carbon disulfide | 800 | -- | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Carbon tetrachloride | 5.0 | 38 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Chlorobenzene | 100 | 25 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Chlorobromomethane | -- | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Chloroethane | 430 | 1,100 | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Chloroform (Trichloromethane) | 80 | 350 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Chloromethane (Methyl chloride) | 260 | -- | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| cis-1,2-Dichloroethene | 70 | 620 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| cis-1,3-Dichloropropene | -- | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Cymene (p-Isopropyltoluene) | -- | -- | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Dibromochloromethane | 80 | -- | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Dibromomethane | 80 | -- | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Dichlorodifluoromethane (CFC-12) | 1,700 | -- | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Ethyl ether | 10 | -- | µg/L | <10 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Ethylbenzene | 74 | 18 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Iodomethane | -- | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Isopropyl benzene | 800 | 28 | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Methyl tert butyl ether (MTBE) | 40 | 7,100 | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Methylene chloride | 5.0 | 1,500 | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Naphthalene | 520 | 11 | µg/L | <5 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| N-Butylbenzene | 80 | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| N-Propylbenzene | 80 | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Styrene | 100 | 80 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| tert-Butylbenzene | 80 | -- | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Tetrachloroethene | 5.0 | 60 | µg/L | <1 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Tetrahydrofuran | 95 | 11,000 | µg/L | <90 | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | |
| Toluene | | | | | | | | | | | | | | | | | | | | |

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: | P201 | | | MW-04-05(6) | MW-12-12 | MW-12-12 | MW-12-13 | MW-12-13 | MW-12-21 | MW-12-21 | MW-13-22 | MW-13-22 | MW-13-26 | MW-13-27 | MW-13-29 | MW-13-30 | MW-13-34 | MW-13-34 | MW-13-36R |
|---|-------------|------------------|-------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| Date Collected: | Residential | P201 Groundwater | | 05/23/23 | 02/15/23 | 05/24/23 | 02/15/23 | 05/24/23 | 02/17/23 | 05/19/23 | 02/17/23 | 05/19/23 | 05/20/23 | 05/20/23 | 05/23/23 | 05/20/23 | 02/17/23 | 05/19/23 | 02/14/23 |
| Sample Name: | Drinking | Surface Water | Units | MW-04-05(6)_052323 | MW-12-12_021523 | MW-12-12_052423 | MW-12-13_021523 | MW-12-13_052423 | MW-12-21_021723 | MW-12-21_051923 | MW-13-22_021723 | MW-13-22_051923 | MW-13-26_052023 | MW-13-27_052023 | MW-13-29_052323 | MW-13-30_052023 | MW-13-34_021723 | MW-13-34_051923 | MW-13-36R_021423 |
| Sample Depth (ft. bgs): | Water | Interface | | 20-30 | 13-18 | 13-18 | 18.5-23.5 | 18.5-23.5 | 70-75 | 70-75 | 89-94 | 89-94 | 72-77 | 67-72 | 68-73 | 72-77 | 74-79 | 74-79 | 5.5-10.5 |
| Semi-Volatile Organics (via EPA Method 522) | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 1,2-Diphenylhydrazine | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether) | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2,4-Dichlorophenol | 73 | 11 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2,4-Dimethylphenol | 370 | 380 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2,4-Dinitrophenol | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2,4-Dinitrotoluene | 7.7 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2,4,5-Trichlorophenol | 730 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2,4,6-Trichlorophenol | 120 | 5.0 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2,6-Dinitrotoluene | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2-Chloronaphthalene | 1800 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2-Chlorophenol | 45 | 18 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2-Methylphenol | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2-Nitroaniline | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 2-Nitrophenol | 20 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 3&4-Methylphenol | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 3,3'-Dichlorobenzidine | 1.1 | 0.3 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 3-Nitroaniline | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 4,6-Dinitro-2-methylphenol | 20 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 4-Bromophenyl phenyl ether | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 4-Chloro-3-methylphenol | 150 | 7.4 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 4-Chloroaniline | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 4-Chlorophenyl phenyl ether | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 4-Nitroaniline | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| 4-Nitrophenol | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Acenaphthene | 1300 | 38 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Acenaphthylene | 52 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Anthracene | 43 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Benzo(a)anthracene | 2.1 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Benzo(a)pyrene | 5.0 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Benzo(b)fluoranthene | 1.5 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Benzo(g,h,i)perylene | 1.0 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Benzo(k)fluoranthene | 1.0 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| bis(2-Chloroethoxy)methane | -- | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| bis(2-Chloroethyl)ether | 2.0 | 1.0 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| bis(2-Ethylhexyl)phthalate (DEHP) | 6.0 | 14 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Butyl benzylphthalate (BBP) | 1200 | 67 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Chrysene | 1.6 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Dibenz(a,h)anthracene | 2.0 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Dibenzofuran | -- | 4.0 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Diethyl phthalate | 5500 | 110 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Dimethyl phthalate | 73000 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Di-n-butylphthalate (DBP) | 880 | 9.7 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Di-n-octyl phthalate (DnOP) | 130 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Fluoranthene | 210 | 1.6 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Fluorene | 880 | 12 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Hexachlorobenzene | 1.0 | 0.2 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Hexachlorobutadiene | 15 | 0.053 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Hexachlorocyclopentadiene | 50 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Indeno(1,2,3-cd)pyrene | 2.0 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Isophorone | 770 | 1300 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Naphthalene | 520 | 11 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Nitrobenzene | 3.4 | 180 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| N-Nitrosodi-n-propylamine | 5.0 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| N-Nitrosodiphenylamine | 270 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Pentachlorophenol | 1.0 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Phenanthrene | 52 | 2.0 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Phenol | 4400 | 450 | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| Pyrene | 140 | -- | µg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA |
| General Chemistry | | | | | | | | | | | | | | | | | | | |
| Nitrate (as N) | 10 | -- | mg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | <0.5 | NA | NA [NA] | NA | NA |
| Phosphorus | 63 | -- | mg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | 0.08 | NA | NA [NA] | NA | NA |
| Total kjeldahl nitrogen (TKN) | -- | -- | mg/L | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | 0.468 | NA | NA [NA] | NA | NA |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: | P201 | | | MW-04-05(6) | MW-12-12 | MW-12-12 | MW-12-13 | MW-12-13 | MW-12-21 | MW-12-21 | MW-13-22 | MW-13-22 | MW-13-26 | MW-13-27 | MW-13-29 | MW-13-30 | MW-13-34 | MW-13-34 | MW-13-36R | |
|---|-------------|------------------|-------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|--|
| Date Collected: | Residential | P201 Groundwater | | 05/23/23 | 02/15/23 | 05/24/23 | 02/15/23 | 05/24/23 | 02/17/23 | 05/19/23 | 02/17/23 | 05/19/23 | 05/20/23 | 05/20/23 | 05/23/23 | 05/20/23 | 02/17/23 | 05/19/23 | 02/14/23 | |
| Sample Name: | Drinking | Surface Water | | MW-04-05(6)_052323 | MW-12-12_021523 | MW-12-12_052423 | MW-12-13_021523 | MW-12-13_052423 | MW-12-21_021723 | MW-12-21_051923 | MW-13-22_021723 | MW-13-22_051923 | MW-13-26_052023 | MW-13-27_052023 | MW-13-29_052323 | MW-13-30_052023 | MW-13-34_021723 | MW-13-34_051923 | MW-13-36R_021423 | |
| Sample Depth (ft. bgs): | Water | Interface | Units | 20-30 | 13-18 | 13-18 | 18.5-23.5 | 18.5-23.5 | 70-75 | 70-75 | 89-94 | 89-94 | 72-77 | 67-72 | 68-73 | 72-77 | 74-79 | 74-79 | 5.5-10.5 | |
| Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified) | | | | | | | | | | | | | | | | | | | | |
| 11Cl-PF3OUdS (F-53B Minor) | -- | -- | ng/L | NA | <6.7 [<6.7] | <7.5 | <6.9 | <7.3 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <6.7 | |
| 4:2 FTS | -- | -- | ng/L | NA | <6.7 Q [<6.7] | <7.5 Q | <6.9 Q | <7.3 Q | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <6.7 Q | |
| 6:2 FTS | -- | -- | ng/L | NA | <6.7 Q [<6.7] | <7.5 Q | <6.9 | <7.3 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <6.7 Q | |
| 8:2 FTS | -- | -- | ng/L | NA | <6.7 [<6.7] | <7.5 Q | <6.9 | <7.3 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <6.7 Q | |
| 9Cl-PF3ONS (F-53B Major) | -- | -- | ng/L | NA | <6.7 [<6.7] | <7.5 | <6.9 | <7.3 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <6.7 | |
| ADONA | -- | -- | ng/L | NA | <6.7 [<6.7] | <7.5 | <6.9 | <7.3 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <6.7 | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX) | 370 | -- | ng/L | NA | <6.7 [<6.7] | <7.5 | <6.9 | <7.3 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <6.7 | |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) | -- | -- | ng/L | NA | <6.7 [<6.7] | <7.5 | <6.9 | <7.3 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 6.3 J | |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMMeFOSAA) | -- | -- | ng/L | NA | <6.7 [<6.7] | <7.5 | <6.9 | <7.3 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 4.3 J | |
| Perfluorobutanesulfonic acid (PFBS) | 420 | -- | ng/L | NA | <3.3 [0.85 J] | 1.4 J | 1.7 J | 3.0 J | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 2.2 J | |
| Perfluorobutanoic acid (PFBA) | -- | -- | ng/L | NA | 38 [35] | 43 | 28 | 30 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 22 | |
| Perfluorodecanesulfonic acid (PFDS) | -- | -- | ng/L | NA | <3.3 [<3.4] | <3.7 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <3.3 | |
| Perfluorodecanoic acid (PFDA) | -- | -- | ng/L | NA | 11 [10] | 8.5 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 25 | |
| Perfluorododecanoic acid (PFDoA) | -- | -- | ng/L | NA | <3.3 [<3.4] | <3.7 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 0.49 J | |
| Perfluoroheptanesulfonic Acid (PFHpS) | -- | -- | ng/L | NA | 0.43 J [<3.4] | <3.7 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <3.3 | |
| Perfluoroheptanoic acid (PFHpA) | -- | -- | ng/L | NA | 32 [31] | 34 | 22 | 21 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 32 | |
| Perfluorohexanesulfonic acid (PFHxS) | 51 | -- | ng/L | NA | 1.8 J [1.2 J] | 1.3 J | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 1.4 J | |
| Perfluorohexanoic acid (PFHxA) | 400,000 | -- | ng/L | NA | 97 [88] | 110 | 69 | 59 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 35 | |
| Perfluorononanesulfonic acid (PFNS) | -- | -- | ng/L | NA | <3.3 [<3.4] | <3.7 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <3.3 | |
| Perfluorononanoic acid (PFNA) | 6.0 | -- | ng/L | NA | 5.9 [5.4] | 3.6 J | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 15 | |
| Perfluorooctane Sulfonamide (PFOSA) | -- | -- | ng/L | NA | <3.3 [<3.4] | <3.7 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 3.7 | |
| Perfluorooctane sulfonic acid (PFOS) | 16 | 12 | ng/L | NA | 36 [33] | 22 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 44 | |
| Perfluorooctanoic acid (PFOA) | 8.0 | 12,000 | ng/L | NA | 78 [69] | 74 | 4.9 | 5.0 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 71 | |
| Perfluoropentanesulfonic acid (PFPeS) | -- | -- | ng/L | NA | <3.3 [<3.4] | <3.7 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <3.3 | |
| Perfluoropentanoic acid (PFPeA) | -- | -- | ng/L | NA | 65 [55] | 62 | 41 | 36 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 30 | |
| Perfluorotetradecanoic acid (PFTeA) | -- | -- | ng/L | NA | <3.3 [<3.4] | <3.7 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <3.3 | |
| Perfluorotridecanoic Acid (PFTriA) | -- | -- | ng/L | NA | <3.3 [<3.4] | <3.7 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | <3.3 | |
| Perfluoroundecanoic acid (PFUnA) | -- | -- | ng/L | NA | <3.3 [<3.4] | <3.7 | <3.5 | <3.7 | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA [NA] | NA | 0.80 J | |

See notes on last page.

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Location ID: P201 | MW-13-36R | MW-13-43 | MW-13-45 | MW-13-48 | MW-14-58R | MW-14-58R | MW-14-61 | MW-14-67 | MW-14-70 | MW-15-72 | MW-16-74 | MW-16-75 | MW-16-77 | MW-16-78 | MW-16-78 | MW-16-81 | | |
|---|------------------|-----------------|-----------------|-----------------|------------------|------------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------|
| Date Collected: Residential | 05/24/23 | 05/16/23 | 05/16/23 | 05/19/23 | 02/15/23 | 05/16/23 | 05/17/23 | 02/14/23 | 02/15/23 | 05/17/23 | 05/17/23 | 05/17/23 | 05/17/23 | 02/16/23 | 05/17/23 | 05/17/23 | | |
| Sample Name: Drinking | MW-13-36R_052423 | MW-13-43_051623 | MW-13-45_051623 | MW-13-48_051923 | MW-14-58R_021523 | MW-14-58R_051623 | MW-14-61_051723 | MW-14-67_021423 | MW-14-70_021523 | MW-15-72_051723 | MW-16-74_051723 | MW-16-75_051623 | MW-16-77_051723 | MW-16-78_021623 | MW-16-78_051723 | MW-16-81_051723 | | |
| Sample Depth (ft. bgs): Water | 5.5-10.5 | 72-77 | 72-77 | 65-70 | 22-27 | 22-27 | 70-75 | 13-18 | 16-21 | 63-68 | 66-71 | 66-71 | 66-71 | 68-73 | 68-73 | 70-75 | | |
| Location ID: P201 | P201 Groundwater | | | | | | | | | | | | | | | | | |
| Surface Water Interface | Units | | | | | | | | | | | | | | | | | |
| Field Parameters | | | | | | | | | | | | | | | | | | |
| pH | 6.5 to 8.5 | 6.5 to 9.0 | s.u. | 12.06 | 7.24 | 6.54 | 6.78 | 7.01 | 6.98 | 7.03 | 7.22 | 7.34 | 6.86 | 6.71 | 6.80 | 6.86 | 6.62 | |
| Conductivity | -- | -- | mS/cm | 1.37 | 2.74 | 1.43 | 2.60 | 2.85 | 3.09 | 2.70 | 1.37 | 1.51 | 1.13 | 1.85 | 2.04 | 3.17 | 2.69 | |
| Turbidity | -- | -- | NTU | 2.78 | 297.00 | 4.29 | 9.49 | 4.93 | 1.27 | 21.10 | 1.23 | 7.48 | 3.41 | 213.00 | 57.80 | 139.00 | 17.30 | |
| Dissolved oxygen (DO) | -- | -- | mg/L | 0.14 | 10.51 | 5.61 | 0.63 | 0.07 | 0.16 | 2.11 | 0.71 | 0.52 | 3.31 | 0.27 | 0.26 | 1.47 | 0.79 | |
| Temperature | -- | -- | Deg C | 12.3 | 17.0 | 15.0 | 15.7 | 12.9 | 14.2 | 14.0 | 10.1 | 9.5 | 14.1 | 14.3 | 20.6 | 11.9 | 16.2 | |
| Oxidation reduction potential (ORP) | -- | -- | millivolts | -42.7 | 128.2 | -41.1 | 202.6 | -175.1 | 92.5 | 239.1 | -222.6 | 62.0 | -83.7 | 12.4 | -37.2 | 34.6 | 55.3 | |
| Volatile Organics (via EPA Method SW5030C/8260C) | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 880 | 740 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,1-Dichloroethene | 7.0 | 130 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,1,1-Trichloroethane | 200 | 89 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,1,1,2-Tetrachloroethane | 77 | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,1,2-Trichloroethane | 5.0 | 330 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,1,2,2-Tetrachloroethane | 8.5 | 78 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.2 | -- | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| 1,2-Dibromoethane (Ethylene dibromide) | 0.05 | 5.7 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,2-Dichloroethane | 5.0 | 360 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,2-Dichloropropane | 5.0 | 230 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,2,3-Trichlorobenzene | -- | -- | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| 1,2,3-Trichloropropane | 42 | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,2,3-Trimethylbenzene | -- | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| 1,2,4-Trimethylbenzene | 63 | 17 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,3,5-Trimethylbenzene | 72 | 45 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 1,4-Dioxane | 7.2 | 280 | µg/L | NA | 2.0 | 28 | 62 | 178 [181] | 173 | 13 | NA | NA | 199 | 2.0 | 1.0 | 2.0 | 1.0 [1.0] | 1.0 |
| 2-Butanone (Methyl ethyl ketone) (MEK) | 13,000 | 2,200 | µg/L | NA | NA | NA | NA | <25 [<25] | <25 | <25 | NA | NA | NA | NA | NA | <25 [<25] | <25 | |
| 2-Hexanone | 1,000 | -- | µg/L | NA | NA | NA | NA | <50 [<50] | <50 | <50 | NA | NA | NA | NA | NA | <50 [<50] | <50 | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| 2-Phenylbutane (sec-Butylbenzene) | 80 | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | 1,800 | -- | µg/L | NA | NA | NA | NA | <50 [<50] | <50 | <50 | NA | NA | NA | NA | NA | <50 [<50] | <50 | |
| Acetone | 730 | 1,700 | µg/L | NA | NA | NA | NA | <50 [<50] | <50 | <50 | NA | NA | NA | NA | NA | <50 [<50] | <50 | |
| Acrylonitrile | 2.6 | 2.0 | µg/L | NA | NA | NA | NA | <2 [<2] | <2 | <2 | NA | NA | NA | NA | NA | <2 [<2] | <2 | |
| Benzene | 5.0 | 200 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Bromobenzene | 18 | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Bromodichloromethane | 80 | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Bromoform | 80 | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Bromomethane (Methyl bromide) | 10 | 5.0 | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Carbon disulfide | 800 | -- | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Carbon tetrachloride | 5.0 | 38 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Chlorobenzene | 100 | 25 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Chlorobromomethane | -- | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Chloroethane | 430 | 1,100 | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Chloroform (Trichloromethane) | 80 | 350 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Chloromethane (Methyl chloride) | 260 | -- | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| cis-1,2-Dichloroethene | 70 | 620 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| cis-1,3-Dichloropropene | -- | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Cymene (p-Isopropyltoluene) | -- | -- | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Dibromochloromethane | 80 | -- | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Dibromomethane | 80 | -- | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Dichlorodifluoromethane (CFC-12) | 1,700 | -- | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Ethyl ether | 10 | -- | µg/L | NA | NA | NA | NA | <10 [<10] | <10 | <10 | NA | NA | NA | NA | NA | <10 [<10] | <10 | |
| Ethylbenzene | 74 | 18 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Iodomethane | -- | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Isopropyl benzene | 800 | 28 | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Methyl tert butyl ether (MTBE) | 40 | 7,100 | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Methylene chloride | 5.0 | 1,500 | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | <5 [<5] | <5 | <5 | NA | NA | NA | NA | NA | <5 [<5] | <5 | |
| N-Butylbenzene | 80 | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| N-Propylbenzene | 80 | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Styrene | 100 | 80 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| tert-Butylbenzene | 80 | -- | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Tetrachloroethene | 5.0 | 60 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| Tetrahydrofuran | 95 | 11,000 | µg/L | NA | NA | NA | NA | <90 [<90] | <90 | <90 | NA | NA | NA | NA | NA | <90 [<90] | <90 | |
| Toluene | 790 | 270 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | NA | <1 [<1] | <1 | |
| trans-1,2-Dichloroethene | 100 | 1,500 | µg/L | NA | NA | NA | NA | <1 [<1] | <1 | <1 | NA | NA | NA | NA | | | | |

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-13-36R | MW-13-43 | MW-13-45 | MW-13-48 | MW-14-58R | MW-14-58R | MW-14-61 | MW-14-67 | MW-14-70 | MW-15-72 | MW-16-74 | MW-16-75 | MW-16-77 | MW-16-78 | MW-16-78 | MW-16-81 | | |
|--|--|--|-------|------------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------|----------|
| | | | | 05/24/23 | 05/16/23 | 05/16/23 | 05/19/23 | 02/15/23 | 05/16/23 | 05/17/23 | 02/14/23 | 02/15/23 | 05/17/23 | 05/17/23 | 05/16/23 | 05/17/23 | 05/17/23 | 05/17/23 | 02/16/23 | 05/17/23 | 05/17/23 |
| | | | | MW-13-36R_052423 5.5-10.5 | MW-13-43_051623 72-77 | MW-13-45_051623 72-77 | MW-13-48_051923 65-70 | MW-14-58R_021523 22-27 | MW-14-58R_051623 22-27 | MW-14-61_051723 70-75 | MW-14-67_021423 13-18 | MW-14-70_021523 16-21 | MW-15-72_051723 63-68 | MW-16-74_051723 66-71 | MW-16-75_051623 66-71 | MW-16-77_051723 66-71 | MW-16-78_021623 68-73 | MW-16-78_051723 68-73 | MW-16-81_051723 70-75 | | |
| Semi-Volatile Organics (via EPA Method 522) | | | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 1,2-Diphenylhydrazine | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether) | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2,4-Dichlorophenol | 73 | 11 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2,4-Dimethylphenol | 370 | 380 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2,4-Dinitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2,4-Dinitrotoluene | 7.7 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2,4,5-Trichlorophenol | 730 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2,4,6-Trichlorophenol | 120 | 5.0 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2,6-Dinitrotoluene | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2-Chloronaphthalene | 1800 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2-Chlorophenol | 45 | 18 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 2-Nitrophenol | 20 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 3&4-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 3,3'-Dichlorobenzidine | 1.1 | 0.3 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 3-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 4,6-Dinitro-2-methylphenol | 20 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 4-Bromophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 4-Chloro-3-methylphenol | 150 | 7.4 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 4-Chloroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 4-Chlorophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 4-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| 4-Nitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Acenaphthene | 1300 | 38 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Acenaphthylene | 52 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Anthracene | 43 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Benzo(a)anthracene | 2.1 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Benzo(a)pyrene | 5.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Benzo(b)fluoranthene | 1.5 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Benzo(g,h,i)perylene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Benzo(k)fluoranthene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| bis(2-Chloroethoxy)methane | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| bis(2-Chloroethyl)ether | 2.0 | 1.0 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| bis(2-Ethylhexyl)phthalate (DEHP) | 6.0 | 14 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Butyl benzylphthalate (BBP) | 1200 | 67 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Chrysene | 1.6 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Dibenz(a,h)anthracene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Dibenzofuran | -- | 4.0 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Diethyl phthalate | 5500 | 110 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Dimethyl phthalate | 73000 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Di-n-butylphthalate (DBP) | 880 | 9.7 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Di-n-octyl phthalate (DnOP) | 130 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Fluoranthene | 210 | 1.6 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Fluorene | 880 | 12 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Hexachlorobenzene | 1.0 | 0.2 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Hexachlorobutadiene | 15 | 0.053 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Hexachlorocyclopentadiene | 50 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Indeno(1,2,3-cd)pyrene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Isophorone | 770 | 1300 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Nitrobenzene | 3.4 | 180 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| N-Nitrosodi-n-propylamine | 5.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| N-Nitrosodiphenylamine | 270 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Pentachlorophenol | 1.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Phenanthrene | 52 | 2.0 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Phenol | 4400 | 450 | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| Pyrene | 140 | -- | µg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| General Chemistry | | | | | | | | | | | | | | | | | | | | | |
| Nitrate (as N) | 10 | -- | mg/L | NA | NA | NA | NA | NA [NA] | NA | <0.5 | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | | |
| Phosphorus | 63 | -- | mg/L | NA | NA | NA | NA | NA [NA] | NA | 0.07 | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | | |
| Total kjeldahl nitrogen (TKN) | -- | -- | mg/L | NA | NA | NA | NA | NA [NA] | NA | 0.168 | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | | |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: | P201 | | | MW-13-36R | MW-13-43 | MW-13-45 | MW-13-48 | MW-14-58R | MW-14-58R | MW-14-61 | MW-14-67 | MW-14-70 | MW-15-72 | MW-16-74 | MW-16-75 | MW-16-77 | MW-16-78 | MW-16-78 | MW-16-81 |
|---|-------------|------------------|-------|------------------|-----------------|-----------------|-----------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Date Collected: | Residential | P201 Groundwater | | 05/24/23 | 05/16/23 | 05/16/23 | 05/19/23 | 02/15/23 | 05/16/23 | 05/17/23 | 02/14/23 | 02/15/23 | 05/17/23 | 05/17/23 | 05/16/23 | 05/17/23 | 02/16/23 | 05/17/23 | 05/17/23 |
| Sample Name: | Drinking | Surface Water | Units | MW-13-36R_052423 | MW-13-43_051623 | MW-13-45_051623 | MW-13-48_051923 | MW-14-58R_021523 | MW-14-58R_051623 | MW-14-61_051723 | MW-14-67_021423 | MW-14-70_021523 | MW-15-72_051723 | MW-16-74_051723 | MW-16-75_051623 | MW-16-77_051723 | MW-16-78_021623 | MW-16-78_051723 | MW-16-81_051723 |
| Sample Depth (ft. bgs): | Water | Interface | | 5.5-10.5 | 72-77 | 72-77 | 65-70 | 22-27 | 22-27 | 70-75 | 13-18 | 16-21 | 63-68 | 66-71 | 66-71 | 66-71 | 68-73 | 68-73 | 70-75 |
| Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified) | | | | | | | | | | | | | | | | | | | |
| 11Cl-PF3OUdS (F-53B Minor) | -- | -- | ng/L | <7.4 | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <6.8 | NA | NA | NA | NA | <7.2 [<7.2] | NA | NA |
| 4:2 FTS | -- | -- | ng/L | <7.4 Q | NA | NA | NA | NA [NA] | NA | NA | <6.8 Q | <6.8 | NA | NA | NA | NA | <7.2 [<7.2] | NA | NA |
| 6:2 FTS | -- | -- | ng/L | <7.4 Q | NA | NA | NA | NA [NA] | NA | NA | 8.3 | <6.8 | NA | NA | NA | NA | <7.2 [<7.2] | NA | NA |
| 8:2 FTS | -- | -- | ng/L | <7.4 Q | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <6.8 | NA | NA | NA | NA | <7.2 [<7.2] | NA | NA |
| 9Cl-PF3ONS (F-53B Major) | -- | -- | ng/L | <7.4 | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <6.8 | NA | NA | NA | NA | <7.2 [<7.2] | NA | NA |
| ADONA | -- | -- | ng/L | <7.4 | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <6.8 | NA | NA | NA | NA | <7.2 [<7.2] | NA | NA |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX) | 370 | -- | ng/L | <7.4 | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <6.8 | NA | NA | NA | NA | <7.2 [<7.2] | NA | NA |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) | -- | -- | ng/L | 5.4 J | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <6.8 | NA | NA | NA | NA | <7.2 [<7.2] | NA | NA |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | -- | -- | ng/L | 3.4 J | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <6.8 | NA | NA | NA | NA | <7.2 [<7.2] | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | 420 | -- | ng/L | 2.3 J | NA | NA | NA | NA [NA] | NA | NA | 3.5 | 3.7 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorobutanoic acid (PFBA) | -- | -- | ng/L | 34 Q | NA | NA | NA | NA [NA] | NA | NA | 49 Q | 100 | NA | NA | NA | NA | 3.2 J [2.8 J] | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | -- | -- | ng/L | <3.7 | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorodecanoic acid (PFDA) | -- | -- | ng/L | 20 | NA | NA | NA | NA [NA] | NA | NA | 1.3 J | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorododecanoic acid (PFDoA) | -- | -- | ng/L | 0.52 J | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | -- | -- | ng/L | <3.7 | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | -- | -- | ng/L | 32 | NA | NA | NA | NA [NA] | NA | NA | 30 | 110 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | 51 | -- | ng/L | 1.9 J | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorohexanoic acid (PFHxA) | 400,000 | -- | ng/L | 33 | NA | NA | NA | NA [NA] | NA | NA | 79 | 310 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorononanesulfonic acid (PFNS) | -- | -- | ng/L | <3.7 | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorononanoic acid (PFNA) | 6.0 | -- | ng/L | 12 | NA | NA | NA | NA [NA] | NA | NA | 0.62 J | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorooctane Sulfonamide (PFOSA) | -- | -- | ng/L | 3.0 J | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorooctane sulfonic acid (PFOS) | 16 | 12 | ng/L | 37 | NA | NA | NA | NA [NA] | NA | NA | 1.8 J | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorooctanoic acid (PFOA) | 8.0 | 12,000 | ng/L | 63 | NA | NA | NA | NA [NA] | NA | NA | 19 | 17 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluoropentanesulfonic acid (PFPeS) | -- | -- | ng/L | <3.7 | NA | NA | NA | NA [NA] | NA | NA | <3.4 | 0.59 J | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluoropentanoic acid (PFPeA) | -- | -- | ng/L | 31 Q | NA | NA | NA | NA [NA] | NA | NA | 58 | 380 | NA | NA | NA | NA | 1.9 J [1.7 J] | NA | NA |
| Perfluorotetradecanoic acid (PFTeA) | -- | -- | ng/L | <3.7 | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluorotridecanoic Acid (PFTriA) | -- | -- | ng/L | <3.7 | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | -- | -- | ng/L | 0.72 J | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.4 | NA | NA | NA | NA | <3.6 [<3.6] | NA | NA |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Field Parameters | Location ID: | P201 | Units | MW-16-82 | MW-16-84 | MW-16-85 | MW-17-86 | MW-18-88 | MW-18-88 | MW-18-89 | MW-18-90 | MW-18-91 | MW-18-95 | MW-18-95 | MW-18-98 | MW-18-98 | MW-18-99 | MW-18-99 | MW-18-100 |
|---|-----------------|---------------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| | Date Collected: | Residential | | MW-16-82 | MW-16-84 | MW-16-85 | MW-17-86 | MW-18-88 | MW-18-88 | MW-18-89 | MW-18-90 | MW-18-91 | MW-18-95 | MW-18-95 | MW-18-98 | MW-18-98 | MW-18-99 | MW-18-99 | MW-18-100 |
| | Sample Name: | Drinking | | 05/17/23 | 05/17/23 | 05/18/23 | 05/17/23 | 02/16/23 | 05/24/23 | 02/17/23 | 02/16/23 | 02/17/23 | 02/17/23 | 05/24/23 | 02/16/23 | 05/23/23 | 02/16/23 | 05/23/23 | 05/23/23 |
| Sample Depth (ft. bgs): | Water | Surface Water | 70-75 | 72-77 | 74-79 | 73-78 | 6-11 | 6-11 | 7-12 | 15-20 | 7-12 | 4.5-9.5 | 4.5-9.5 | 7-12 | 7-12 | 9-14 | 9-14 | 8-13 | |
| Field Parameters | | | | | | | | | | | | | | | | | | | |
| pH | 6.5 to 8.5 | 6.5 to 9.0 | s.u. | 6.95 | 6.95 | 7.17 | 6.95 | 7.07 | 7.14 | 7.43 | 12.21 | 7.55 | 7.37 | 7.52 | 7.56 | 7.63 | 7.88 | 8.44 | 7.54 |
| Conductivity | -- | -- | mS/cm | 1.03 | 1.82 | 0.79 | 1.99 | 0.67 | 0.53 | 0.81 | 2.16 | 0.71 | 0.51 | 0.41 | 1.63 | 0.95 | 1.61 | 0.89 | 1.07 |
| Turbidity | -- | -- | NTU | 2.81 | 46.50 | 214.00 | 1.93 | 1.44 | 1.23 | 1.33 | 1.81 | 1.23 | 1.50 | 4.03 | 1.11 | 1.05 | 1.17 | 2.95 | 0.43 |
| Dissolved oxygen (DO) | -- | -- | mg/L | 0.21 | 0.23 | 0.58 | 0.86 | 0.12 | 0.29 | 3.18 | 0.48 | 0.47 | 7.10 | 1.54 | 0.81 | 1.42 | 2.07 | 0.33 | 3.62 |
| Temperature | -- | -- | Deg C | 14.8 | 16.0 | 18.0 | 16.7 | 6.3 | 13.6 | 6.6 | 9.9 | 6.4 | 5.3 | 13.7 | 5.9 | 14.7 | 6.7 | 14.7 | 12.4 |
| Oxidation reduction potential (ORP) | -- | -- | millivolts | -72.9 | -32.3 | 2.8 | -35.1 | -104.8 | 71.2 | -183.3 | -284.0 | -180.6 | 13.9 | 73.2 | -116.0 | 51.5 | -172.4 | -132.0 | 128.3 |
| Volatile Organics (via EPA Method SW5030C/8260C) | | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 880 | 740 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,1-Dichloroethene | 7.0 | 130 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 200 | 89 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,1,1,2-Tetrachloroethane | 77 | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.0 | 330 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | 8.5 | 78 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.2 | -- | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2-Dibromoethane (Ethylene dibromide) | 0.05 | 5.7 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2-Dichloroethane | 5.0 | 360 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2-Dichloropropane | 5.0 | 230 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | -- | -- | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 42 | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2,3-Trimethylbenzene | -- | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | 63 | 17 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,3,5-Trimethylbenzene | 72 | 45 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 1,4-Dioxane | 7.2 | 280 | µg/L | 1.0 | 44 | 6.0 | 20 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 2-Butanone (Methyl ethyl ketone) (MEK) | 13,000 | 2,200 | µg/L | NA | <25 | NA | <25 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 2-Hexanone | 1,000 | -- | µg/L | NA | <50 | NA | <50 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 2-Phenylbutane (sec-Butylbenzene) | 80 | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | 1,800 | -- | µg/L | NA | <50 | NA | <50 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Acetone | 730 | 1,700 | µg/L | NA | <50 | NA | <50 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Acrylonitrile | 2.6 | 2.0 | µg/L | NA | <2 | NA | <2 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Benzene | 5.0 | 200 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Bromobenzene | 18 | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Bromodichloromethane | 80 | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Bromoform | 80 | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Bromomethane (Methyl bromide) | 10 | 5.0 | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Carbon disulfide | 800 | -- | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Carbon tetrachloride | 5.0 | 38 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Chlorobenzene | 100 | 25 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Chlorobromomethane | -- | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Chloroethane | 430 | 1,100 | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Chloroform (Trichloromethane) | 80 | 350 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Chloromethane (Methyl chloride) | 260 | -- | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| cis-1,2-Dichloroethene | 70 | 620 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | -- | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Cymene (p-Isopropyltoluene) | -- | -- | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Dibromochloromethane | 80 | -- | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Dibromomethane | 80 | -- | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Dichlorodifluoromethane (CFC-12) | 1,700 | -- | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Ethyl ether | 10 | -- | µg/L | NA | <10 | NA | <10 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Ethylbenzene | 74 | 18 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Iodomethane | -- | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Isopropyl benzene | 800 | 28 | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Methyl tert butyl ether (MTBE) | 40 | 7,100 | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Methylene chloride | 5.0 | 1,500 | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Naphthalene | 520 | 11 | µg/L | NA | <5 | NA | <5 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| N-Butylbenzene | 80 | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| N-Propylbenzene | 80 | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Styrene | 100 | 80 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| tert-Butylbenzene | 80 | -- | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Tetrachloroethene | 5.0 | 60 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Tetrahydrofuran | 95 | 11,000 | µg/L | NA | <90 | NA | <90 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| Toluene | 790 | 270 | µg/L | NA | <1 | NA | <1 | NA | NA | NA | NA [NA] | NA | NA | NA | NA [NA] | NA | NA | NA | NA |
| trans-1,2-Dichloroeth | | | | | | | | | | | | | | | | | | | |

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-16-82 | MW-16-84 | MW-16-85 | MW-17-86 | MW-18-88 | MW-18-88 | MW-18-89 | MW-18-90 | MW-18-91 | MW-18-95 | MW-18-95 | MW-18-98 | MW-18-98 | MW-18-99 | MW-18-99 | MW-18-100 | |
|--|--|--|-------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|-------------------|------------------|---------------------|---------------------|------------------|------------------|------------------|------------------|------------------|--|
| | | | | 05/17/23 70-75 | 05/17/23 72-77 | 05/18/23 74-79 | 05/17/23 73-78 | 02/16/23 6-11 | 05/24/23 6-11 | 02/17/23 7-12 | 02/16/23 15-20 | 02/17/23 7-12 | 02/17/23 4.5-9.5 | 05/24/23 4.5-9.5 | 02/16/23 7-12 | 05/23/23 7-12 | 02/16/23 9-14 | 05/23/23 9-14 | 05/23/23 8-13 | |
| Semi-Volatile Organics (via EPA Method 522) | | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 1,2-Diphenylhydrazine | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether) | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2,4-Dichlorophenol | 73 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2,4-Dimethylphenol | 370 | 380 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2,4-Dinitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2,4-Dinitrotoluene | 7.7 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2,4,5-Trichlorophenol | 730 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2,4,6-Trichlorophenol | 120 | 5.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2,6-Dinitrotoluene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2-Chloronaphthalene | 1800 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2-Chlorophenol | 45 | 18 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 2-Nitrophenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 3&4-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 3,3'-Dichlorobenzidine | 1.1 | 0.3 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 3-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 4,6-Dinitro-2-methylphenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 4-Bromophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 4-Chloro-3-methylphenol | 150 | 7.4 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 4-Chloroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 4-Chlorophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 4-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| 4-Nitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Acenaphthene | 1300 | 38 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Acenaphthylene | 52 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Anthracene | 43 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Benzo(a)anthracene | 2.1 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Benzo(a)pyrene | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Benzo(b)fluoranthene | 1.5 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Benzo(g,h,i)perylene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Benzo(k)fluoranthene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| bis(2-Chloroethoxy)methane | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| bis(2-Chloroethyl)ether | 2.0 | 1.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| bis(2-Ethylhexyl)phthalate (DEHP) | 6.0 | 14 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Butyl benzylphthalate (BBP) | 1200 | 67 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Chrysene | 1.6 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Dibenz(a,h)anthracene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Dibenzofuran | -- | 4.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Diethyl phthalate | 5500 | 110 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Dimethyl phthalate | 73000 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Di-n-butylphthalate (DBP) | 880 | 9.7 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Di-n-octyl phthalate (DnOP) | 130 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Fluoranthene | 210 | 1.6 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Fluorene | 880 | 12 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Hexachlorobenzene | 1.0 | 0.2 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Hexachlorobutadiene | 15 | 0.053 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Hexachlorocyclopentadiene | 50 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Indeno(1,2,3-cd)pyrene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Isophorone | 770 | 1300 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Nitrobenzene | 3.4 | 180 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| N-Nitrosodi-n-propylamine | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| N-Nitrosodiphenylamine | 270 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Pentachlorophenol | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Phenanthrene | 52 | 2.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Phenol | 4400 | 450 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Pyrene | 140 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| General Chemistry | | | | | | | | | | | | | | | | | | | | |
| Nitrate (as N) | 10 | -- | mg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Phosphorus | 63 | -- | mg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |
| Total kjeldahl nitrogen (TKN) | -- | -- | mg/L | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA [NA] | NA | NA | NA | |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: | P201 | | | MW-16-82 | MW-16-84 | MW-16-85 | MW-17-86 | MW-18-88 | MW-18-88 | MW-18-89 | MW-18-90 | MW-18-91 | MW-18-95 | MW-18-95 | MW-18-98 | MW-18-98 | MW-18-99 | MW-18-99 | MW-18-100 | |
|---|-------------|------------------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|--|
| Date Collected: | Residential | P201 Groundwater | | 05/17/23 | 05/17/23 | 05/18/23 | 05/17/23 | 02/16/23 | 05/24/23 | 02/17/23 | 02/16/23 | 02/17/23 | 02/17/23 | 05/24/23 | 02/16/23 | 05/23/23 | 02/16/23 | 05/23/23 | 05/23/23 | |
| Sample Name: | Drinking | Surface Water | Units | MW-16-82_051723 | MW-16-84_051723 | MW-16-85_051823 | MW-17-86_051723 | MW-18-88_021623 | MW-18-88_052423 | MW-18-89_021723 | MW-18-90_021623 | MW-18-91_021723 | MW-18-95_021723 | MW-18-95_052423 | MW-18-98_021623 | MW-18-98_052323 | MW-18-99_021623 | MW-18-99_052323 | MW-18-100_052323 | |
| Sample Depth (ft. bgs): | Water | Interface | | 70-75 | 72-77 | 74-79 | 73-78 | 6-11 | 6-11 | 7-12 | 15-20 | 7-12 | 4.5-9.5 | 4.5-9.5 | 7-12 | 7-12 | 9-14 | 9-14 | 8-13 | |
| Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified) | | | | | | | | | | | | | | | | | | | | |
| 11Cl-PF3OUdS (F-53B Minor) | -- | -- | ng/L | NA | NA | NA | NA | <7.1 | <7.3 | <6.8 | <7.0 [<6.8] | <7.6 | <6.9 | <7.4 | <7.4 | <7.3 [<7.3] | <7.0 | <7.3 | <7.3 | |
| 4:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | <7.1 Q | <7.3 Q | <6.8 Q | <7.0 Q [<6.8 Q] | <7.6 Q | <6.9 Q | <7.4 Q | <7.4 | <7.3 Q [<7.3 Q] | <7.0 Q | <7.3 Q | <7.3 | |
| 6:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | <7.1 | <7.3 | <6.8 Q | <7.0 Q [<6.8 Q] | <7.6 Q | <6.9 Q | <7.4 Q | <7.4 | <7.3 Q [<7.3 Q] | <7.0 | <7.3 | <7.3 | |
| 8:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | <7.1 | <7.3 | <6.8 | <7.0 Q [<6.8 Q] | <7.6 Q | <6.9 Q | <7.4 Q | <7.4 | <7.3 [<7.3] | <7.0 | <7.3 | <7.3 | |
| 9Cl-PF3ONS (F-53B Major) | -- | -- | ng/L | NA | NA | NA | NA | <7.1 | <7.3 | <6.8 | <7.0 [<6.8] | <7.6 | <6.9 | <7.4 | <7.4 | <7.3 [<7.3] | <7.0 | <7.3 | <7.3 | |
| ADONA | -- | -- | ng/L | NA | NA | NA | NA | <7.1 | <7.3 | <6.8 | <7.0 [<6.8] | <7.6 | <6.9 | <7.4 | <7.4 | <7.3 [<7.3] | <7.0 | <7.3 | <7.3 | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX) | 370 | -- | ng/L | NA | NA | NA | NA | <7.1 | <7.3 | <6.8 | <7.0 [<6.8] | <7.6 | <6.9 | <7.4 | <7.4 | <7.3 [<7.3] | <7.0 | <7.3 | <7.3 | |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) | -- | -- | ng/L | NA | NA | NA | NA | <7.1 | <7.3 | <6.8 | <7.0 [<6.8] | <7.6 | <6.9 | <7.4 | <7.4 | <7.3 [<7.3] | <7.0 | <7.3 | <7.3 | |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | -- | -- | ng/L | NA | NA | NA | NA | <7.1 | <7.3 | <6.8 | <7.0 [<6.8] | <7.6 | <6.9 | <7.4 | <7.4 | <7.3 [<7.3] | <7.0 | <7.3 | <7.3 | |
| Perfluorobutanesulfonic acid (PFBS) | 420 | -- | ng/L | NA | NA | NA | NA | 2.0 J | 2.3 J | 1.1 J | 1.5 J [1.7 J] | 3.8 | 2.3 J | 1.3 J | 1.7 J | 0.50 J [0.51 J] | 1.3 J | 0.54 J | 1.2 J | |
| Perfluorobutanoic acid (PFBA) | -- | -- | ng/L | NA | NA | NA | NA | 8.8 | 10 | 8.9 | 9.8 [9.1] | 8.9 | 5.5 | 3.6 J | 8.1 | 4.5 [4.6] | 9.7 | 11 | 11 | |
| Perfluorodecanesulfonic acid (PFDS) | -- | -- | ng/L | NA | NA | NA | NA | <3.6 | <3.6 | <3.4 | 0.89 J [0.76 J] | 1.1 J | <3.5 | <3.7 | <3.6 [<3.6] | <3.5 | <3.6 | <3.6 | | |
| Perfluorodecanoic acid (PFDA) | -- | -- | ng/L | NA | NA | NA | NA | <3.6 | <3.6 | 0.94 J | 1.6 J [1.8 J] | 0.79 J | <3.5 | <3.7 | <3.6 [<3.6] | 0.85 J | 0.90 J | 0.90 J | | |
| Perfluorododecanoic acid (PFDoA) | -- | -- | ng/L | NA | NA | NA | NA | <3.6 | <3.6 | <3.4 | <3.5 [<3.4] | <3.8 | <3.5 | <3.7 | <3.6 [<3.6] | <3.5 | <3.6 | <3.6 | | |
| Perfluoroheptanesulfonic acid (PFHpS) | -- | -- | ng/L | NA | NA | NA | NA | 2.0 J | 2.1 J | 2.0 J | 18 [17] | <3.8 | <3.5 | 0.50 J | <3.7 | <3.6 [<3.6] | 0.67 J | 0.72 J | | |
| Perfluoroheptanoic acid (PFHpA) | -- | -- | ng/L | NA | NA | NA | NA | 0.54 J | 0.65 J | 3.7 | 3.7 [4.1] | 2.3 J | 0.62 J | 0.51 J | 0.76 J | 1.2 J [1.2 J] | 2.3 J | 1.8 J | | |
| Perfluorohexanesulfonic acid (PFHxS) | 51 | -- | ng/L | NA | NA | NA | NA | 3.4 J | 4.1 | 4.2 | 17 [19] | 1.4 J | <3.5 | 0.76 J | <3.7 | 0.51 J [0.54 J] | 1.4 J | 1.4 J | | |
| Perfluorohexanoic acid (PFHxA) | 400,000 | -- | ng/L | NA | NA | NA | NA | 0.72 J | 0.70 J | 6.1 | 6.6 [6.5] | 3.1 J | <3.5 | <3.7 | 1.3 J | 1.8 J [1.5 J] | 3.9 | 3.5 J | | |
| Perfluorononanesulfonic acid (PFNS) | -- | -- | ng/L | NA | NA | NA | NA | <3.6 | <3.6 | <3.4 | <3.5 [<3.4] | <3.8 | <3.5 | <3.7 | <3.6 [<3.6] | <3.5 | <3.6 | <3.6 | | |
| Perfluorononanoic acid (PFNA) | 6.0 | -- | ng/L | NA | NA | NA | NA | <3.6 | 0.53 J | 1.2 J | 1.6 J [1.5 J] | 1.1 J | 0.68 J | 0.80 J | 1.8 J | 3.4 J [3.3 J] | 1.3 J | 1.1 J | | |
| Perfluorooctane Sulfonamide (PFOSA) | -- | -- | ng/L | NA | NA | NA | NA | <3.6 | <3.6 | <3.4 | 0.86 J [0.71 J] | <3.8 | <3.5 | <3.7 | <3.6 [<3.6] | <3.5 | <3.6 | <3.6 | | |
| Perfluorooctane sulfonic acid (PFOS) | 16 | 12 | ng/L | NA | NA | NA | NA | 150 | 200 | 120 | 880 [830] | 44 | 29 | 35 | 140 | 250 [250] | 56 | 57 | | |
| Perfluorooctanoic acid (PFOA) | 8.0 | 12,000 | ng/L | NA | NA | NA | NA | 6.1 | 6.8 | 11 | 16 [15] | 7.2 | 2.9 J | 3.1 J | 1.7 J | 3.1 J [2.9 J] | 4.8 | 3.9 | | |
| Perfluoropentanesulfonic acid (PFPeS) | -- | -- | ng/L | NA | NA | NA | NA | 0.60 J | 0.59 J | 0.68 J | 2.6 J [2.2 J] | <3.8 | <3.5 | <3.7 | <3.7 | <3.6 [<3.6] | <3.5 | <3.6 | | |
| Perfluoropentanoic acid (PFPeA) | -- | -- | ng/L | NA | NA | NA | NA | 0.60 J | <3.6 | <3.4 | <3.5 [<3.4] | <3.8 | <3.5 | <3.7 | <3.7 | 0.75 J [0.74 J] | <3.5 | 1.8 J | | |
| Perfluorotetradecanoic acid (PFTeA) | -- | -- | ng/L | NA | NA | NA | NA | <3.6 | <3.6 | <3.4 | <3.5 [<3.4] | <3.8 | <3.5 | <3.7 | <3.7 | <3.6 [<3.6] | <3.5 | <3.6 | | |
| Perfluorotridecanoic Acid (PFTriA) | -- | -- | ng/L | NA | NA | NA | NA | <3.6 | <3.6 | <3.4 | <3.5 [<3.4] | <3.8 | <3.5 | <3.7 | <3.7 | <3.6 [<3.6] | <3.5 | <3.6 | | |
| Perfluoroundecanoic acid (PFUnA) | -- | -- | ng/L | NA | NA | NA | NA | <3.6 | <3.6 | <3.4 | <3.5 [<3.4] | <3.8 | <3.5 | <3.7 | <3.7 | <3.6 [<3.6] | <3.5 | <3.6 | | |

See notes on last page.

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Field Parameters | Location ID: P201 | P201 Groundwater | Units | MW-18-101 | MW-18-103 | MW-18-105 | MW-18-105 | MW-19-107 | MW-19-108 | MW-19-111 | MW-19-115 | MW-19-116 | MW-19-117 | MW-19-120 | MW-19-121 | MW-19-121 | MW-19-122 | MW-19-122 | |
|--|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------|
| | Date Collected: Residential | Surface Water | | 05/23/23 | 02/17/23 | 02/17/23 | 05/24/23 | 05/24/23 | 05/24/23 | 05/24/23 | 05/24/23 | 05/17/23 | 05/17/23 | 05/18/23 | 05/18/23 | 02/16/23 | 05/17/23 | 02/16/23 | 05/18/23 |
| Sample Name: Drinking Water | Sample Depth (ft. bgs): | Interface | MW-18-100_052323 | MW-18-103_021723 | MW-18-105_021723 | MW-18-105_052423 | MW-19-107_052423 | MW-19-108_052423 | MW-19-111_052423 | MW-19-115_051723 | MW-19-116_051723 | MW-19-117_051823 | MW-19-120_051823 | MW-19-121_021623 | MW-19-121_051723 | MW-19-122_021623 | MW-19-122_051823 | | |
| pH | 6.5 to 8.5 | 6.5 to 9.0 | s.u. | 6.95 | 6.90 | 7.11 | 7.31 | 6.84 | 6.75 | 6.78 | 7.06 | 6.93 | 6.94 | 7.03 | 7.49 | 6.97 | 7.22 | 7.15 | |
| Conductivity | -- | -- | mS/cm | 1.75 | 0.89 | 0.52 | 0.41 | 0.77 | 1.20 | 1.22 | 2.46 | 1.15 | 1.15 | 2.89 | 2.21 | 2.26 | 3.42 | 4.17 | |
| Turbidity | -- | -- | NTU | 41.00 | 1.11 | 1.29 | 3.87 | 140.00 | 33.80 | 2.02 | 88.40 | 3.69 | 60.60 | 201.00 | 266.00 | 30.20 | 294.00 | 588.00 | |
| Dissolved oxygen (DO) | -- | -- | mg/L | 0.15 | 0.39 | 5.48 | 0.32 | 0.37 | 0.88 | 1.66 | 5.57 | 1.91 | 0.36 | 0.50 | 10.50 | 4.29 | 9.46 | 6.57 | |
| Temperature | -- | -- | Deg C | 15.1 | 6.6 | 5.2 | 9.9 | 11.7 | 11.1 | 11.8 | 14.1 | 14.5 | 17.2 | 14.5 | 6.4 | 13.6 | 8.9 | 13.9 | |
| Oxidation reduction potential (ORP) | -- | -- | millivolts | -245.1 | -155.2 | -130.0 | 56.0 | -10.4 | 20.7 | 62.4 | 19.4 | -50.7 | -79.4 | -5.1 | 75.8 | 246.2 | 80.2 | 169.0 | |
| Volatiles Organics (via EPA Method SW5030C/8260C) | | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 880 | 740 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,1-Dichloroethene | 7.0 | 130 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,1,1-Trichloroethane | 200 | 89 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,1,1,2-Tetrachloroethane | 77 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,1,2-Trichloroethane | 5.0 | 330 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,1,2,2-Tetrachloroethane | 8.5 | 78 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.2 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| 1,2-Dibromoethane (Ethylene dibromide) | 0.05 | 5.7 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,2-Dichloroethane | 5.0 | 360 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,2-Dichloropropane | 5.0 | 230 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,2,3-Trichlorobenzene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| 1,2,3-Trichloropropane | 42 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,2,3-Trimethylbenzene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| 1,2,4-Trimethylbenzene | 63 | 17 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,3,5-Trimethylbenzene | 72 | 45 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 1,4-Dioxane | 7.2 | 280 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | 8.0 | 81 | <1 | 15 | <1 | <1 | 3.0 | 2.0 | |
| 2-Butanone (Methyl ethyl ketone) (MEK) | 13,000 | 2,200 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <25 | NA | NA [NA] | NA | NA | |
| 2-Hexanone | 1,000 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <50 | NA | NA [NA] | NA | NA | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| 2-Phenylbutane (sec-Butylbenzene) | 80 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | 1,800 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <50 | NA | NA [NA] | NA | NA | |
| Acetone | 730 | 1,700 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <50 | NA | NA [NA] | NA | NA | |
| Acrylonitrile | 2.6 | 2.0 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <2 | NA | NA [NA] | NA | NA | |
| Benzene | 5.0 | 200 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Bromobenzene | 18 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Bromodichloromethane | 80 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Bromoform | 80 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Bromomethane (Methyl bromide) | 10 | 5.0 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Carbon disulfide | 800 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Carbon tetrachloride | 5.0 | 38 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Chlorobenzene | 100 | 25 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Chlorobromomethane | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Chloroethane | 430 | 1,100 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Chloroform (Trichloromethane) | 80 | 350 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Chloromethane (Methyl chloride) | 260 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| cis-1,2-Dichloroethene | 70 | 620 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| cis-1,3-Dichloropropene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Cymene (p-Isopropyltoluene) | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Dibromochloromethane | 80 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Dibromomethane | 80 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Dichlorodifluoromethane (CFC-12) | 1,700 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Ethyl ether | 10 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <10 | NA | NA [NA] | NA | NA | |
| Ethylbenzene | 74 | 18 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Iodomethane | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Isopropyl benzene | 800 | 28 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Methyl tert butyl ether (MTBE) | 40 | 7,100 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Methylene chloride | 5.0 | 1,500 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <5 | NA | NA [NA] | NA | NA | |
| N-Butylbenzene | 80 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| N-Propylbenzene | 80 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Styrene | 100 | 80 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| tert-Butylbenzene | 80 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Tetrachloroethene | 5.0 | 60 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Tetrahydrofuran | 95 | 11,000 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <90 | NA | NA [NA] | NA | NA | |
| Toluene | 790 | 270 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| trans-1,2-Dichloroethene | 100 | 1,500 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| trans-1,3-Dichloropropene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| trans-1,4-Dichloro-2-butene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Trichloroethene | 5.0 | 200 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | <1 | NA | NA [NA] | NA | NA | |
| Trichlorofluoromethane (CFC-11) | 2,600 | -- | µg/L | | | | | | | | | | | | | | | | |

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-18-101 | MW-18-103 | MW-18-105 | MW-18-105 | MW-19-107 | MW-19-108 | MW-19-111 | MW-19-115 | MW-19-116 | MW-19-117 | MW-19-120 | MW-19-121 | MW-19-121 | MW-19-122 | MW-19-122 |
|--|--|--|-------|-------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | | | 05/23/23 80-85 | 02/17/23 5-10 | 02/17/23 6-11 | 05/24/23 6-11 | 05/24/23 23-28 | 05/24/23 23-28 | 05/24/23 20-25 | 05/17/23 72.5-77.5 | 05/17/23 65-70 | 05/18/23 54-59 | 05/18/23 66-71 | 05/18/23 66-71 | 05/17/23 66-71 | 05/18/23 59-64 | 05/18/23 59-64 |
| Semi-Volatile Organics (via EPA Method 522) | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether) | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dichlorophenol | 73 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dimethylphenol | 370 | 380 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dinitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dinitrotoluene | 7.7 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | 730 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Trichlorophenol | 120 | 5.0 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-Dinitrotoluene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Chloronaphthalene | 1800 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Chlorophenol | 45 | 18 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Nitrophenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-Dichlorobenzidine | 1.1 | 0.3 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-Dinitro-2-methylphenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Bromophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Chloro-3-methylphenol | 150 | 7.4 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Chloroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Chlorophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Nitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Acenaphthene | 1300 | 38 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Acenaphthylene | 52 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Anthracene | 43 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)anthracene | 2.1 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)pyrene | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(b)fluoranthene | 1.5 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(g,h,i)perylene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(k)fluoranthene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| bis(2-Chloroethoxy)methane | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| bis(2-Chloroethyl)ether | 2.0 | 1.0 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| bis(2-Ethylhexyl)phthalate (DEHP) | 6.0 | 14 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Butyl benzylphthalate (BBP) | 1200 | 67 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Chrysene | 1.6 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibenz(a,h)anthracene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibenzofuran | -- | 4.0 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Diethyl phthalate | 5500 | 110 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Dimethyl phthalate | 73000 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Di-n-butylphthalate (DBP) | 880 | 9.7 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Di-n-octyl phthalate (DnOP) | 130 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Fluoranthene | 210 | 1.6 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Fluorene | 880 | 12 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 1.0 | 0.2 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobutadiene | 15 | 0.053 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorocyclopentadiene | 50 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Indeno(1,2,3-cd)pyrene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Isophorone | 770 | 1300 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Nitrobenzene | 3.4 | 180 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | 270 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Pentachlorophenol | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Phenanthrene | 52 | 2.0 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Phenol | 4400 | 450 | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| Pyrene | 140 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA |
| General Chemistry | | | | | | | | | | | | | | | | | | |
| Nitrate (as N) | 10 | -- | mg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | 5.4 [5.6] | NA |
| Phosphorus | 63 | -- | mg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | 4.8 [5.1] | NA |
| Total kjeldahl nitrogen (TKN) | -- | -- | mg/L | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | 0.452 [0.324] | NA |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-18-101 | MW-18-103 | MW-18-105 | MW-18-105 | MW-19-107 | MW-19-108 | MW-19-111 | MW-19-115 | MW-19-116 | MW-19-117 | MW-19-120 | MW-19-121 | MW-19-121 | MW-19-122 | MW-19-122 | | | |
|---|--|--|-------|---------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|-------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|----------|----------|----------|
| | | | | 05/23/23 | 02/17/23 | 02/17/23 | 05/24/23 | 05/24/23 | 05/24/23 | 05/24/23 | 05/24/23 | 05/24/23 | 05/17/23 | 05/17/23 | 05/17/23 | 05/18/23 | 05/18/23 | 02/16/23 | 05/17/23 | 02/16/23 | 05/18/23 |
| | | | | MW-18-100_052323 80-85 | MW-18-103_021723 5-10 | MW-18-105_021723 6-11 | MW-18-105_052423 6-11 | MW-19-107_052423 23-28 | MW-19-108_052423 23-28 | MW-19-111_052423 20-25 | MW-19-115_051723 72.5-77.5 | MW-19-116_051723 65-70 | MW-19-117_051823 54-59 | MW-19-120_051823 66-71 | MW-19-121_021623 66-71 | MW-19-121_051723 66-71 | MW-19-122_021623 59-64 | MW-19-122_051823 59-64 | | | |
| Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified) | | | | | | | | | | | | | | | | | | | | | |
| 11Cl-PF3OUds (F-53B Minor) | -- | -- | ng/L | <7.3 | <6.7 | <7.1 | <7.4 | <7.5 | <7.7 | <7.5 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| 4:2 FTS | -- | -- | ng/L | <7.3 | <6.7 | <7.1 | <7.4 | <7.5 Q | <7.7 Q | <7.5 Q | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| 6:2 FTS | -- | -- | ng/L | <7.3 | <6.7 | <7.1 | <7.4 | <7.5 | <7.7 | <7.5 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| 8:2 FTS | -- | -- | ng/L | <7.3 | <6.7 | <7.1 | <7.4 | <7.5 | <7.7 | <7.5 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| 9Cl-PF3ONS (F-53B Major) | -- | -- | ng/L | <7.3 | <6.7 | <7.1 | <7.4 | <7.5 | <7.7 | <7.5 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| ADONA | -- | -- | ng/L | <7.3 | <6.7 | <7.1 | <7.4 | 0.45 J | <7.7 | <7.5 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX) | 370 | -- | ng/L | <7.3 | <6.7 | <7.1 | <7.4 | <7.5 | <7.7 | <7.5 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) | -- | -- | ng/L | <7.3 | <6.7 | <7.1 | <7.4 | <7.5 | <7.7 | <7.5 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | -- | -- | ng/L | <7.3 | <6.7 | <7.1 | <7.4 | <7.5 | <7.7 | <7.5 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorobutanesulfonic acid (PFBS) | 420 | -- | ng/L | <3.6 | 15 | 1.4 J | 3.1 J | 1.9 J | 1.5 J | 1.3 J | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorobutanoic acid (PFBA) | -- | -- | ng/L | 4.0 | 15 | <3.6 | 1.1 J | 2.3 J | 1.9 J | 3.0 J | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorodecanesulfonic acid (PFDS) | -- | -- | ng/L | <3.6 | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorodecanoic acid (PFDA) | -- | -- | ng/L | <3.6 | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorododecanoic acid (PFDoA) | -- | -- | ng/L | <3.6 Q | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluoroheptanesulfonic Acid (PFHpS) | -- | -- | ng/L | <3.6 | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluoroheptanoic acid (PFHpA) | -- | -- | ng/L | <3.6 | 0.53 J | <3.6 | <3.7 | 0.50 J | 0.64 J | 0.83 J | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorohexanesulfonic acid (PFHxS) | 51 | -- | ng/L | <3.6 | 100 | 0.51 J | 1.1 J | 4.4 | 0.89 J | 1.3 J | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorohexanoic acid (PFHxA) | 400,000 | -- | ng/L | <3.6 | 4.8 | <3.6 | <3.7 | 0.67 J | 0.86 J | 1.9 J | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorononanesulfonic acid (PFNS) | -- | -- | ng/L | <3.6 | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorononanoic acid (PFNA) | 6.0 | -- | ng/L | <3.6 | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorooctane Sulfonamide (PFOSA) | -- | -- | ng/L | <3.6 | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorooctane sulfonic acid (PFOS) | 16 | 12 | ng/L | <3.6 | 4.5 | 6.2 | 4.9 | 2.0 J | 5.5 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorooctanoic acid (PFOA) | 8.0 | 12,000 | ng/L | <3.6 | 1.6 J | <3.6 | <3.7 | 2.6 J | 4.1 | 5.0 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluoropentanesulfonic acid (PFPeS) | -- | -- | ng/L | <3.6 | 14 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluoropentanoic acid (PFPeA) | -- | -- | ng/L | 0.64 J | 4.5 | <3.6 | <3.7 | 0.52 J | <3.9 | 1.3 J | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorotetradecanoic acid (PFTeA) | -- | -- | ng/L | <3.6 Q | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluorotridecanoic Acid (PFTriA) | -- | -- | ng/L | <3.6 Q | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |
| Perfluoroundecanoic acid (PFUnA) | -- | -- | ng/L | <3.6 | <3.4 | <3.6 | <3.7 | <3.8 | <3.9 | <3.7 | NA | NA | NA | NA | NA | NA [NA] | NA | NA | | | |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-19-123 | MW-19-123 | MW-19-124 | MW-20-126 | MW-20-126 | MW-20-127 | MW-20-127 | MW-20-128 | MW-20-129 | MW-20-129 | MW-20-130 | MW-20-131 | MW-20-131 | MW-20-132 | MW-20-132 | |
|--|--|--|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|----|
| | | | | 02/16/23 66-71 | 05/17/23 66-71 | 05/18/23 65-70 | 02/16/23 69-74 | 05/18/23 69-74 | 02/16/23 72-77 | 05/17/23 72-77 | 05/17/23 65-70 | 02/16/23 64-69 | 05/18/23 64-69 | 05/18/23 63-68 | 02/14/23 5-10 | 05/23/23 5-10 | 02/14/23 6-11 | 05/23/23 6-11 | |
| Semi-Volatile Organics (via EPA Method 522) | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether) | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dichlorophenol | 73 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dimethylphenol | 370 | 380 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dinitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dinitrotoluene | 7.7 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | 730 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Trichlorophenol | 120 | 5.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-Dinitrotoluene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Chloronaphthalene | 1800 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Chlorophenol | 45 | 18 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Nitrophenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-Dichlorobenzidine | 1.1 | 0.3 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-Dinitro-2-methylphenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Bromophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Chloro-3-methylphenol | 150 | 7.4 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Chloroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Chlorophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Nitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acenaphthene | 1300 | 38 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acenaphthylene | 52 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Anthracene | 43 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)anthracene | 2.1 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)pyrene | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(b)fluoranthene | 1.5 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(g,h,i)perylene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(k)fluoranthene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| bis(2-Chloroethoxy)methane | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| bis(2-Chloroethyl)ether | 2.0 | 1.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| bis(2-Ethylhexyl)phthalate (DEHP) | 6.0 | 14 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Butyl benzylphthalate (BBP) | 1200 | 67 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chrysene | 1.6 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibenz(a,h)anthracene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibenzofuran | -- | 4.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diethyl phthalate | 5500 | 110 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dimethyl phthalate | 73000 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Di-n-butylphthalate (DBP) | 880 | 9.7 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Di-n-octyl phthalate (DnOP) | 130 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Fluoranthene | 210 | 1.6 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Fluorene | 880 | 12 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 1.0 | 0.2 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobutadiene | 15 | 0.053 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorocyclopentadiene | 50 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indeno(1,2,3-cd)pyrene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isophorone | 770 | 1300 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nitrobenzene | 3.4 | 180 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | 270 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Pentachlorophenol | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Phenanthrene | 52 | 2.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Phenol | 4400 | 450 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Pyrene | 140 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| General Chemistry | | | | | | | | | | | | | | | | | | | |
| Nitrate (as N) | 10 | -- | mg/L | NA | <0.5 | NA | NA | NA | NA | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Phosphorus | 63 | -- | mg/L | NA | 0.07 | NA | NA | NA | NA | 0.06 | 0.33 | NA | NA | NA | NA | NA | NA | NA | NA |
| Total kjeldahl nitrogen (TKN) | -- | -- | mg/L | NA | 0.228 | NA | NA | NA | NA | 0.752 | 0.808 | NA | NA | NA | NA | NA | NA | NA | NA |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified) | Location ID: | P201 | Units | MW-19-123 | MW-19-123 | MW-19-124 | MW-20-126 | MW-20-126 | MW-20-127 | MW-20-127 | MW-20-128 | MW-20-129 | MW-20-129 | MW-20-130 | MW-20-131 | MW-20-131 | MW-20-132 | MW-20-132 | |
|--|-----------------|--|-------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|
| | Date Collected: | Residential | | 02/16/23 | 05/17/23 | 05/18/23 | 02/16/23 | 05/18/23 | 02/16/23 | 05/17/23 | 05/17/23 | 05/17/23 | 02/16/23 | 05/18/23 | 05/18/23 | 02/14/23 | 05/23/23 | 02/14/23 | 05/23/23 |
| | Sample Name: | Drinking | | MW-19-123_021623 | MW-19-123_051723 | MW-19-124_051823 | MW-20-126_021623 | MW-20-126_051823 | MW-20-127_021623 | MW-20-127_051723 | MW-20-128_051723 | MW-20-129_021623 | MW-20-129_051823 | MW-20-130_051823 | MW-20-131_021423 | MW-20-131_052323 | MW-20-132_021423 | MW-20-132_052323 | |
| Sample Depth (ft. bgs): | Water | P201 Groundwater Surface Water Interface | 66-71 | 66-71 | 65-70 | 69-74 | 69-74 | 72-77 | 72-77 | 65-70 | 64-69 | 64-69 | 63-68 | 5-10 | 5-10 | 6-11 | 6-11 | | |
| 11Cl-PF3OUdS (F-53B Minor) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <7.1 | NA [NA] | <7.2 | NA | <7.2 [<7.2] | |
| 4:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <7.1 Q | NA [NA] | <7.2 Q | NA | <7.2 Q [<7.2 Q] | |
| 6:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <7.1 Q | NA [NA] | <7.2 Q | NA | <7.2 [<7.2 Q] | |
| 8:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <7.1 | NA [NA] | <7.2 | NA | <7.2 [<7.2] | |
| 9Cl-PF3ONS (F-53B Major) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <7.1 | NA [NA] | <7.2 | NA | <7.2 [<7.2] | |
| ADONA | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <7.1 | NA [NA] | <7.2 | NA | <7.2 [<7.2] | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX) | 370 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <7.1 | NA [NA] | <7.2 | NA | <7.2 [<7.2] | |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <7.1 | NA [NA] | <7.2 | NA | <7.2 [<7.2] | |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <7.1 | NA [NA] | <7.2 | NA | <7.2 [<7.2] | |
| Perfluorobutanesulfonic acid (PFBS) | 420 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 27 | NA [NA] | 1.4 J | NA | 1.2 J [1.1 J] | |
| Perfluorobutanoic acid (PFBA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 19 | NA [NA] | 25 | NA | 8.9 [8.9] | |
| Perfluorodecanesulfonic acid (PFDS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | <3.6 | NA | <3.6 [<3.6] | |
| Perfluorodecanoic acid (PFDA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | <3.6 | NA | 1.1 J [0.91 J] | |
| Perfluorododecanoic acid (PFDoA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | <3.6 | NA | <3.6 [<3.6] | |
| Perfluoroheptanesulfonic Acid (PFHpS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | <3.6 | NA | <3.6 [<3.6] | |
| Perfluoroheptanoic acid (PFHpA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 9.7 | NA [NA] | 21 | NA | 7.7 [7.4] | |
| Perfluorohexanesulfonic acid (PFHxS) | 51 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 4.8 | NA [NA] | 1.7 J | NA | 0.82 J [0.86 J] | |
| Perfluorohexanoic acid (PFHxA) | 400,000 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 47 | NA [NA] | 24 | NA | 8.0 [8.4] | |
| Perfluorononanesulfonic acid (PFNS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | <3.6 | NA | <3.6 [<3.6] | |
| Perfluorononanoic acid (PFNA) | 6.0 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | 1.3 J | NA | 2.1 J [2.5 J] | |
| Perfluorooctane Sulfonamide (PFOSA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | <3.6 | NA | <3.6 [<3.6] | |
| Perfluorooctane sulfonic acid (PFOS) | 16 | 12 | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | 3.3 J | NA | 6.9 [6.9] | |
| Perfluorooctanoic acid (PFOA) | 8.0 | 12,000 | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.3 J | NA [NA] | 32 | NA | 13 [14] | |
| Perfluoropentanesulfonic acid (PFPeS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 7.8 | NA [NA] | <3.6 | NA | <3.6 [<3.6] | |
| Perfluoropentanoic acid (PFPeA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 28 | NA [NA] | 29 | NA | 8.7 [8.8] | |
| Perfluorotetradecanoic acid (PFTeA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | <3.6 | NA | <3.6 [<3.6] | |
| Perfluorotridecanoic Acid (PFTriA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | <3.6 | NA | <3.6 [<3.6] | |
| Perfluoroundecanoic acid (PFUnA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | NA [NA] | <3.6 | NA | <3.6 [<3.6] | |

See notes on last page.

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 | P201 Groundwater | | MW-21-133 | MW-21-134 | MW-21-135 | MW-21-139 | MW-21-139 | MW-21-140 | MW-21-140 | MW-21-141 | MW-21-142 | MW-22-143 | MW-22-143 | MW-22-144 | MW-22-144 | MW-22-145 | MW-22-145 |
|--|----------------------------------|----------------------------|------------|-------------------|-------------------|-------------------|------------------|------------------|-------------------|-------------------|-------------------|-----------------------|-------------------|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Residential Drinking Water | Surface Water Interface | Units | 05/24/23 10-15 | 05/24/23 11-16 | 05/24/23 22-27 | 02/15/23 7-12 | 05/16/23 7-12 | 02/16/23 67-72 | 05/18/23 67-72 | 05/18/23 72-77 | 05/18/23 71.5-76.5 | 02/13/23 26-31 | 05/19/23 26-31 | 02/13/23 19.5-24.5 | 05/18/23 19.5-24.5 | 02/13/23 10.5-15.5 | 05/18/23 10.5-15.5 |
| Field Parameters | | | | | | | | | | | | | | | | | | |
| pH | 6.5 to 8.5 | 6.5 to 9.0 | s.u. | 7.08 | 7.17 | 7.44 | 7.63 | 7.66 | 6.95 | 7.14 | 6.67 | 6.65 | 6.97 | 6.95 | 6.94 | 7.01 | 6.98 | 7.02 |
| Conductivity | -- | -- | mS/cm | 0.65 | 0.56 | 0.70 | 1.54 | 1.41 | 0.82 | 0.83 | 0.74 | 2.20 | 3.19 | 3.44 | 1.27 | 1.22 | 1.13 | 1.07 |
| Turbidity | -- | -- | NTU | 0.88 | 1.24 | 2.92 | 1.22 | 1.18 | 6.41 | 18.80 | 1.79 | 57.00 | 3.22 | 3.12 | 2.95 | 0.05 | 1.89 | 3.20 |
| Dissolved oxygen (DO) | -- | -- | mg/L | 0.37 | 2.60 | 1.69 | 0.07 | 0.13 | 0.25 | 8.95 | 0.31 | 0.48 | 0.30 | 0.24 | 0.48 | 0.99 | 3.22 | 2.20 |
| Temperature | -- | -- | Deg C | 11.2 | 11.0 | 12.6 | 7.7 | 13.4 | 12.0 | 11.6 | 13.5 | 15.4 | 12.6 | 11.7 | 11.7 | 11.1 | 10.6 | 11.0 |
| Oxidation reduction potential (ORP) | -- | -- | millivolts | 90.3 | 89.6 | -55.7 | -168.0 | 130.1 | -127.8 | 7.4 | -81.5 | 79.7 | -98.6 | -63.9 | -132.8 | 84.0 | -110.7 | 161.1 |
| Volatiles Organics (via EPA Method SW5030C/8260C) | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 880 | 740 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethene | 7.0 | 130 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 200 | 89 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1,2-Tetrachloroethane | 77 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.0 | 330 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | 8.5 | 78 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.2 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane (Ethylene dibromide) | 0.05 | 5.7 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichloroethane | 5.0 | 360 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichloropropane | 5.0 | 230 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 42 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trimethylbenzene | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | 63 | 17 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-Trimethylbenzene | 72 | 45 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dioxane | 7.2 | 280 | µg/L | NA | NA | NA | 2.0 | 2.0 [2.0] | <1 | <1 | <1 | 82 | NA | NA | NA | NA | NA | NA |
| 2-Butanone (Methyl ethyl ketone) (MEK) | 13,000 | 2,200 | µg/L | NA | NA | NA | NA | NA [NA] | <25 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 1,000 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <50 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Phenylbutane (sec-Butylbenzene) | 80 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | 1,800 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <50 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acetone | 730 | 1,700 | µg/L | NA | NA | NA | NA | NA [NA] | <50 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 2.6 | 2.0 | µg/L | NA | NA | NA | NA | NA [NA] | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzene | 5.0 | 200 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromobenzene | 18 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 80 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromoform | 80 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromomethane (Methyl bromide) | 10 | 5.0 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 800 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon tetrachloride | 5.0 | 38 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlorobenzene | 100 | 25 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlorobromomethane | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroethane | 430 | 1,100 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroform (Trichloromethane) | 80 | 350 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloromethane (Methyl chloride) | 260 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,2-Dichloroethene | 70 | 620 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cymene (p-Isopropyltoluene) | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | 80 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 80 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane (CFC-12) | 1,700 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethyl ether | 10 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <10 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 74 | 18 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropyl benzene | 800 | 28 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert butyl ether (MTBE) | 40 | 7,100 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | 5.0 | 1,500 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Butylbenzene | 80 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Propylbenzene | 80 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | 100 | 80 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| tert-Butylbenzene | 80 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Tetrachloroethene | 5.0 | 60 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Tetrahydrofuran | 95 | 11,000 | µg/L | NA | NA | NA | NA | NA [NA] | <90 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 790 | 270 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-1,2-Dichloroethene | 100 | 1,500 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-1,3-Dichloropropene | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-1,4-Dichloro-2-butene | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Trichloroethene | 5.0 | 200 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Trichlorofluoromethane (CFC-11) | 2,600 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 2.0 | 13 | µg/L | NA | NA | NA | | | | | | | | | | | | |

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-21-133 | MW-21-134 | MW-21-135 | MW-21-139 | MW-21-139 | MW-21-140 | MW-21-140 | MW-21-141 | MW-21-142 | MW-22-143 | MW-22-143 | MW-22-144 | MW-22-144 | MW-22-145 | MW-22-145 | | | |
|--|--|--|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| | | | | 05/24/23 | 05/24/23 | 05/24/23 | 02/15/23 | 05/16/23 | 02/16/23 | 05/18/23 | 05/18/23 | 05/18/23 | 05/18/23 | 02/13/23 | 05/19/23 | 02/13/23 | 05/18/23 | 02/13/23 | 05/18/23 | 02/13/23 | 05/18/23 |
| | | | | 10-15 | 11-16 | 22-27 | 7-12 | 7-12 | 67-72 | 67-72 | 72-77 | 71.5-76.5 | 26-31 | 26-31 | 19.5-24.5 | 19.5-24.5 | 10.5-15.5 | 10.5-15.5 | 10.5-15.5 | 10.5-15.5 | |
| Semi-Volatile Organics (via EPA Method 522) | | | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 1,2-Diphenylhydrazine | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether) | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2,4-Dichlorophenol | 73 | 11 | µg/L | NA | NA | NA | NA | NA [NA] | <10 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2,4-Dimethylphenol | 370 | 380 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2,4-Dinitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <25 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2,4-Dinitrotoluene | 7.7 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2,4,5-Trichlorophenol | 730 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2,4,6-Trichlorophenol | 120 | 5.0 | µg/L | NA | NA | NA | NA | NA [NA] | <4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2,6-Dinitrotoluene | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2-Chloronaphthalene | 1800 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2-Chlorophenol | 45 | 18 | µg/L | NA | NA | NA | NA | NA [NA] | <10 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <10 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <25 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 2-Nitrophenol | 20 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 3&4-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <20 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 3,3'-Dichlorobenzidine | 1.1 | 0.3 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 3-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <25 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 4,6-Dinitro-2-methylphenol | 20 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <20 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 4-Bromophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 4-Chloro-3-methylphenol | 150 | 7.4 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 4-Chloroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <10 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 4-Chlorophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 4-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <25 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| 4-Nitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <25 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Acenaphthene | 1300 | 38 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Acenaphthylene | 52 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Anthracene | 43 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Benzo(a)anthracene | 2.1 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Benzo(a)pyrene | 5.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Benzo(b)fluoranthene | 1.5 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Benzo(g,h,i)perylene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Benzo(k)fluoranthene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| bis(2-Chloroethoxy)methane | -- | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| bis(2-Chloroethyl)ether | 2.0 | 1.0 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| bis(2-Ethylhexyl)phthalate (DEHP) | 6.0 | 14 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Butyl benzylphthalate (BBP) | 1200 | 67 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Chrysene | 1.6 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Dibenz(a,h)anthracene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Dibenzofuran | -- | 4.0 | µg/L | NA | NA | NA | NA | NA [NA] | <4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Diethyl phthalate | 5500 | 110 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Dimethyl phthalate | 73000 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Di-n-butylphthalate (DBP) | 880 | 9.7 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Di-n-octyl phthalate (DnOP) | 130 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Fluoranthene | 210 | 1.6 | µg/L | NA | NA | NA | NA | NA [NA] | <1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Fluorene | 880 | 12 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Hexachlorobenzene | 1.0 | 0.2 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Hexachlorobutadiene | 15 | 0.053 | µg/L | NA | NA | NA | NA | NA [NA] | <10 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Hexachlorocyclopentadiene | 50 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Indeno(1,2,3-cd)pyrene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Isophorone | 770 | 1300 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Nitrobenzene | 3.4 | 180 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| N-Nitrosodi-n-propylamine | 5.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| N-Nitrosodiphenylamine | 270 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Pentachlorophenol | 1.0 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Phenanthrene | 52 | 2.0 | µg/L | NA | NA | NA | NA | NA [NA] | <2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Phenol | 4400 | 450 | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Pyrene | 140 | -- | µg/L | NA | NA | NA | NA | NA [NA] | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| General Chemistry | | | | | | | | | | | | | | | | | | | | | |
| Nitrate (as N) | 10 | -- | mg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Phosphorus | 63 | -- | mg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |
| Total kjeldahl nitrogen (TKN) | -- | -- | mg/L | NA | NA | NA | NA | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-21-133 | MW-21-134 | MW-21-135 | MW-21-139 | MW-21-139 | MW-21-140 | MW-21-140 | MW-21-141 | MW-21-142 | MW-22-143 | MW-22-143 | MW-22-144 | MW-22-144 | MW-22-145 | MW-22-145 |
|---|--|--|-------|-------------------|-------------------|-------------------|------------------|-----------------------|-------------------|-------------------|-------------------|-----------------------|-------------------|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | | | 05/24/23 10-15 | 05/24/23 11-16 | 05/24/23 22-27 | 02/15/23 7-12 | 05/16/23 7-12 | 02/16/23 67-72 | 05/18/23 67-72 | 05/18/23 72-77 | 05/18/23 71.5-76.5 | 02/13/23 26-31 | 05/19/23 26-31 | 02/13/23 19.5-24.5 | 05/18/23 19.5-24.5 | 02/13/23 10.5-15.5 | 05/18/23 10.5-15.5 |
| Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified) | | | | | | | | | | | | | | | | | | |
| 11Cl-PF3OUds (F-53B Minor) | -- | -- | ng/L | <7.3 | <7.3 | <7.3 | <6.9 | <69 [<68] | <7.1 | NA | NA | NA | <6.9 | <7.1 | <7.0 | <6.9 | <7.0 | <7.3 |
| 4:2 FTS | -- | -- | ng/L | <7.3 Q | <7.3 Q | <7.3 Q | <6.9 Q | <69 [<68] | <7.1 | NA | NA | NA | <6.9 Q | <7.1 Q | <7.0 | <6.9 | <7.0 | <7.3 |
| 6:2 FTS | -- | -- | ng/L | <7.3 | <7.3 | <7.3 | 46 S | 46 J [48 J] | <7.1 | NA | NA | NA | <6.9 | <7.1 | <7.0 | <6.9 | <7.0 | <7.3 |
| 8:2 FTS | -- | -- | ng/L | <7.3 | <7.3 | <7.3 | 32 | 54 J [56 J] | <7.1 | NA | NA | NA | <6.9 | <7.1 | <7.0 | <6.9 | <7.0 | <7.3 |
| 9Cl-PF3ONS (F-53B Major) | -- | -- | ng/L | <7.3 | <7.3 | <7.3 | <6.9 | <69 [<68] | <7.1 | NA | NA | NA | <6.9 | <7.1 | <7.0 | <6.9 | <7.0 | <7.3 |
| ADONA | -- | -- | ng/L | <7.3 | <7.3 | <7.3 | <6.9 | <69 [<68] | <7.1 | NA | NA | NA | <6.9 | <7.1 | <7.0 | <6.9 | <7.0 | <7.3 |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX) | 370 | -- | ng/L | <7.3 | <7.3 | <7.3 | <6.9 | <69 [<68] | <7.1 | NA | NA | NA | <6.9 | <7.1 | <7.0 | <6.9 | <7.0 | <7.3 |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) | -- | -- | ng/L | <7.3 | <7.3 | <7.3 | <6.9 | <69 [<68] | <7.1 | NA | NA | NA | <6.9 | <7.1 | <7.0 | <6.9 | <7.0 | <7.3 |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | -- | -- | ng/L | <7.3 | <7.3 | <7.3 | <6.9 | <69 [<68] | <7.1 | NA | NA | NA | <6.9 | <7.1 | <7.0 | <6.9 | <7.0 | <7.3 |
| Perfluorobutanesulfonic acid (PFBS) | 420 | -- | ng/L | 1.0 J | 1.9 J | 1.5 J | 31 | 15 J [14 J] | <3.6 | NA | NA | NA | 1.3 J | 0.79 J | 2.0 J | 2.2 J | 3.4 J | 2.8 J |
| Perfluorobutanoic acid (PFBA) | -- | -- | ng/L | 5.1 | 10 | 10 | 40 | 47 [44] | <3.6 | NA | NA | NA | 11 | 11 | 3.2 J | 8.0 | 4.9 | 11 |
| Perfluorodecanesulfonic acid (PFDS) | -- | -- | ng/L | <3.6 | <3.6 | <3.7 | <3.4 | <34 [<34] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | <3.6 |
| Perfluorodecanoic acid (PFDA) | -- | -- | ng/L | <3.6 | <3.6 | <3.7 | 4.1 | <34 [6.8 J] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | <3.6 |
| Perfluorododecanoic acid (PFDoA) | -- | -- | ng/L | <3.6 | <3.6 | <3.7 | <3.4 | <34 [<34] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | <3.6 |
| Perfluoroheptanesulfonic Acid (PFHpS) | -- | -- | ng/L | <3.6 | 1.2 J | <3.7 | 20 | 27 J [23 J] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | 0.45 J |
| Perfluoroheptanoic acid (PFHpA) | -- | -- | ng/L | 5.5 | 17 | 44 | 56 | 76 [64] | <3.6 | NA | NA | NA | 6.4 | 3.9 | 2.6 J | 6.8 | 3.9 | 15 |
| Perfluorohexanesulfonic acid (PFHxS) | 51 | -- | ng/L | 1.3 J | 1.9 J | 2.3 J | 260 S | 250 [230] | <3.6 | NA | NA | NA | <3.5 | <3.5 | 4.5 | 3.0 J | 1.7 J | 3.3 J |
| Perfluorohexanoic acid (PFHxA) | 400,000 | -- | ng/L | 6.5 | 21 | 30 | 99 | 96 [92] | <3.6 | NA | NA | NA | 17 | 14 | 4.4 | 15 | 5.5 | 25 |
| Perfluorononanesulfonic acid (PFNS) | -- | -- | ng/L | <3.6 | <3.6 | <3.7 | <3.4 | <34 [<34] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | <3.6 |
| Perfluorononanoic acid (PFNA) | 6.0 | -- | ng/L | 0.60 J | 0.55 J | 1.4 J | 15 | 27 J [21 J] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | 1.0 J |
| Perfluorooctane Sulfonamide (PFOSA) | -- | -- | ng/L | <3.6 | <3.6 | <3.7 | <3.4 | <34 [<34] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | <3.6 |
| Perfluorooctane sulfonic acid (PFOS) | 16 | 12 | ng/L | 4.3 | 4.2 | <3.7 | 1,000 | 1,700 [1,600] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | 7.3 |
| Perfluorooctanoic acid (PFOA) | 8.0 | 12,000 | ng/L | 16 | 29 | 47 | 79 | 91 [75] | <3.6 | NA | NA | NA | 5.5 | 3.7 | 5.0 | 12 | 11 | 32 |
| Perfluoropentanesulfonic acid (PFPeS) | -- | -- | ng/L | <3.6 | 0.57 J | 1.0 J | 36 | 20 J [18 J] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | 0.84 J |
| Perfluoropentanoic acid (PFPeA) | -- | -- | ng/L | 4.3 | 18 | 23 | 94 | 92 [100] | <3.6 | NA | NA | NA | 14 | 14 | 3.7 | 15 | 5.1 | 22 |
| Perfluorotetradecanoic acid (PFTeA) | -- | -- | ng/L | <3.6 | <3.6 | <3.7 | <3.4 | <34 [<34] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | <3.6 |
| Perfluorotridecanoic Acid (PFTriA) | -- | -- | ng/L | <3.6 | <3.6 | <3.7 | <3.4 | <34 [<34] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | <3.6 |
| Perfluoroundecanoic acid (PFUnA) | -- | -- | ng/L | <3.6 | <3.6 | <3.7 | <3.4 | <34 [<34] | <3.6 | NA | NA | NA | <3.5 | <3.5 | <3.5 | <3.4 | <3.5 | <3.6 |

See notes on last page.

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Location ID: | P201 | P201 Groundwater | | MW-22-146 | MW-22-146 | MW-22-147 | MW-22-147 | MW-22-148 | MW-22-148 | MW-22-148 | MW-22-149 | MW-22-149 | MW-22-150 | MW-22-150 | MW-22-151 | MW-22-151 | MW-22-152 | MW-22-152 | MW-22-153 |
|--|-------------|------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Date Collected: | Residential | Surface Water | Units | 02/13/23 | 05/18/23 | 02/14/23 | 05/19/23 | 02/14/23 | 05/24/23 | 02/14/23 | 05/19/23 | 05/19/23 | 02/13/23 | 05/24/23 | 02/13/23 | 05/23/23 | 02/13/23 | 05/23/23 | 02/15/23 |
| Sample Name: | Drinking | Interface | | 5.5-10.5 | 5.5-10.5 | 7.5-12.5 | 7.5-12.5 | 24.5-29.5 | 24.5-29.5 | 24.5-29.5 | 5.5-10.5 | 5.5-10.5 | 13-18 | 13-18 | 13-18 | 13-18 | 10-15 | 10-15 | 25-30 |
| Sample Depth (ft. bgs): | Water | | | 021323 | 051823 | 021423 | 051923 | 021423 | 052423 | 021423 | 051923 | 051923 | 021323 | 052423 | 021323 | 052323 | 021323 | 052323 | 021523 |
| Field Parameters | | | | | | | | | | | | | | | | | | | |
| pH | 6.5 to 8.5 | 6.5 to 9.0 | s.u. | 7.20 | 7.44 | 7.28 | 7.19 | 7.25 | 7.32 | 7.45 | 7.34 | 7.37 | 7.31 | 6.89 | 6.92 | 7.01 | 7.02 | 7.02 | 6.98 |
| Conductivity | -- | -- | mS/cm | 0.99 | 0.79 | 1.66 | 1.39 | 0.89 | 0.71 | 0.57 | 0.57 | 0.57 | 3.38 | 2.67 | 1.84 | 1.25 | 0.85 | 2.26 | 2.26 |
| Turbidity | -- | -- | NTU | 2.14 | 4.25 | 32.00 | 0.41 | 11.00 | 3.12 | 7.84 | 1.19 | 9.23 | 2.10 | 35.80 | 14.90 | 7.34 | 0.97 | 1.09 | 1.09 |
| Dissolved oxygen (DO) | -- | -- | mg/L | 6.93 | 6.74 | 1.65 | 5.07 | 0.40 | 2.43 | 6.87 | 6.53 | 0.36 | 0.17 | 0.40 | 0.10 | 0.15 | 0.14 | 0.12 | 0.12 |
| Temperature | -- | -- | Deg C | 8.4 | 10.4 | 10.3 | 10.6 | 12.2 | 12.5 | 7.6 | 11.8 | 9.3 | 11.5 | 11.0 | 13.5 | 11.2 | 12.8 | 12.9 | 12.9 |
| Oxidation reduction potential (ORP) | -- | -- | millivolts | -66.2 | 197.2 | -2.2 | 85.9 | 6.4 | 99.1 | 0.9 | 162.1 | 32.0 | -72.9 | -21.5 | -79.1 | -13.9 | -30.8 | -181.6 | -181.6 |
| Volatiles Organics (via EPA Method SW5030C/8260C) | | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 880 | 740 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | 54 |
| 1,1-Dichloroethene | 7.0 | 130 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,1,1-Trichloroethane | 200 | 89 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,1,1,2-Tetrachloroethane | 77 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,1,2-Trichloroethane | 5.0 | 330 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,1,2,2-Tetrachloroethane | 8.5 | 78 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.2 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| 1,2-Dibromoethane (Ethylene dibromide) | 0.05 | 5.7 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,2-Dichloroethane | 5.0 | 360 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,2-Dichloropropane | 5.0 | 230 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,2,3-Trichlorobenzene | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| 1,2,3-Trichloropropane | 42 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,2,3-Trimethylbenzene | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| 1,2,4-Trimethylbenzene | 63 | 17 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,3,5-Trimethylbenzene | 72 | 45 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 1,4-Dioxane | 7.2 | 280 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | 26 |
| 2-Butanone (Methyl ethyl ketone) (MEK) | 13,000 | 2,200 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <25 [<25] | <25 |
| 2-Hexanone | 1,000 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <50 [<50] | <50 |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| 2-Phenylbutane (sec-Butylbenzene) | 80 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | 1,800 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <50 [<50] | <50 |
| Acetone | 730 | 1,700 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <50 [<50] | <50 |
| Acrylonitrile | 2.6 | 2.0 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <2 [<2] | <2 |
| Benzene | 5.0 | 200 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Bromobenzene | 18 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Bromodichloromethane | 80 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Bromofrom | 80 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Bromomethane (Methyl bromide) | 10 | 5.0 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Carbon disulfide | 800 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Carbon tetrachloride | 5.0 | 38 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Chlorobenzene | 100 | 25 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Chlorobromomethane | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Chloroethane | 430 | 1,100 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Chloroform (Trichloromethane) | 80 | 350 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Chloromethane (Methyl chloride) | 260 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| cis-1,2-Dichloroethene | 70 | 620 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| cis-1,3-Dichloropropene | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Cymene (p-Isopropyltoluene) | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Dibromochloromethane | 80 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Dibromomethane | 80 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Dichlorodifluoromethane (CFC-12) | 1,700 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Ethyl ether | 10 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <10 [<10] | <10 |
| Ethylbenzene | 74 | 18 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Iodomethane | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Isopropyl benzene | 800 | 28 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Methyl tert butyl ether (MTBE) | 40 | 7,100 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Methylene chloride | 5.0 | 1,500 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| Naphthalene | 520 | 11 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 [<5] | <5 |
| N-Butylbenzene | 80 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| N-Propylbenzene | 80 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Styrene | 100 | 80 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| tert-Butylbenzene | 80 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Tetrachloroethene | 5.0 | 60 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 [<1] | <1 |
| Tetrahydrofuran | 95 | 11,000 | µg/L | NA [NA] | NA [NA | | | | | | | | | | | | | | |

| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-22-146 02/13/23 MW-22-146_021323 5.5-10.5 | MW-22-146 05/18/23 MW-22-146_051823 5.5-10.5 | MW-22-147 02/14/23 MW-22-147_021423 7.5-12.5 | MW-22-147 05/19/23 MW-22-147_051923 7.5-12.5 | MW-22-148 02/14/23 MW-22-148_021423 24.5-29.5 | MW-22-148 05/24/23 MW-22-148_052423 24.5-29.5 | MW-22-149 02/13/23 MW-22-149_021323 5.5-10.5 | MW-22-149 05/19/23 MW-22-149_051923 5.5-10.5 | MW-22-150 02/13/23 MW-22-150_021323 13-18 | MW-22-150 05/24/23 MW-22-150_052423 13-18 | MW-22-151 02/13/23 MW-22-151_021323 13-18 | MW-22-151 05/23/23 MW-22-151_052323 13-18 | MW-22-152 02/13/23 MW-22-152_021323 10-15 | MW-22-152 05/23/23 MW-22-152_052323 10-15 | MW-22-153 02/15/23 MW-22-153_021523 25-30 | |
|--|--|--|-------|---|---|---|---|--|--|---|---|--|--|--|--|--|--|--|----|
| Semi-Volatile Organics (via EPA Method 522) | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 1,2-Diphenylhydrazine | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether) | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2,4-Dichlorophenol | 73 | 11 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2,4-Dimethylphenol | 370 | 380 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2,4-Dinitrophenol | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2,4-Dinitrotoluene | 7.7 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2,4,5-Trichlorophenol | 730 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2,4,6-Trichlorophenol | 120 | 5.0 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2,6-Dinitrotoluene | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2-Chloronaphthalene | 1800 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2-Chlorophenol | 45 | 18 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2-Methylphenol | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2-Nitroaniline | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 2-Nitrophenol | 20 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 3&4-Methylphenol | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 3,3'-Dichlorobenzidine | 1.1 | 0.3 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 3-Nitroaniline | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 4,6-Dinitro-2-methylphenol | 20 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 4-Bromophenyl phenyl ether | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 4-Chloro-3-methylphenol | 150 | 7.4 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 4-Chloroaniline | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 4-Chlorophenyl phenyl ether | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 4-Nitroaniline | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| 4-Nitrophenol | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Acenaphthene | 1300 | 38 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Acenaphthylene | 52 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Anthracene | 43 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Benzo(a)anthracene | 2.1 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Benzo(a)pyrene | 5.0 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Benzo(b)fluoranthene | 1.5 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Benzo(g,h,i)perylene | 1.0 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Benzo(k)fluoranthene | 1.0 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| bis(2-Chloroethoxy)methane | -- | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| bis(2-Chloroethyl)ether | 2.0 | 1.0 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| bis(2-Ethylhexyl)phthalate (DEHP) | 6.0 | 14 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Butyl benzylphthalate (BBP) | 1200 | 67 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Chrysene | 1.6 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Dibenz(a,h)anthracene | 2.0 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Dibenzofuran | -- | 4.0 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Diethyl phthalate | 5500 | 110 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Dimethyl phthalate | 73000 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Di-n-butylphthalate (DBP) | 880 | 9.7 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Di-n-octyl phthalate (DnOP) | 130 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Fluoranthene | 210 | 1.6 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Fluorene | 880 | 12 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Hexachlorobenzene | 1.0 | 0.2 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Hexachlorobutadiene | 15 | 0.053 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Hexachlorocyclopentadiene | 50 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Indeno(1,2,3-cd)pyrene | 2.0 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Isophorone | 770 | 1300 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Naphthalene | 520 | 11 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Nitrobenzene | 3.4 | 180 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| N-Nitrosodi-n-propylamine | 5.0 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| N-Nitrosodiphenylamine | 270 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Pentachlorophenol | 1.0 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Phenanthrene | 52 | 2.0 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Phenol | 4400 | 450 | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Pyrene | 140 | -- | µg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| General Chemistry | | | | | | | | | | | | | | | | | | | |
| Nitrate (as N) | 10 | -- | mg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Phosphorus | 63 | -- | mg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |
| Total kjeldahl nitrogen (TKN) | -- | -- | mg/L | NA [NA] | NA [NA] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA |

See notes on last page.

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-22-146 | MW-22-146 | MW-22-147 | MW-22-147 | MW-22-148 | MW-22-148 | MW-22-149 | MW-22-149 | MW-22-150 | MW-22-150 | MW-22-151 | MW-22-151 | MW-22-152 | MW-22-152 | MW-22-153 | | |
|--|--|--|-------|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|---------------|----------------------|----------------------|-----------|----------|----------|
| | | | | 02/13/23 | 05/18/23 | 02/14/23 | 05/19/23 | 02/14/23 | 05/24/23 | 02/13/23 | 05/19/23 | 02/13/23 | 05/19/23 | 02/13/23 | 05/24/23 | 02/13/23 | 05/23/23 | 02/13/23 | 05/23/23 | 02/15/23 |
| | | | | 5.5-10.5 | 5.5-10.5 | 7.5-12.5 | 7.5-12.5 | 24.5-29.5 | 24.5-29.5 | 5.5-10.5 | 5.5-10.5 | 13-18 | 13-18 | 13-18 | 13-18 | 10-15 | 10-15 | 25-30 | | |
| Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified) | | | | | | | | | | | | | | | | | | | | |
| 11Cl-PF3OUdS (F-53B Minor) | -- | -- | ng/L | <6.9 [<7.0] | <7.1 | <6.8 | <7.0 | <7.0 | <7.4 | <6.7 | <7.0 | <6.7 | <7.4 | <6.8 | <7.5 | <6.9 | <7.4 [<7.4] | NA | | |
| 4:2 FTS | -- | -- | ng/L | <6.9 [<7.0] | <7.1 Q | <6.8 | <7.0 Q | <7.0 | <7.4 | <6.7 | <7.0 | <6.7 Q | <7.4 Q | <6.8 Q | <7.5 Q | <6.9 Q | <7.4 [<7.4 Q] | NA | | |
| 6:2 FTS | -- | -- | ng/L | <6.9 [<7.0] | 13 Q | <6.8 | <7.0 | <7.0 | <7.4 | 7.7 | <7.0 | <6.7 Q | <7.4 | <6.8 Q | <7.5 Q | <6.9 | <7.4 [<7.4] | NA | | |
| 8:2 FTS | -- | -- | ng/L | <6.9 [<7.0] | <7.1 | <6.8 | <7.0 | <7.0 | <7.4 | <6.7 | <7.0 | <6.7 | <7.4 | <6.8 Q | <7.5 | <6.9 | <7.4 [<7.4] | NA | | |
| 9Cl-PF3ONS (F-53B Major) | -- | -- | ng/L | <6.9 [<7.0] | <7.1 | <6.8 | <7.0 | <7.0 | <7.4 | <6.7 | <7.0 | <6.7 | <7.4 | <6.8 | <7.5 | <6.9 | <7.4 [<7.4] | NA | | |
| ADONA | -- | -- | ng/L | <6.9 [<7.0] | <7.1 | <6.8 | <7.0 | <7.0 | <7.4 | <6.7 | <7.0 | <6.7 | <7.4 | <6.8 | 0.94 J | <6.9 | <7.4 [<7.4] | NA | | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX) | 370 | -- | ng/L | <6.9 [<7.0] | <7.1 | <6.8 | <7.0 | <7.0 | <7.4 | <6.7 | <7.0 | <6.7 | <7.4 | <6.8 | <7.5 | <6.9 | <7.4 [<7.4] | NA | | |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) | -- | -- | ng/L | <6.9 [<7.0] | <7.1 | <6.8 | <7.0 | <7.0 | <7.4 | <6.7 | <7.0 | <6.7 | <7.4 | <6.8 | <7.5 | <6.9 | <7.4 [<7.4] | NA | | |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | -- | -- | ng/L | <6.9 [<7.0] | <7.1 | <6.8 | <7.0 | <7.0 | <7.4 | <6.7 | <7.0 | <6.7 | <7.4 | <6.8 | <7.5 | <6.9 | <7.4 [<7.4] | NA | | |
| Perfluorobutanesulfonic acid (PFBS) | 420 | -- | ng/L | 2.3 J [2.2 J] | 4.8 | 2.1 J | 3.0 J | 1.7 J | 1.4 J | 1.0 J | 0.76 J | <3.3 | <3.7 | 8.3 | 7.9 | 11 | 6.0 [6.2] | NA | | |
| Perfluorobutanoic acid (PFBA) | -- | -- | ng/L | 7.1 [6.8] | 13 | 5.4 | 4.8 | 0.88 J | <3.7 | 0.52 J | <3.5 | 2.6 J | 2.7 J | 12 | 11 | 6.0 | 5.1 [5.1] | NA | | |
| Perfluorodecanesulfonic acid (PFDS) | -- | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | <3.4 | <3.7 [<3.7] | NA | | |
| Perfluorodecanoic acid (PFDA) | -- | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | <3.4 | <3.7 [<3.7] | NA | | |
| Perfluorododecanoic acid (PFDoA) | -- | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | <3.4 | <3.7 [<3.7] | NA | | |
| Perfluoroheptanesulfonic acid (PFHpS) | -- | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | 2.7 J | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | <3.4 | <3.7 [<3.7] | NA | | |
| Perfluoroheptanoic acid (PFHpA) | -- | -- | ng/L | <3.5 [<3.5] | 0.90 J | 0.98 J | 0.97 J | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | 3.6 | 3.1 J | 1.6 J | 1.6 J [1.4 J] | NA | | |
| Perfluorohexanesulfonic acid (PFHxS) | 51 | -- | ng/L | 0.60 J [0.57 J] | 0.97 J | 1.6 J | 1.4 J | <3.5 | <3.7 | 0.52 J | 0.75 J | <3.3 | <3.7 | 1.1 J | 1.4 J | 4.9 | 4.0 [3.9] | NA | | |
| Perfluorohexanoic acid (PFHxA) | 400,000 | -- | ng/L | <3.5 [<3.5] | 3.5 | 1.7 J | 1.4 J | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | 6.7 | 3.7 | 2.9 J [3.1 J] | NA | | | |
| Perfluorononanesulfonic acid (PFNS) | -- | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | <3.4 | <3.7 [<3.7] | NA | | |
| Perfluorononanoic acid (PFNA) | 6.0 | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | 0.66 J | 0.51 J | <3.3 | <3.7 | <3.4 | 0.54 J | <3.4 | <3.7 [<3.7] | NA | | |
| Perfluorooctane Sulfonamide (PFOSA) | -- | -- | ng/L | 0.55 J [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | 0.65 J | <3.4 | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | <3.4 | <3.7 [<3.7] | NA | | |
| Perfluorooctane sulfonic acid (PFOS) | 16 | 12 | ng/L | 1.8 J [1.9 J] | 3.7 | 1.9 J | <3.5 | <3.5 | <3.7 | 1.9 J | <3.5 | <3.3 | <3.7 | 3.7 | 4.0 | 2.4 J | <3.7 [<3.7] | NA | | |
| Perfluorooctanoic acid (PFOA) | 8.0 | 12,000 | ng/L | 1.7 J [1.6 J] | 4.5 | 3.6 | 2.7 J | <3.5 | <3.7 | 1.3 J | <3.5 | <3.3 | <3.7 | 8.0 | 8.6 | 5.4 | 4.0 [4.0] | NA | | |
| Perfluoropentanesulfonic acid (PFPeS) | -- | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | 0.55 J | <3.7 [<3.7] | NA | | |
| Perfluoropentanoic acid (PFPeA) | -- | -- | ng/L | <3.5 [<3.5] | 2.9 J | 2.1 J | 1.3 J | <3.5 | <3.7 | <3.4 | <3.5 | 4.0 | 1.3 J | 13 | 12 | 5.9 | 3.8 [3.9] | NA | | |
| Perfluorotetradecanoic acid (PFTeA) | -- | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | <3.4 | <3.7 [<3.7] | NA | | |
| Perfluorotridecanoic Acid (PFTriA) | -- | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | <3.4 | <3.7 [<3.7] | NA | | |
| Perfluoroundecanoic acid (PFUnA) | -- | -- | ng/L | <3.5 [<3.5] | <3.5 | <3.4 | <3.5 | <3.5 | <3.7 | <3.4 | <3.5 | <3.3 | <3.7 | <3.4 | <3.7 | <3.4 | <3.7 [<3.7] | NA | | |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan

| Location ID: | P201 | | | MW-22-153 | MW-22-154 | MW-22-154 | MW-22-155 | MW-22-155 | MW-22-156 | MW-22-156 | MW-22-157 | MW-22-157 | MW-22-158 | MW-22-158 | MW-22-160 | MW-22-160 | P6-SB-07 | |
|---|-------------|------------------|------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|--|
| Date Collected: | Residential | P201 Groundwater | | 05/17/23 | 02/13/23 | 05/01/23 | 02/15/23 | 05/17/23 | 02/15/23 | 05/17/23 | 02/15/23 | 05/17/23 | 02/15/23 | 05/18/23 | 02/14/23 | 05/18/23 | 02/15/23 | |
| Sample Name: | Drinking | Surface Water | Units | MW-22-153_051723 | MW-22-154_021323 | MW-22-154_050123 | MW-22-155_021523 | MW-22-155_051723 | MW-22-156_021523 | MW-22-156_051723 | MW-22-157_021523 | MW-22-157_051723 | MW-22-158_021323 | MW-22-158_051823 | MW-22-160_021423 | MW-22-160_051823 | P6-SB-07_021523 | |
| Sample Depth (ft. bgs): | Water | Interface | | 25-30 | 16-11 | 16-11 | 25.5-30.5 | 25.5-30.5 | 23-28 | 23-28 | 24-29 | 24-29 | 16-21 | 16-21 | 14-19 | 14-19 | 15-20 | |
| Field Parameters | | | | | | | | | | | | | | | | | | |
| pH | 6.5 to 8.5 | 6.5 to 9.0 | s.u. | 7.09 | 6.95 | 7.21 | 6.99 | 7.91 | 7.02 | 7.19 | 7.01 | 7.00 | 7.09 | 7.02 | 6.82 | 6.89 | 7.67 | |
| Conductivity | -- | -- | mS/cm | 2.25 | 5.37 | 2.47 | 2.02 | NR | 1.97 | 2.08 | 1.99 | 1.48 | 3.61 | 3.54 | 1.12 | 1.31 | 0.57 | |
| Turbidity | -- | -- | NTU | 0.02 | 7.88 | 3.01 | 5.79 | 39.80 | 1.12 | 1.13 | 1.61 | 0.58 | 1.60 | 2.99 | 2.54 | 2.11 | 9.82 | |
| Dissolved oxygen (DO) | -- | -- | mg/L | 0.06 | 0.44 | 0.20 | 0.86 | 7.90 | 0.57 | 0.24 | 0.11 | 0.23 | 0.16 | 0.24 | 0.75 | 0.26 | 2.41 | |
| Temperature | -- | -- | Deg C | 12.7 | 9.8 | 9.3 | 12.0 | 20.1 | 13.1 | 12.7 | 13.0 | 14.1 | 11.4 | 11.2 | 12.2 | 11.2 | 9.5 | |
| Oxidation reduction potential (ORP) | -- | -- | millivolts | 109.7 | -3.7 | 32.0 | -182.6 | -64.0 | -170.5 | 123.6 | -157.7 | -59.6 | -97.8 | -21.2 | -167.7 | -42.7 | 23.2 | |
| Volatile Organics (via EPA Method SW5030C/8260C) | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 880 | 740 | µg/L | 52 | <1 | <1 | <1 | <1 | 463 E | 471 E | NA | NA | NA | NA | NA | NA | NA | |
| 1,1-Dichloroethane | 7.0 | 130 | µg/L | <1 | <1 | <1 | <1 | <1 | 25 | 38 | NA | NA | NA | NA | NA | NA | NA | |
| 1,1,1-Trichloroethane | 200 | 89 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,1,1,2-Tetrachloroethane | 77 | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,1,2-Trichloroethane | 5.0 | 330 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,1,2,2-Tetrachloroethane | 8.5 | 78 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.2 | -- | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Dibromoethane (Ethylene dibromide) | 0.05 | 5.7 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Dichloroethane | 5.0 | 360 | µg/L | <1 | <1 | <1 | <1 | <1 | 1.0 | 1.0 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Dichloropropane | 5.0 | 230 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,3-Trichlorobenzene | -- | -- | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,3-Trichloropropane | 42 | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,3-Trimethylbenzene | -- | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trimethylbenzene | 63 | 17 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,3,5-Trimethylbenzene | 72 | 45 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,4-Dioxane | 7.2 | 280 | µg/L | 61 | NA | NA | 36 | 270 Y | 47 | 101 | 5.0 | 44 | NA | NA | NA | NA | NA | |
| 2-Butanone (Methyl ethyl ketone) (MEK) | 13,000 | 2,200 | µg/L | <25 | <25 | <25 | <25 | <25 | <25 | <25 | NA | NA | NA | NA | NA | NA | NA | |
| 2-Hexanone | 1,000 | -- | µg/L | <50 | <50 | <50 | <50 | <50 | <50 | <50 | NA | NA | NA | NA | NA | NA | NA | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| 2-Phenylbutane (sec-Butylbenzene) | 80 | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | 1,800 | -- | µg/L | <50 | <50 | <50 | <50 | <50 | <50 | <50 | NA | NA | NA | NA | NA | NA | NA | |
| Acetone | 730 | 1,700 | µg/L | <50 | <50 | <50 | <50 | <50 | <50 | <50 | NA | NA | NA | NA | NA | NA | NA | |
| Acrylonitrile | 2.6 | 2.0 | µg/L | <2 | <2 | <2 | <2 | <2 | <2 | <2 | NA | NA | NA | NA | NA | NA | NA | |
| Benzene | 5.0 | 200 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Bromobenzene | 18 | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Bromodichloromethane | 80 | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Bromoform | 80 | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Bromomethane (Methyl bromide) | 10 | 5.0 | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Carbon disulfide | 800 | -- | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Carbon tetrachloride | 5.0 | 38 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Chlorobenzene | 100 | 25 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Chlorobromomethane | -- | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Chloroethane | 430 | 1,100 | µg/L | <5 | <5 | <5 | <5 | <5 | 16 | 27 | NA | NA | NA | NA | NA | NA | NA | |
| Chloroform (Trichloromethane) | 80 | 350 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Chloromethane (Methyl chloride) | 260 | -- | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| cis-1,2-Dichloroethane | 70 | 620 | µg/L | <1 | 3.0 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| cis-1,3-Dichloropropene | -- | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Cymene (p-Isopropyltoluene) | -- | -- | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Dibromochloromethane | 80 | -- | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Dibromomethane | 80 | -- | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Dichlorodifluoromethane (CFC-12) | 1,700 | -- | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Ethyl ether | 10 | -- | µg/L | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | NA | NA | NA | NA | NA | NA | |
| Ethylbenzene | 74 | 18 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Iodomethane | -- | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Isopropyl benzene | 800 | 28 | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Methyl tert butyl ether (MTBE) | 40 | 7,100 | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Methylene chloride | 5.0 | 1,500 | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| Naphthalene | 520 | 11 | µg/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | NA | NA | NA | NA | NA | NA | |
| N-Butylbenzene | 80 | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| N-Propylbenzene | 80 | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Styrene | 100 | 80 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| tert-Butylbenzene | 80 | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Tetrachloroethene | 5.0 | 60 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Tetrahydrofuran | 95 | 11,000 | µg/L | <90 | <90 | <90 | <90 | <90 | <90 | <90 | NA | NA | NA | NA | NA | NA | NA | |
| Toluene | 790 | 270 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| trans-1,2-Dichloroethene | 100 | 1,500 | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| trans-1,3-Dichloropropene | -- | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| trans-1,4-Dichloro-2-butene | -- | -- | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | NA | NA | NA | NA | |
| Trichloroethene | 5.0 | 200 | µg/L | <1 | <1 | <1 | & | | | | | | | | | | | |

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | MW-22-153 05/17/23 MW-22-153_051723 25-30 | MW-22-154 02/13/23 MW-22-154_021323 16-11 | MW-22-154 05/01/23 MW-22-154_050123 16-11 | MW-22-155 02/15/23 MW-22-155_021523 25.5-30.5 | MW-22-155 05/17/23 MW-22-155_051723 25.5-30.5 | MW-22-156 02/15/23 MW-22-156_021523 23-28 | MW-22-156 05/17/23 MW-22-156_051723 23-28 | MW-22-157 02/15/23 MW-22-157_021523 24-29 | MW-22-157 05/17/23 MW-22-157_051723 24-29 | MW-22-158 02/13/23 MW-22-158_021323 16-21 | MW-22-158 05/18/23 MW-22-158_051823 16-21 | MW-22-160 02/14/23 MW-22-160_021423 14-19 | MW-22-160 05/18/23 MW-22-160_051823 14-19 | P6-SB-07 02/15/23 P6-SB-07_021523 15-20 | |
|--|--|--|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Semi-Volatile Organics (via EPA Method 522) | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Diphenylhydrazine | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether) | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4-Dichlorophenol | 73 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4-Dimethylphenol | 370 | 380 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4-Dinitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4-Dinitrotoluene | 7.7 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4,5-Trichlorophenol | 730 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4,6-Trichlorophenol | 120 | 5.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,6-Dinitrotoluene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Chloronaphthalene | 1800 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Chlorophenol | 45 | 18 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Nitrophenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 3&4-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 3,3'-Dichlorobenzidine | 1.1 | 0.3 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 3-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4,6-Dinitro-2-methylphenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Bromophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Chloro-3-methylphenol | 150 | 7.4 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Chloroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Chlorophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Nitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Acenaphthene | 1300 | 38 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Acenaphthylene | 52 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Anthracene | 43 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(a)anthracene | 2.1 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(a)pyrene | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(b)fluoranthene | 1.5 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(g,h,i)perylene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(k)fluoranthene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| bis(2-Chloroethoxy)methane | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| bis(2-Chloroethyl)ether | 2.0 | 1.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| bis(2-Ethylhexyl)phthalate (DEHP) | 6.0 | 14 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Butyl benzylphthalate (BBP) | 1200 | 67 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Chrysene | 1.6 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Dibenz(a,h)anthracene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Dibenzofuran | -- | 4.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Diethyl phthalate | 5500 | 110 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Dimethyl phthalate | 73000 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Di-n-butylphthalate (DBP) | 880 | 9.7 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Di-n-octyl phthalate (DnOP) | 130 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Fluoranthene | 210 | 1.6 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Fluorene | 880 | 12 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorobenzene | 1.0 | 0.2 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorobutadiene | 15 | 0.053 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorocyclopentadiene | 50 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Indeno(1,2,3-cd)pyrene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Isophorone | 770 | 1300 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Nitrobenzene | 3.4 | 180 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Nitrosodi-n-propylamine | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Nitrosodiphenylamine | 270 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Pentachlorophenol | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Phenanthrene | 52 | 2.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Phenol | 4400 | 450 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Pyrene | 140 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| General Chemistry | | | | | | | | | | | | | | | | | | |
| Nitrate (as N) | 10 | -- | mg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Phosphorus | 63 | -- | mg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total kjeldahl nitrogen (TKN) | -- | -- | mg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |

See notes on last page.

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: | P201 | P201 Groundwater | Units | MW-22-153 | MW-22-154 | MW-22-154 | MW-22-155 | MW-22-155 | MW-22-156 | MW-22-156 | MW-22-157 | MW-22-157 | MW-22-158 | MW-22-158 | MW-22-160 | MW-22-160 | P6-SB-07 |
|---|-------------|------------------|-------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| | | | | 05/17/23 | 02/13/23 | 05/01/23 | 02/15/23 | 05/17/23 | 02/15/23 | 05/17/23 | 02/15/23 | 05/17/23 | 02/15/23 | 05/17/23 | 02/13/23 | 05/18/23 | 02/14/23 |
| Date Collected: | Residential | Surface Water | | MW-22-153_051723 | MW-22-154_021323 | MW-22-154_050123 | MW-22-155_021523 | MW-22-155_051723 | MW-22-156_021523 | MW-22-156_051723 | MW-22-157_021523 | MW-22-157_051723 | MW-22-158_021323 | MW-22-158_051823 | MW-22-160_021423 | MW-22-160_051823 | P6-SB-07_021523 |
| Sample Name: | Drinking | Interface | | 25-30 | 16-11 | 16-11 | 25.5-30.5 | 25.5-30.5 | 23-28 | 23-28 | 24-29 | 24-29 | 16-21 | 16-21 | 14-19 | 14-19 | 15-20 |
| Sample Depth (ft. bgs): | Water | | | | | | | | | | | | | | | | |
| Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified) | | | | | | | | | | | | | | | | | |
| 11Cl-PF3OUdS (F-53B Minor) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <6.9 | <7.1 | <6.8 |
| 4:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <6.9 | <7.1 Q | <6.8 Q |
| 6:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <6.9 | <7.1 | 8.3 |
| 8:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <6.9 | <7.1 | 6.3 J |
| 9Cl-PF3ONS (F-53B Major) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <6.9 | <7.1 | <6.8 |
| ADONA | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <6.9 | <7.1 | <6.8 |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX) | 370 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <6.9 | <7.1 | <6.8 |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <6.9 | <7.1 | <6.8 |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <6.9 | <7.1 | <6.8 |
| Perfluorobutanesulfonic acid (PFBS) | 420 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.3 J | 1.5 J | 6.2 |
| Perfluorobutanoic acid (PFBA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 4.6 | 4.7 | 410 |
| Perfluorodecanesulfonic acid (PFDS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | <3.4 |
| Perfluorodecanoic acid (PFDA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | 56 |
| Perfluorododecanoic acid (PFDoA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | <3.4 |
| Perfluoroheptanesulfonic Acid (PFHpS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | 1.1 J |
| Perfluoroheptanoic acid (PFHpA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.5 J | 1.5 J | 1200 |
| Perfluorohexanesulfonic acid (PFHxS) | 51 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | 6.6 |
| Perfluorohexanoic acid (PFHxA) | 400,000 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.1 J | 2.8 J | 1500 |
| Perfluorononanesulfonic acid (PFNS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | <3.4 |
| Perfluorononanoic acid (PFNA) | 6.0 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | 220 |
| Perfluorooctane Sulfonamide (PFOSA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | 0.62 J |
| Perfluorooctane sulfonic acid (PFOS) | 16 | 12 | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | 110 |
| Perfluorooctanoic acid (PFOA) | 8.0 | 12,000 | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | 1,600 |
| Perfluoropentanesulfonic acid (PFPeS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | 2.5 J |
| Perfluoropentanoic acid (PFPeA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.3 J | 3.0 J | 1400 |
| Perfluorotetradecanoic acid (PFTeA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | <3.4 |
| Perfluorotridecanoic Acid (PFTriA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | <3.4 |
| Perfluoroundecanoic acid (PFUnA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <3.5 | <3.5 | <3.4 |

See notes on last page.

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Location ID: | P201 | P201 Groundwater | | PW-14-01 | PW-14-02 | PW-14-02 | PW-14-03 | PW-14-03 | TW-14-02 | TW-14-02 | TW-14-06 | TW-15-11 | TW-15-11 | TW-15-12 | TW-15-12 | UNK-15 | UNK-15 | |
|---|-------------|------------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------|--|
| Date Collected: | Residential | Surface Water | Units | 05/18/23 | 02/16/23 | 05/18/23 | 02/17/23 | 05/20/23 | 02/16/23 | 05/18/23 | 05/20/23 | 02/17/23 | 05/20/23 | 02/16/23 | 05/17/23 | 02/17/23 | 05/24/23 | |
| Sample Name: | Drinking | Interface | | PW-14-01_051823 | PW-14-02_021623 | PW-14-02_051823 | PW-14-03_021723 | PW-14-03_052023 | TW-14-02_021623 | TW-14-02_051823 | TW-14-06_052323 | TW-15-11_021723 | TW-15-11_052023 | TW-15-12_021623 | TW-15-12_051723 | UNK-15_021723 | UNK-15_052423 | |
| Sample Depth (ft. bgs): | Water | | | 71.6-76.8 | 75-80 | 75-80 | 85-90 | 85-90 | 67-72 | 67-72 | 82-87 | 85-90 | 85-90 | 73-78 | 73-78 | 11-16 | 11-16 | |
| Field Parameters | | | | | | | | | | | | | | | | | | |
| pH | 6.5 to 8.5 | 6.5 to 9.0 | s.u. | 7.43 | 7.39 | 7.37 | 6.80 | 6.80 | 7.52 | 7.69 | 7.50 | 6.76 | 7.22 | 7.59 | 7.64 | 7.83 | 7.89 | |
| Conductivity | -- | -- | mS/cm | 3.29 | 1.54 | 1.82 | 3.65 | 3.69 | 4.99 | 4.51 | 2.92 | 2.32 | 3.54 | 1.82 | 2.47 | 0.65 | 0.51 | |
| Turbidity | -- | -- | NTU | 4.80 | 5.30 | 1.70 | 9.06 | 35.20 | 38.80 | 52.10 | NR | 13.40 | 53.10 | 79.70 | 21.80 | 1.71 | 1.30 | |
| Dissolved oxygen (DO) | -- | -- | mg/L | 8.28 | 9.42 | 7.50 | 6.22 | 7.69 | 12.10 | 8.16 | 11.94 | 0.29 | 8.66 | 10.73 | 7.35 | 1.32 | 0.36 | |
| Temperature | -- | -- | Deg C | 19.0 | 7.8 | 14.7 | 4.9 | 12.3 | 2.3 | 21.6 | 16.4 | 8.4 | 15.5 | 10.1 | 17.5 | 7.6 | 14.3 | |
| Oxidation reduction potential (ORP) | -- | -- | millivolts | 68.1 | 95.8 | -15.0 | 33.4 | 100.2 | 19.9 | 80.5 | 267.9 | -11.4 | 123.1 | 107.8 | 191.9 | -145.1 | 59.9 | |
| Volatile Organics (via EPA Method SW5030C/8260C) | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 880 | 740 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,1-Dichloroethene | 7.0 | 130 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,1,1-Trichloroethane | 200 | 89 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,1,1,2-Tetrachloroethane | 77 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,1,2-Trichloroethane | 5.0 | 330 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,1,2,2-Tetrachloroethane | 8.5 | 78 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.2 | -- | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2-Dibromoethane (Ethylene dibromide) | 0.05 | 5.7 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2-Dichloroethane | 5.0 | 360 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2-Dichloropropane | 5.0 | 230 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2,3-Trichlorobenzene | -- | -- | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2,3-Trichloropropane | 42 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2,3-Trimethylbenzene | -- | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,2,4-Trimethylbenzene | 63 | 17 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,3,5-Trimethylbenzene | 72 | 45 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 1,4-Dioxane | 7.2 | 280 | µg/L | <1 | 18 | 14 | 6.0 | 5.0 | 3.0 | 8.0 | 4.0 | 17 | 47 [46] | 1.0 | 3.0 | NA | NA | |
| 2-Butanone (Methyl ethyl ketone) (MEK) | 13,000 | 2,200 | µg/L | NA | NA | <25 | NA | NA | NA | <25 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 2-Hexanone | 1,000 | -- | µg/L | NA | NA | <50 | NA | NA | NA | <50 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 2-Phenylbutane (sec-Butylbenzene) | 80 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | 1,800 | -- | µg/L | NA | NA | <50 | NA | NA | NA | <50 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Acetone | 730 | 1,700 | µg/L | NA | NA | <50 | NA | NA | NA | <50 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Acrylonitrile | 2.6 | 2.0 | µg/L | NA | NA | <2 | NA | NA | NA | <2 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Benzene | 5.0 | 200 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Bromobenzene | 18 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Bromodichloromethane | 80 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Bromoform | 80 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Bromomethane (Methyl bromide) | 10 | 5.0 | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Carbon disulfide | 800 | -- | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Carbon tetrachloride | 5.0 | 38 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Chlorobenzene | 100 | 25 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Chlorobromomethane | -- | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Chloroethane | 430 | 1,100 | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Chloroform (Trichloromethane) | 80 | 350 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Chloromethane (Methyl chloride) | 260 | -- | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| cis-1,2-Dichloroethene | 70 | 620 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| cis-1,3-Dichloropropene | -- | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Cymene (p-Isopropyltoluene) | -- | -- | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Dibromochloromethane | 80 | -- | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Dibromomethane | 80 | -- | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Dichlorodifluoromethane (CFC-12) | 1,700 | -- | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Ethyl ether | 10 | -- | µg/L | NA | NA | <10 | NA | NA | NA | <10 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Ethylbenzene | 74 | 18 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Iodomethane | -- | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Isopropyl benzene | 800 | 28 | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Methyl tert butyl ether (MTBE) | 40 | 7,100 | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Methylene chloride | 5.0 | 1,500 | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Naphthalene | 520 | 11 | µg/L | NA | NA | <5 | NA | NA | NA | <5 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| N-Butylbenzene | 80 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| N-Propylbenzene | 80 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Styrene | 100 | 80 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| tert-Butylbenzene | 80 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Tetrachloroethene | 5.0 | 60 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Tetrahydrofuran | 95 | 11,000 | µg/L | NA | NA | <90 | NA | NA | NA | <90 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Toluene | 790 | 270 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| trans-1,2-Dichloroethene | 100 | 1,500 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| trans-1,3-Dichloropropene | -- | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| trans-1,4-Dichloro-2-butene | -- | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Trichloroethene | 5.0 | 200 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Trichlorofluoromethane (CFC-11) | 2,600 | -- | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| Vinyl chloride | 2.0 | 13 | µg/L | NA | NA | <1 | NA | NA | NA | <1 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| m&p-Xylene | -- | -- | µg/L | NA | NA | <2 | NA | NA | NA | <2 | NA | NA | NA [NA] | NA | NA | NA | NA | |
| o-Xylene | -- | -- | | | | | | | | | | | | | | | | |

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Location ID: Date Collected: Sample Name: Sample Depth (ft. bgs): | P201 Residential Drinking Water | P201 Groundwater Surface Water Interface | Units | PW-14-01 | PW-14-02 | PW-14-02 | PW-14-03 | PW-14-03 | TW-14-02 | TW-14-02 | TW-14-06 | TW-15-11 | TW-15-11 | TW-15-12 | TW-15-12 | UNK-15 | UNK-15 | | |
|--|--|--|-------|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|------------------------|----------|----------|
| | | | | 05/18/23 | 02/16/23 | 05/18/23 | 02/17/23 | 05/20/23 | 02/16/23 | 05/18/23 | 05/23/23 | 02/17/23 | 05/20/23 | 02/16/23 | 05/17/23 | 02/17/23 | 02/17/23 | 05/24/23 | 05/24/23 |
| | | | | PW-14-01_051823 71.6-76.8 | PW-14-02_021623 75-80 | PW-14-02_051823 75-80 | PW-14-03_021723 85-90 | PW-14-03_052023 85-90 | TW-14-02_021623 67-72 | TW-14-02_051823 67-72 | TW-14-06_052323 82-87 | TW-15-11_021723 85-90 | TW-15-11_052023 85-90 | TW-15-12_021623 73-78 | TW-15-12_051723 73-78 | UNK-15_021723 11-16 | UNK-15_052423 11-16 | | |
| Semi-Volatile Organics (via EPA Method 522) | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 600 | 13 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Diphenylhydrazine | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 70 | 99 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,3-Dichlorobenzene | 6.6 | 28 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,4-Dichlorobenzene | 75 | 17 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether) | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4-Dichlorophenol | 73 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4-Dimethylphenol | 370 | 380 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4-Dinitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4-Dinitrotoluene | 7.7 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4,5-Trichlorophenol | 730 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4,6-Trichlorophenol | 120 | 5.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,6-Dinitrotoluene | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Chloronaphthalene | 1800 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Chlorophenol | 45 | 18 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Methylnaphthalene | 260 | 19 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Nitrophenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 3&4-Methylphenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 3,3'-Dichlorobenzidine | 1.1 | 0.3 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 3-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4,6-Dinitro-2-methylphenol | 20 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Bromophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Chloro-3-methylphenol | 150 | 7.4 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Chloroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Chlorophenyl phenyl ether | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Nitroaniline | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Nitrophenol | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Acenaphthene | 1300 | 38 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Acenaphthylene | 52 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Anthracene | 43 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(a)anthracene | 2.1 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(a)pyrene | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(b)fluoranthene | 1.5 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(g,h,i)perylene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzo(k)fluoranthene | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| bis(2-Chloroethoxy)methane | -- | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| bis(2-Chloroethyl)ether | 2.0 | 1.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| bis(2-Ethylhexyl)phthalate (DEHP) | 6.0 | 14 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Butyl benzylphthalate (BBP) | 1200 | 67 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Chrysene | 1.6 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Dibenz(a,h)anthracene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Dibenzofuran | -- | 4.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Diethyl phthalate | 5500 | 110 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Dimethyl phthalate | 73000 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Di-n-butylphthalate (DBP) | 880 | 9.7 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Di-n-octyl phthalate (DnOP) | 130 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Fluoranthene | 210 | 1.6 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Fluorene | 880 | 12 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorobenzene | 1.0 | 0.2 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorobutadiene | 15 | 0.053 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorocyclopentadiene | 50 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Hexachloroethane | 7.3 | 6.7 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Indeno(1,2,3-cd)pyrene | 2.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Isophorone | 770 | 1300 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Naphthalene | 520 | 11 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Nitrobenzene | 3.4 | 180 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Nitrosodi-n-propylamine | 5.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Nitrosodiphenylamine | 270 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Pentachlorophenol | 1.0 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Phenanthrene | 52 | 2.0 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Phenol | 4400 | 450 | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Pyrene | 140 | -- | µg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| General Chemistry | | | | | | | | | | | | | | | | | | | |
| Nitrate (as N) | 10 | -- | mg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Phosphorus | 63 | -- | mg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total kjeldahl nitrogen (TKN) | -- | -- | mg/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| See notes on last page. | | | | | | | | | | | | | | | | | | | |

Table 2
 Summary of Groundwater Analytical Results - January through June 2023
 RACER Trust Plants 2, 3, and 6
 Lansing, Michigan



| Location ID: | P201 | | | PW-14-01 | PW-14-02 | PW-14-02 | PW-14-03 | PW-14-03 | TW-14-02 | TW-14-02 | TW-14-06 | TW-15-11 | TW-15-11 | TW-15-12 | TW-15-12 | UNK-15 | UNK-15 |
|---|-------------|------------------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------|
| Date Collected: | Residential | P201 Groundwater | | 05/18/23 | 02/16/23 | 05/18/23 | 02/17/23 | 05/20/23 | 02/16/23 | 05/18/23 | 05/23/23 | 02/17/23 | 05/20/23 | 02/16/23 | 05/17/23 | 02/17/23 | 05/24/23 |
| Sample Name: | Drinking | Surface Water | Units | PW-14-01_051823 | PW-14-02_021623 | PW-14-02_051823 | PW-14-03_021723 | PW-14-03_052023 | TW-14-02_021623 | TW-14-02_051823 | TW-14-06_052323 | TW-15-11_021723 | TW-15-11_052023 | TW-15-12_021623 | TW-15-12_051723 | UNK-15_021723 | UNK-15_052423 |
| Sample Depth (ft. bgs): | Water | Interface | | 71.6-76.8 | 75-80 | 75-80 | 85-90 | 85-90 | 67-72 | 67-72 | 82-87 | 85-90 | 85-90 | 73-78 | 73-78 | 11-16 | 11-16 |
| Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified) | | | | | | | | | | | | | | | | | |
| 11CI-PF3OUdS (F-53B Minor) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <7.3 |
| 4:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <6.8 Q | <7.3 Q |
| 6:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <6.8 Q | <7.3 Q |
| 8:2 FTS | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <7.3 Q |
| 9CI-PF3ONS (F-53B Major) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <7.3 Q |
| ADONA | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <7.3 |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX) | 370 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <7.3 |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NETFOSAA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <7.3 |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <6.8 | <7.3 |
| Perfluorobutanesulfonic acid (PFBS) | 420 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 1.6 J | 1.2 J |
| Perfluorobutanoic acid (PFBA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 15 | 15 |
| Perfluorodecanesulfonic acid (PFDS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.6 |
| Perfluorodecanoic acid (PFDA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 3.1 J | 4.3 |
| Perfluorododecanoic acid (PFDoA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.6 |
| Perfluoroheptanesulfonic Acid (PFHpS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 13 | 12 |
| Perfluoroheptanoic acid (PFHpA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 6.3 | 6.2 |
| Perfluorohexanesulfonic acid (PFHxS) | 51 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 16 | 15 |
| Perfluorohexanoic acid (PFHxA) | 400,000 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 11 | 9.9 |
| Perfluorononanesulfonic acid (PFNS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.6 |
| Perfluorononanoic acid (PFNA) | 6.0 | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 5.0 | 5.3 |
| Perfluorooctane Sulfonamide (PFOSA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.6 |
| Perfluorooctane sulfonic acid (PFOS) | 16 | 12 | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 1,100 | 940 |
| Perfluorooctanoic acid (PFOA) | 8.0 | 12,000 | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 30 | 26 |
| Perfluoropentanesulfonic acid (PFPeS) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <3.4 | 2.1 J |
| Perfluoropentanoic acid (PFPeA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | 10 | 11 |
| Perfluorotetradecanoic acid (PFTeA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.6 |
| Perfluorotridecanoic Acid (PFTriA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.6 |
| Perfluoroundecanoic acid (PFUnA) | -- | -- | ng/L | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA [NA] | NA | NA | <3.4 | <3.6 |

See notes on last page.

Table 2
Summary of Groundwater Analytical Results - January through June 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



Data Flagging:

Bold font represents data where detections were noted above the laboratory method detection limit.

Gray shading represents result exceeding either or both the EGLE Part 201 Generic Cleanup Criteria and Screening Levels or the EGLE GSI Criteria (Updated December 21, 2020)

Notes:

1. EGLE Part 201 Residential Drinking Water Criteria and Groundwater Surface Water Interface Criteria from the Generic Cleanup Criteria and Screening Levels (dated January 10, 2018) are used for comparison with all VOC and Inorganic data and revised criteria values (dated December 21, 2020) are used for comparison with all PFAS data.
2. 1,4-Dioxane is compared to a drinking water criteria of 7.2 µg/L per the MDEQ Establishment of Cleanup Criteria for 1,4 -Dioxane: Emergency Rules dated October 27, 2016.

Abbreviations:

-- = Not listed in the EGLE Criteria Tables.

* = Analyzed for low-level 1,4-Dioxane via EPA Method 522

Deg. C. = degrees Celsius

EGLE = Michigan Department of Environment, Great Lakes, and Energy

mg/L = milligrams per liter

NA = Not Analyzed

NR = Not Recorded

NTU = Nephelometric Turbidity Unit

s.u. = standard unit

ug/L = micrograms per liter

µS/cm = microSiemens per centimeter

Lab and Validation Data Qualifiers:

< = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

B = Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).

E = Analyte exceeded calibration range. Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.

F1 = Matrix spike and/or matrix spike duplicate recovery is outside acceptance limits.

J = The compound was positively identified, but the associated numerical value is an estimated concentration only.

Q = Surrogate failure

U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

X = Elevated reporting limit due to matrix interference.

Y = Elevated reporting limit due to high target concentration.

Table 3
Summary of LNAPL Thickness - May 2023
2023 Semi-Annual Groundwater Monitoring Report
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Well ID | Date Collected | Reference Elevation (TOC) | Ground Surface Elevation (feet msl) | Total Well Depth (feet below TOC) | Depth to Water (feet below TOC) | Depth to LNAPL (feet below TOC) | Calculated Thickness NAPL (feet) | Groundwater Elevation (feet msl) | Corrected Groundwater Elevation (feet msl) |
|----------------|----------------|---------------------------|-------------------------------------|-----------------------------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|--|
| Plant 2 | | | | | | | | | |
| LMW-12-01 | 5/16/23 | 864.91 | 862.14 | NM | 5.09 | NP | NP | 859.82 | 859.82 |
| LMW-12-02 | 5/16/23 | 865.25 | 862.17 | NM | 4.99 | NP | NP | 860.26 | 860.26 |
| LMW-12-03D | 5/16/23 | 864.99 | 862.08 | NM | 19.52 | 3.5 | 16.02 | 845.47 | 859.88 |
| LMW-12-03S | 5/16/23 | 864.93 | 862.06 | NM | 4.02 | 3.99 | 0.03 | 860.91 | 860.94 |
| LMW-12-04 | 5/16/23 | 864.94 | 862.12 | NM | 5.61 | NP | NP | 859.33 | 859.33 |
| LMW-12-05 | 5/16/23 | 865.03 | 862.17 | NM | 6.7 | 5.94 | 0.76 | 858.33 | 859.01 |
| LMW-12-06 | 5/16/23 | 865.02 | 862.15 | NM | 6.22 | NP | NP | 858.80 | 858.80 |
| LMW-12-07 | 5/16/23 | 864.13 | 861.50 | NM | 2.87 | NP | NP | 861.26 | 861.26 |
| LMW-12-08 | 5/16/23 | 864.40 | 861.56 | NM | 4.65 | 3.22 | 1.43 | 859.75 | 861.04 |
| LMW-14-12D | 5/16/23 | 864.59 | 862.11 | 25.00 | 24.99 | 3.58 | 21.41 | 839.60 | 858.86 |
| LMW-14-13D | 5/16/23 | 865.03 | 862.06 | NM | 4.84 | NP | NP | 860.19 | 860.19 |
| LMW-14-14D | 5/16/23 | 864.89 | 861.90 | NM | 7.33 | NP | NP | 857.56 | 857.56 |
| LMW-14-15D | 5/16/23 | 865.11 | 861.66 | 22.65 | 22.64 | 3.99 | 18.65 | 842.47 | 859.25 |
| LMW-15-16D | 5/16/23 | 865.20 | 862.24 | NM | 23.65 | 5.39 | 18.26 | 841.55 | 857.97 |
| LMW-15-17D | 5/16/23 | 865.21 | 862.24 | NM | 5.79 | NP | NP | 859.42 | 859.42 |
| P2-SB-37 | 5/16/23 | 865.90 | 861.90 | NM | 5.20 | 3.85 | 1.35 | 860.70 | 861.91 |
| PMW-01 | 5/16/23 | 860.85 | 861.33 | NM | 0.04 | 0.01 | 0.03 | 860.81 | 860.83 |
| PMW-02 | 5/16/23 | 860.94 | 861.33 | NM | 0.02 | 0.01 | 0.01 | 860.92 | 860.93 |
| PMW-03 | 5/16/23 | 861.59 | 862.12 | NM | 0.29 | NP | NP | 861.30 | 861.30 |
| Plant 3 | | | | | | | | | |
| LMW-12-09 | 5/16/23 | 863.22 | 860.40 | NM | 3.69 | 3.59 | 0.1 | 859.53 | 859.62 |
| LMW-12-10 | 5/16/23 | 866.82 | 863.60 | NM | 18.4 | 11.34 | 7.06 | 848.42 | 854.77 |
| LMW-12-11 | 5/16/23 | 866.53 | 863.53 | NM | 11.14 | NP | NP | 855.39 | 855.39 |

Notes:

1. Where LNAPL was observed, groundwater elevations have been corrected using a measured LNAPL density of 0.8995 gram per milliliter.
2. Previously included well MW-16-79 has been abandoned and removed from the table.

Abbreviations:

LNAPL = light nonaqueous phase liquid
msl = mean sea level
NAPL = nonaqueous phase liquid
NM = not measured
NP = no product
TOC = top of casing
RACER = Revitalizing Auto Communities Environmental Response

Table 4
Summary of Groundwater Elevations - May 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Well ID | Date Collected | Screened Interval Top (feet bgs) | Screened Interval Bottom (feet bgs) | Reference Elevation (TOC) | Ground Surface Elevation (feet msl) | Total Well Depth (feet below TOC) | Corrected Depth to Water (feet below TOC) | Corrected Groundwater Elevation (feet msl) |
|----------------|----------------|----------------------------------|-------------------------------------|---------------------------|-------------------------------------|-----------------------------------|---|--|
| Plant 2 | | | | | | | | |
| LMW-12-01 | 5/16/2023 | 7.0 | 12.0 | 864.91 | 862.14 | NM | 5.09 | 859.82 |
| LMW-12-02 | 5/16/2023 | 5.0 | 10.0 | 865.25 | 862.17 | NM | 4.99 | 860.26 |
| LMW-12-03D | 5/16/2023 | 17.3 | 22.3 | 864.99 | 862.08 | NM | 5.11 | 859.88* |
| LMW-12-03S | 5/16/2023 | 4.0 | 9.0 | 864.93 | 862.06 | NM | 3.99 | 860.94* |
| LMW-12-04 | 5/16/2023 | 16.0 | 21.0 | 864.94 | 862.12 | NM | 5.61 | 859.33 |
| LMW-12-05 | 5/16/2023 | 7.0 | 12.0 | 865.03 | 862.17 | NM | 6.02 | 859.01* |
| LMW-12-06 | 5/16/2023 | 4.0 | 9.0 | 865.02 | 862.15 | NM | 6.22 | 858.80 |
| LMW-12-07 | 5/16/2023 | 4.0 | 9.0 | 864.13 | 861.50 | NM | 2.87 | 861.26 |
| LMW-12-08 | 5/16/2023 | 8.0 | 13.0 | 864.40 | 861.56 | NM | 3.36 | 861.04* |
| LMW-14-12D | 5/16/2023 | 18.0 | 23.0 | 864.59 | 862.11 | 25.00 | 5.73 | 858.86* |
| LMW-14-13D | 5/16/2023 | 17.5 | 22.5 | 865.03 | 862.06 | NM | 4.84 | 860.19 |
| LMW-14-14D | 5/16/2023 | 18.0 | 23.0 | 864.89 | 861.90 | NM | 7.33 | 857.56 |
| LMW-14-15D | 5/16/2023 | 18.0 | 23.0 | 865.11 | 861.66 | 22.65 | 5.86 | 859.25* |
| LMW-15-16D | 5/16/2023 | 19.5 | 24.5 | 865.20 | 862.24 | NM | 7.23 | 857.97* |
| LMW-15-17D | 5/16/2023 | 20.0 | 25.0 | 865.21 | 862.24 | NM | 5.79 | 859.42 |
| MW-01(2) | 5/16/2023 | 10.0 | 20.0 | 875.79 | 876.10 | 15.97 | 7.49 | 868.30 |
| MW-12-01 | 5/16/2023 | 87.0 | 110.0 | 867.94 | 865.46 | 114.47 | 78.02 | 789.92 |
| MW-12-02 | NM | 87.0 | 110.0 | 853.91 | 851.88 | NM | NM | NM |
| MW-12-05R | 5/16/2023 | 100.0 | 112.0 | 861.80 | 862.30 | 107.22 | 72.72 | 789.08 |
| MW-12-06 | 5/16/2023 | 80.6 | 99.5 | 864.64 | 861.69 | 107.45 | 72.60 | 792.04 |
| MW-12-07 | 5/16/2023 | 10.0 | 15.0 | 872.11 | 869.21 | 17.71 | 7.96 | 864.15 |
| MW-12-08 | 5/16/2023 | 19.0 | 24.0 | 864.68 | 861.50 | 27.08 | 3.41 | 861.27 |
| MW-12-09 | 5/16/2023 | 14.0 | 19.0 | 863.54 | 860.63 | NM | 12.19 | 851.35 |
| MW-12-18 | 5/15/2023 | 28.0 | 33.0 | 866.43 | 864.19 | 34.78 | 12.87 | 853.56 |
| MW-13-43 | 5/15/2023 | 72.0 | 77.0 | 863.82 | 860.97 | 77.70 | 64.40 | 799.42 |
| MW-13-44 | 5/16/2023 | 96.0 | 115.0 | 864.24 | 861.03 | 123.21 | 76.66 | 787.58 |
| MW-13-45 | 5/15/2023 | 72.0 | 77.0 | 863.80 | 861.54 | 78.32 | 65.15 | 798.65 |
| MW-13-51 | 5/16/2023 | 77.0 | 87.0 | 875.34 | 872.51 | 89.85 | 72.11 | 803.23 |
| MW-14-54 | 5/15/2023 | 14.0 | 19.0 | 865.21 | 862.21 | 19.02 | 8.61 | 856.60 |
| MW-14-55 | 5/15/2023 | 13.0 | 18.0 | 864.17 | 861.73 | 20.07 | 14.41 | 849.76 |
| MW-14-56 | 5/16/2023 | 71.0 | 76.0 | 860.21 | 860.62 | 75.65 | 65.05 | 795.16 |
| MW-14-57 | 5/15/2023 | 15.0 | 20.0 | 863.97 | 861.10 | 21.35 | 10.29 | 853.68 |
| MW-14-58R | 5/15/2023 | 22.0 | 27.0 | 862.93 | 860.09 | 15.35 | 12.93 | 850.00 |
| MW-14-59 | 5/15/2023 | 12.0 | 17.0 | 865.13 | 861.63 | NM | 5.72 | 859.41 |
| MW-14-60 | 5/15/2023 | 15.0 | 20.0 | 864.65 | 861.70 | 22.42 | 9.70 | 854.95 |
| MW-14-61 | 5/15/2023 | 70.0 | 75.0 | 865.51 | 862.30 | 77.42 | 66.40 | 799.11 |
| MW-14-62 | 5/18/2023 | 12.0 | 17.0 | 865.17 | 862.25 | 19.65 | 4.01 | 861.16 |
| MW-14-63 | 5/16/2023 | 68.0 | 73.0 | 854.64 | 851.68 | 76.71 | 65.78 | 788.86 |
| MW-15-72 | 5/16/2023 | 63.0 | 68.0 | 865.09 | 862.35 | 70.27 | 56.24 | 808.85 |
| MW-15-73 | 5/16/2023 | 78.0 | 83.0 | 861.56 | 859.12 | 80.97 | 71.76 | 789.80 |
| MW-16-74 | 5/15/2023 | 66.0 | 71.0 | 864.81 | 862.10 | 73.68 | 65.15 | 799.66 |
| MW-16-75 | 5/15/2023 | 66.0 | 71.0 | 864.87 | 862.13 | 74.45 | 62.11 | 802.76 |
| MW-16-76 | 5/16/2023 | 70.0 | 75.0 | 867.76 | 865.12 | 82.66 | 65.45 | 802.31 |
| MW-16-77 | 5/16/2023 | 66.0 | 71.0 | 866.17 | 863.42 | 73.98 | 60.87 | 805.30 |
| MW-16-78 | 5/15/2023 | 68.0 | 73.0 | 864.98 | 862.09 | 76.71 | 64.73 | 800.25 |
| MW-16-80 | 5/16/2023 | 68.0 | 73.0 | 853.03 | 853.41 | 73.31 | 64.05 | 788.98 |
| MW-16-81 | 5/15/2023 | 70.0 | 75.0 | 864.68 | 862.04 | 77.21 | 65.08 | 799.60 |
| MW-16-82 | 5/16/2023 | 70.0 | 75.0 | 864.79 | 862.10 | 77.40 | 65.85 | 798.94 |

See Notes on last page.

Table 4
Summary of Groundwater Elevations - May 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Well ID | Date Collected | Screened Interval Top (feet bgs) | Screened Interval Bottom (feet bgs) | Reference Elevation (TOC) | Ground Surface Elevation (feet msl) | Total Well Depth (feet below TOC) | Corrected Depth to Water (feet below TOC) | Corrected Groundwater Elevation (feet msl) |
|----------------------------|----------------|----------------------------------|-------------------------------------|---------------------------|-------------------------------------|-----------------------------------|---|--|
| Plant 2 (continued) | | | | | | | | |
| MW-16-83 | 5/16/2023 | 71.0 | 76.0 | 862.97 | 860.17 | 79.08 | 72.61 | 790.36 |
| MW-16-84 | 5/15/2023 | 72.0 | 77.0 | 864.09 | 861.81 | 81.15 | 69.25 | 794.84 |
| MW-16-85 | 5/15/2023 | 74.0 | 79.0 | 864.77 | 861.87 | 81.84 | 70.57 | 794.20 |
| MW-17-86 | 5/15/2023 | 73.0 | 78.0 | 864.55 | 861.92 | 81.42 | 65.55 | 799.00 |
| MW-17-87 | 5/16/2023 | 100.0 | 112.0 | 862.82 | 860.44 | 113.69 | 75.15 | 787.67 |
| MW-19-115 | 5/16/2023 | 72.5 | 77.5 | 865.04 | 862.19 | 80.35 | 58.15 | 806.89 |
| MW-19-116 | 5/16/2023 | 65.0 | 70.0 | 865.12 | 862.17 | 73.19 | 55.96 | 809.16 |
| MW-19-117 | 5/16/2023 | 54.0 | 59.0 | 865.10 | 862.15 | 62.81 | 58.91 | 806.19 |
| MW-19-118D | 5/16/2023 | 175.0 | 190.0 | 862.78 | 859.80 | 195.54 | 76.03 | 786.75 |
| MW-19-118S | 5/16/2023 | 145.0 | 160.0 | 862.81 | 859.80 | 164.84 | 76.02 | 786.79 |
| MW-19-120 | 5/15/2023 | 66.0 | 71.0 | 864.73 | 862.13 | 73.99 | 65.79 | 798.94 |
| MW-19-121 | 5/15/2023 | 66.0 | 71.0 | 864.55 | 862.19 | 73.50 | 64.16 | 800.39 |
| MW-19-122 | 5/15/2023 | 59.0 | 64.0 | 865.02 | 862.15 | 67.45 | 63.20 | 801.82 |
| MW-19-123 | 5/15/2023 | 66.0 | 71.0 | 864.45 | 862.04 | 74.48 | 70.92 | 793.53 |
| MW-19-124 | 5/15/2023 | 65.0 | 70.0 | 864.53 | 862.22 | 72.30 | 64.79 | 799.74 |
| MW-19-125 | 5/16/2023 | 100.0 | 115.0 | 865.11 | 862.11 | 106.50 | 77.71 | 787.40 |
| MW-20-126 | 5/16/2023 | 69.0 | 74.0 | 861.89 | 859.50 | 76.00 | 57.75 | 804.14 |
| MW-20-127 | 5/16/2023 | 72.0 | 77.0 | 862.58 | 861.30 | 78.70 | 65.31 | 797.27 |
| MW-20-128 | 5/15/2023 | 65.0 | 70.0 | 863.73 | 861.40 | 69.72 | 66.92 | 796.81 |
| MW-20-129 | 5/16/2023 | 64.0 | 69.0 | 864.91 | 862.20 | 70.98 | 60.26 | 804.65 |
| MW-20-130 | 5/15/2023 | 63.0 | 68.0 | 863.98 | 862.20 | 69.97 | 66.89 | 797.09 |
| MW-21-139 | 5/15/2023 | 7.0 | 12.0 | 865.00 | 862.17 | 15.35 | 3.09 | 861.91 |
| MW-21-140 | 5/15/2023 | 67.0 | 72.0 | 866.06 | 862.76 | 75.95 | 68.37 | 797.69 |
| MW-21-142 | 5/16/2023 | 71.5 | 76.5 | 853.70 | 850.79 | 79.16 | 64.70 | 789.00 |
| MW-22-153 | 5/15/2023 | 25.0 | 30.0 | 860.43 | 859.44 | 31.18 | 10.41 | 850.02 |
| MW-22-155 | 5/15/2023 | 25.5 | 30.5 | 861.58 | 858.99 | 31.50 | 11.69 | 849.89 |
| MW-22-156 | 5/15/2023 | 23.0 | 28.0 | 863.07 | 860.13 | 31.60 | 12.90 | 850.17 |
| MW-22-157 | 5/15/2023 | 24.0 | 29.0 | 852.38 | 853.06 | 27.63 | 2.38 | 850.00 |
| P2-MW-02 | 5/15/2023 | 31.0 | 41.0 | 872.24 | 872.70 | 40.22 | 36.32 | 835.92 |
| P2-MW-03 | 5/15/2023 | 27.0 | 32.0 | 854.18 | 854.66 | 27.18 | 8.49 | 845.69 |
| P2-MW-04 | 5/15/2023 | 26.0 | 36.0 | 866.12 | 862.75 | 39.60 | 11.92 | 854.20 |
| P2-SB-03 | 5/15/2023 | 14.0 | 19.0 | 863.89 | 861.03 | 22.10 | 14.11 | 849.78 |
| P2-SB-06 | 5/15/2023 | 24.0 | 29.0 | 866.06 | 862.09 | 33.58 | 16.02 | 850.04 |
| P2-SB-20 | 5/15/2023 | 8.0 | 13.0 | 864.46 | 861.12 | 16.28 | 9.47 | 854.99 |
| P2-SB-37 | 5/16/2023 | 5.0 | 10.0 | 865.90 | 861.90 | NM | 3.99 | 861.91* |
| PMW-01 | 5/16/2023 | 2.6 | 7.6 | 860.85 | 861.33 | NM | 0.01 | 860.83* |
| PMW-02 | 5/16/2023 | 2.6 | 7.6 | 860.94 | 861.33 | NM | 0.01 | 860.93* |
| PMW-03 | 5/16/2023 | 1.2 | 6.2 | 861.59 | 862.12 | NM | 0.29 | 861.30 |
| PW-14-01 | 5/15/2023 | 71.6 | 76.8 | 864.97 | 862.38 | 86.00 | 65.25 | 799.72 |
| PW-14-02 | 5/15/2023 | 75.0 | 80.0 | 863.87 | 860.93 | 88.00 | 64.85 | 799.02 |
| TW-14-02 | 5/15/2023 | 67.0 | 72.0 | 865.01 | 862.13 | 71.60 | 61.51 | 803.50 |
| TW-15-12 | 5/15/2023 | 73.0 | 78.0 | 860.88 | 861.23 | 66.36 | 62.40 | 798.48 |
| Plant 3 | | | | | | | | |
| CH-14-RO | 5/15/2023 | 7.0 | 12.0 | 866.50 | 863.74 | NM | 7.61 | 858.86 |
| LMW-12-09 | 5/16/2023 | 3.0 | 8.0 | 863.22 | 860.40 | NM | 3.60 | 859.62* |
| LMW-12-10 | 5/16/2023 | 14.0 | 19.0 | 866.82 | 863.60 | NM | 12.05 | 854.77* |
| LMW-12-11 | 5/16/2023 | 15.0 | 20.0 | 866.53 | 863.53 | NM | 11.14 | 855.39 |
| MW-02-01(3) | 5/15/2023 | 59.0 | 69.0 | 865.54 | 863.35 | 72.10 | 50.81 | 814.73 |

See Notes on last page.

Table 4
Summary of Groundwater Elevations - May 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Well ID | Date Collected | Screened Interval Top (feet bgs) | Screened Interval Bottom (feet bgs) | Reference Elevation (TOC) | Ground Surface Elevation (feet msl) | Total Well Depth (feet below TOC) | Corrected Depth to Water (feet below TOC) | Corrected Groundwater Elevation (feet msl) |
|----------------------------|----------------|----------------------------------|-------------------------------------|---------------------------|-------------------------------------|-----------------------------------|---|--|
| Plant 3 (continued) | | | | | | | | |
| MW-02-02(3) | 5/15/2023 | 74.0 | 84.0 | 862.70 | 863.11 | 83.70 | 60.74 | 801.96 |
| MW-02-03(3) | 5/15/2023 | 79.0 | 89.0 | 859.63 | 859.90 | 89.10 | 59.21 | 800.42 |
| MW-02-04(3) | 5/15/2023 | 76.0 | 86.0 | 859.41 | 859.96 | NM | 59.35 | 800.06 |
| MW-04-02(3) | 5/16/2023 | 126.0 | 136.0 | 861.09 | 861.26 | 133.30 | 61.86 | 799.23 |
| MW-04-03(3) | 5/16/2023 | 80.0 | 90.0 | 860.72 | 861.00 | 87.30 | 60.86 | 799.86 |
| MW-04-04(3) | 5/15/2023 | 72.0 | 82.0 | 855.72 | 856.11 | 81.60 | 55.81 | 799.91 |
| MW-05(3) | 5/15/2023 | 10.0 | 15.0 | 863.44 | 859.80 | 19.50 | 4.48 | 858.96 |
| MW-12-04 | 5/15/2023 | 77.0 | 100.0 | 844.08 | 844.26 | 100.25 | 46.68 | 797.40 |
| MW-12-20 | 5/16/2023 | 75.0 | 80.0 | 864.20 | 861.45 | 79.45 | 64.67 | 799.53 |
| MW-12-21 | 5/16/2023 | 70.0 | 75.0 | 864.50 | 861.45 | 78.10 | 64.21 | 800.29 |
| MW-13-22 | 5/16/2023 | 89.0 | 94.0 | 864.37 | 861.50 | 96.15 | 67.23 | 797.14 |
| MW-13-23 | 5/16/2023 | 69.0 | 74.0 | 864.31 | 861.45 | 77.50 | 64.55 | 799.76 |
| MW-13-24 | 5/16/2023 | 69.0 | 74.0 | 864.35 | 861.48 | 77.30 | 63.58 | 800.77 |
| MW-13-25 | 5/16/2023 | 67.0 | 72.0 | 863.77 | 860.49 | 75.00 | 64.33 | 799.44 |
| MW-13-26 | 5/16/2023 | 72.0 | 77.0 | 863.95 | 861.67 | 79.20 | 63.39 | 800.56 |
| MW-13-27 | 5/16/2023 | 67.0 | 72.0 | 864.50 | 861.54 | 75.70 | 64.71 | 799.79 |
| MW-13-28 | 5/16/2023 | 99.0 | 115.5 | 864.42 | 861.61 | 114.75 | 67.89 | 796.53 |
| MW-13-29 | 5/16/2023 | 68.0 | 73.0 | 862.81 | 859.81 | 76.30 | 33.80 | 829.01 |
| MW-13-30 | 5/16/2023 | 72.0 | 77.0 | 864.53 | 861.66 | 79.80 | 65.21 | 799.32 |
| MW-13-31 | 5/15/2023 | 5.0 | 10.0 | 861.27 | 858.36 | 12.80 | 7.48 | 853.79 |
| MW-13-32 | 5/15/2023 | 5.0 | 10.0 | 860.11 | 857.32 | 12.65 | 6.28 | 853.83 |
| MW-13-34 | 5/15/2023 | 74.0 | 79.0 | 853.92 | 851.82 | 79.90 | 64.18 | 789.74 |
| MW-13-37 | 5/15/2023 | 97.0 | 112.0 | 866.02 | 863.75 | 114.35 | 68.05 | 797.97 |
| MW-13-38 | 5/15/2023 | 107.0 | 124.0 | 866.47 | 863.71 | 126.50 | 68.69 | 797.78 |
| MW-13-39B | 5/15/2023 | 97.0 | 112.0 | 860.20 | 857.33 | 105.50 | 62.11 | 798.09 |
| MW-13-40 | 5/15/2023 | 72.0 | 77.0 | 862.95 | 859.74 | 78.90 | 55.52 | 807.43 |
| MW-13-41 | 5/15/2023 | 77.0 | 82.0 | 863.41 | 863.68 | 81.50 | 54.75 | 808.66 |
| MW-13-46 | 5/15/2023 | 68.0 | 73.0 | 854.54 | 852.12 | 74.65 | 62.82 | 791.72 |
| MW-13-47 | 5/15/2023 | 99.0 | 119.0 | 853.74 | 851.89 | 113.65 | 63.52 | 790.22 |
| MW-13-48 | 5/15/2023 | 65.0 | 70.0 | 854.83 | 852.17 | 73.25 | 55.89 | 798.94 |
| MW-13-49 | 5/15/2023 | 73.0 | 78.0 | 853.01 | 850.55 | 81.65 | 63.77 | 789.24 |
| MW-14-64 | 5/16/2023 | 98.6 | 103.6 | 864.56 | 861.77 | 106.30 | 67.98 | 796.58 |
| MW-14-65 | 5/15/2023 | 5.0 | 10.0 | 866.34 | 863.71 | NM | 6.95 | 859.39 |
| MW-15-71 | 5/16/2023 | 110.0 | 115.0 | 864.07 | 861.71 | 119.10 | 64.62 | 799.45 |
| MW-18-88 | 5/15/2023 | 6.0 | 11.0 | 863.70 | 860.93 | NM | 5.16 | 858.54 |
| MW-18-89 | 5/15/2023 | 7.0 | 12.0 | 866.53 | 863.51 | NM | 7.26 | 859.27 |
| MW-18-90 | 5/15/2023 | 15.0 | 20.0 | 866.32 | 863.25 | NM | 9.51 | 856.81 |
| MW-18-91 | 5/15/2023 | 7.0 | 12.0 | 865.94 | 863.43 | NM | 6.11 | 859.83 |
| MW-18-92 | 5/16/2023 | 23.0 | 28.0 | 870.43 | 869.08 | NM | 14.82 | 855.61 |
| MW-18-93 | 5/15/2023 | 77.5 | 82.5 | 863.77 | 860.99 | NM | 48.22 | 815.55 |
| MW-18-94 | 5/15/2023 | 72.0 | 77.0 | 866.34 | 863.86 | NM | 53.05 | 813.29 |
| MW-18-95 | 5/15/2023 | 4.5 | 9.5 | 864.66 | 861.76 | NM | 6.83 | 857.83 |
| MW-18-96 | NM | 7.0 | 12.0 | 864.60 | 861.64 | NM | DRY | DRY |
| MW-18-97 | 5/15/2023 | 85.0 | 90.0 | 860.91 | 859.13 | 91.65 | 61.51 | 799.40 |
| MW-18-98 | 5/15/2023 | 7.0 | 12.0 | 862.16 | 859.10 | NM | 5.46 | 856.70 |
| MW-18-99 | 5/15/2023 | 9.0 | 14.0 | 862.47 | 859.95 | NM | 3.90 | 858.57 |
| MW-18-100 | 5/16/2023 | 8.0 | 13.0 | 863.94 | 861.49 | NM | 10.32 | 853.62 |
| MW-18-101 | 5/16/2023 | 80.0 | 85.0 | 863.87 | 861.24 | NM | 61.94 | 801.93 |

See Notes on last page.

Table 4
Summary of Groundwater Elevations - May 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Well ID | Date Collected | Screened Interval Top (feet bgs) | Screened Interval Bottom (feet bgs) | Reference Elevation (TOC) | Ground Surface Elevation (feet msl) | Total Well Depth (feet below TOC) | Corrected Depth to Water (feet below TOC) | Corrected Groundwater Elevation (feet msl) |
|----------------------------|----------------|----------------------------------|-------------------------------------|---------------------------|-------------------------------------|-----------------------------------|---|--|
| Plant 3 (continued) | | | | | | | | |
| MW-18-102 | 5/16/2023 | 10.0 | 15.0 | 863.13 | 863.44 | NM | 8.31 | 854.82 |
| MW-18-103 | 5/16/2023 | 5.0 | 10.0 | 859.13 | 859.74 | NM | 2.42 | 856.71 |
| MW-18-104 | 5/16/2023 | 5.0 | 10.0 | 859.12 | 859.82 | NM | 2.51 | 856.61 |
| MW-18-105 | 5/16/2023 | 6.0 | 11.0 | 858.59 | 859.01 | NM | 1.31 | 857.28 |
| MW-18-106 | 5/16/2023 | 5.0 | 10.0 | 866.15 | 866.51 | NM | 3.35 | 862.80 |
| MW-19 | 5/15/2023 | 55.0 | 65.0 | 859.73 | 860.01 | 67.70 | 44.81 | 814.92 |
| MW-19-107 | 5/16/2023 | 23.0 | 28.0 | 870.65 | 869.20 | NM | 16.92 | 853.73 |
| MW-19-108 | 5/16/2023 | 23.0 | 28.0 | 872.60 | 870.22 | NM | 14.98 | 857.62 |
| MW-19-110 | NM | 8.0 | 13.0 | 863.67 | 860.72 | NM | DRY | DRY |
| MW-19-111 | 5/16/2023 | 20.0 | 25.0 | 874.51 | 871.70 | NM | 22.24 | 852.27 |
| MW-19-112 | 5/15/2023 | 9.0 | 14.0 | 861.63 | 858.53 | NM | 6.22 | 855.41 |
| MW-19-113 | 5/15/2023 | 16.0 | 21.0 | 860.67 | 857.73 | NM | 24.32 | 836.35 |
| MW-19-114 | 5/16/2023 | 6.0 | 11.0 | 861.25 | 861.79 | NM | 3.34 | 857.91 |
| MW-19-119D | 5/16/2023 | 180.0 | 195.0 | 864.42 | 861.66 | 197.90 | 81.53 | 782.89 |
| MW-19-119S | 5/16/2023 | 145.0 | 160.0 | 864.32 | 861.66 | 163.90 | 69.01 | 795.31 |
| MW-22 | 5/15/2023 | 52.5 | 62.5 | 859.69 | 860.08 | 64.10 | 45.46 | 814.23 |
| MW-23 | 5/15/2023 | 52.0 | 62.0 | 863.71 | 859.82 | 65.60 | 48.78 | 814.93 |
| MW-88-1 | 5/15/2023 | 103.5 | 140.0 | 858.75 | 859.06 | 138.60 | 63.62 | 795.13 |
| MW-91-2R | 5/15/2023 | 75.0 | 80.0 | 866.84 | 863.63 | NM | 57.15 | 809.69 |
| MW-91-3 | 5/15/2023 | 105.0 | 117.0 | 860.81 | 859.35 | 118.95 | 65.02 | 795.79 |
| MW-91-4 | 5/15/2023 | 116.0 | 132.5 | 855.59 | 855.93 | 131.95 | 56.95 | 798.64 |
| MW-91-5 | 5/16/2023 | 112.5 | 128.0 | 860.61 | 861.20 | 127.70 | 61.59 | 799.02 |
| MW-91-6 | 5/15/2023 | 82.0 | 98.0 | 851.84 | 852.22 | 96.15 | 60.59 | 791.25 |
| MW-93-1 | 5/15/2023 | 65.0 | 75.0 | 866.05 | 863.56 | 70.20 | 62.74 | 803.31 |
| P3-SB-07 | 5/15/2023 | 11.0 | 16.0 | 866.84 | 863.63 | 19.50 | 7.94 | 858.90 |
| P3-SB-28 | 5/15/2023 | 8.0 | 13.0 | 866.43 | 863.63 | NM | 6.14 | 860.29 |
| PW-14-03R | 5/16/2023 | 85.0 | 90.0 | 864.31 | 861.55 | 95.50 | 69.99 | 794.32 |
| TW-14-06 | 5/16/2023 | 82.0 | 87.0 | 864.30 | 861.50 | 85.55 | 84.30 | 776.51 |
| TW-15-11 | 5/16/2023 | 85.0 | 90.0 | 864.51 | 861.60 | 86.90 | 63.98 | 800.53 |
| UNK-10 | 5/15/2023 | 11.0 | 16.0 | 859.34 | 860.05 | 15.40 | 0.33 | 859.01 |
| UNK-11 | 5/15/2023 | 6.5 | 11.5 | 859.91 | 860.17 | 11.75 | 0.81 | 859.10 |
| UNK-15 | 5/15/2023 | 11.0 | 16.0 | 859.56 | 859.94 | NM | 0.43 | 859.13 |
| Plant 6 | | | | | | | | |
| MW-02-02(6) | 5/15/2023 | 35.0 | 45.0 | 868.04 | 868.41 | 43.35 | 29.10 | 838.94 |
| MW-03-02 | 5/15/2023 | 30.0 | 40.0 | 864.52 | 864.76 | 38.18 | 20.76 | 843.76 |
| MW-03-04 | 5/15/2023 | 33.0 | 43.0 | 865.28 | 865.53 | 42.62 | 20.60 | 844.68 |
| MW-03-05 | 5/15/2023 | 35.0 | 45.0 | 868.90 | 869.14 | 47.99 | 23.85 | 845.05 |
| MW-03-06 | 5/15/2023 | 30.0 | 40.0 | 870.45 | 870.80 | 40.58 | 35.78 | 834.67 |
| MW-03-08 | NM | 35.0 | 45.0 | 869.03 | 869.39 | NM | Could Not Access - Well Under Water | |
| MW-04-01(6) | 5/15/2023 | 78.0 | 88.0 | 866.85 | 867.15 | 87.95 | 70.22 | 796.63 |
| MW-04-04R | 5/15/2023 | 82.0 | 110.0 | 873.31 | 870.64 | 111.08 | 75.91 | 797.40 |
| MW-04-05(6) | 5/16/2023 | 20.0 | 30.0 | 858.33 | 858.87 | 29.61 | 9.20 | 849.13 |
| MW-04-06R | 5/15/2023 | 74.0 | 99.5 | 861.56 | 858.59 | 100.20 | 65.35 | 796.21 |
| MW-12-03 | 5/15/2023 | 57.0 | 80.0 | 859.10 | 856.71 | 82.51 | 62.13 | 796.97 |
| MW-12-10R | 5/16/2023 | 10.0 | 15.0 | 862.29 | 858.92 | 17.96 | 11.28 | 851.01 |
| MW-12-11 | 5/16/2023 | 13.0 | 18.0 | 857.26 | 857.68 | 16.80 | 3.75 | 853.51 |
| MW-12-12 | 5/15/2023 | 13.0 | 18.0 | 874.34 | 874.61 | NM | 7.41 | 866.93 |
| MW-12-13 | 5/15/2023 | 18.5 | 23.5 | 882.60 | 880.51 | NM | 10.69 | 871.91 |

See Notes on last page.

Table 4
Summary of Groundwater Elevations - May 2023
RACER Trust Plants 2, 3, and 6
Lansing, Michigan



| Well ID | Date Collected | Screened Interval Top (feet bgs) | Screened Interval Bottom (feet bgs) | Reference Elevation (TOC) | Ground Surface Elevation (feet msl) | Total Well Depth (feet below TOC) | Corrected Depth to Water (feet below TOC) | Corrected Groundwater Elevation (feet msl) |
|----------------------------|----------------|----------------------------------|-------------------------------------|---------------------------|-------------------------------------|-----------------------------------|---|--|
| Plant 6 (continued) | | | | | | | | |
| MW-12-14 | 5/15/2023 | 25.0 | 30.0 | 872.56 | 869.28 | 32.07 | 25.08 | 847.48 |
| MW-12-16 | 5/16/2023 | 28.0 | 33.0 | 864.24 | 864.73 | 32.20 | 22.50 | 841.74 |
| MW-13-36R | 5/15/2023 | 5.5 | 10.5 | 878.04 | 875.28 | 12.64 | 6.43 | 871.61 |
| MW-13-50 | 5/16/2023 | 85.0 | 107.0 | 872.85 | 869.93 | 109.87 | 82.17 | 790.68 |
| MW-13-52 | 5/16/2023 | 70.0 | 80.0 | 872.50 | 869.84 | 81.43 | 68.95 | 803.55 |
| MW-13-53 | 5/16/2023 | 73.0 | 83.0 | 875.56 | 873.10 | 85.42 | 74.28 | 801.28 |
| MW-14-66 | 5/15/2023 | 14.0 | 19.0 | 877.85 | 874.73 | 22.22 | 5.39 | 872.46 |
| MW-14-67 | 5/15/2023 | 13.0 | 18.0 | 877.76 | 875.07 | 20.83 | 5.75 | 872.01 |
| MW-14-69 | NM | 41.0 | 46.0 | 883.62 | 880.72 | NM | DRY | DRY |
| MW-14-70 | 5/15/2023 | 16.0 | 21.0 | 882.79 | 880.08 | 23.11 | 10.86 | 871.93 |
| MW-20-131 | 5/15/2023 | 5.0 | 10.0 | 858.21 | 858.66 | NM | 5.11 | 853.10 |
| MW-20-132 | 5/15/2023 | 6.0 | 11.0 | 858.01 | 858.38 | NM | 5.03 | 852.98 |
| MW-21-133 | 5/15/2023 | 10.0 | 15.0 | 876.67 | 872.91 | NM | 8.51 | 868.16 |
| MW-21-134 | 5/15/2023 | 11.0 | 16.0 | 872.97 | 869.38 | NM | 8.54 | 864.43 |
| MW-21-135 | 5/15/2023 | 22.0 | 27.0 | 872.10 | 868.60 | NM | 25.10 | 847.00 |
| MW-21-136 | 5/16/2023 | 9.0 | 14.0 | 865.91 | 866.31 | NM | 6.92 | 858.99 |
| MW-21-137 | 5/16/2023 | 7.0 | 12.0 | 866.99 | 867.50 | NM | 9.15 | 857.84 |
| MW-21-138 | 5/16/2023 | 24.0 | 29.0 | 867.05 | 867.54 | NM | 21.64 | 845.41 |
| MW-21-141 | 5/15/2023 | 72.0 | 77.0 | 874.03 | 871.05 | 79.70 | 77.22 | 796.81 |
| MW-22-143 | 5/15/2023 | 26.0 | 31.0 | 864.23 | 864.52 | NM | 16.79 | 847.44 |
| MW-22-144 | 5/15/2023 | 19.5 | 24.5 | 863.27 | 863.91 | 24.08 | 11.20 | 852.07 |
| MW-22-145 | 5/15/2023 | 10.5 | 15.5 | 863.25 | 863.87 | NM | 11.38 | 851.87 |
| MW-22-146 | 5/15/2023 | 5.5 | 10.5 | 861.74 | 862.17 | NM | 4.57 | 857.17 |
| MW-22-147 | 5/15/2023 | 7.5 | 12.5 | 865.46 | 865.83 | NM | 9.00 | 856.46 |
| MW-22-148 | 5/15/2023 | 24.5 | 29.5 | 865.93 | 866.12 | NM | 24.65 | 841.28 |
| MW-22-149 | 5/15/2023 | 5.5 | 10.5 | 866.24 | 866.68 | NM | 5.62 | 860.62 |
| MW-22-150 | 5/15/2023 | 13.0 | 18.0 | 859.62 | 859.84 | NM | 5.41 | 854.21 |
| MW-22-151 | 5/15/2023 | 13.0 | 18.0 | 856.66 | 857.04 | NM | 6.38 | 850.28 |
| MW-22-152 | 5/15/2023 | 10.0 | 15.0 | 857.23 | 857.50 | NM | 7.63 | 849.60 |
| MW-22-154 | 5/15/2023 | 16.0 | 11.0 | 855.81 | 856.29 | NM | 5.15 | 850.66 |
| MW-22-158 | 5/15/2023 | 16.0 | 21.0 | 863.45 | 863.87 | NM | 12.95 | 850.50 |
| MW-22-159 | NM | 26.0 | 31.0 | 864.41 | 864.78 | NM | DRY | DRY |
| MW-22-160 | 5/15/2023 | 14.0 | 19.0 | 860.77 | 861.40 | NM | 13.78 | 846.99 |
| MWBP-10-UST5-6 | 5/16/2023 | 28.0 | 38.0 | 867.70 | 867.99 | 36.81 | 29.41 | 838.29 |
| MWBP-11-UST1-4 | 5/16/2023 | 9.0 | 19.0 | 868.66 | 869.07 | 11.23 | 1.20 | 867.46 |
| MWBP-12-UST1-4 | 5/16/2023 | 15.0 | 25.0 | 870.02 | 870.58 | 11.30 | 2.28 | 867.74 |
| P6-MW-01 | 5/16/2023 | 23.0 | 28.0 | 870.10 | 866.87 | 31.23 | 28.51 | 841.59 |
| P6-SB-07 | 5/15/2023 | 15.0 | 20.0 | 877.36 | 874.36 | 23.63 | 6.68 | 870.68 |
| P6-SB-18 | 5/15/2023 | 3.0 | 8.0 | 878.72 | 874.65 | 12.11 | 5.92 | 872.80 |
| P6-SB-21 | 5/15/2023 | 3.0 | 8.0 | 874.20 | 870.92 | 11.11 | 2.83 | 871.37 |
| P6-SB-35 | 5/15/2023 | 3.0 | 8.0 | 877.76 | 874.28 | 11.98 | 5.35 | 872.41 |
| P6-SB-37 | 5/15/2023 | 5.0 | 10.0 | 878.12 | 874.32 | 13.92 | 5.76 | 872.36 |

Notes:

1. Previously included wells MW-16-79, TW-14-07, TW-14-08, TW-14-09, TW-15-10 have been abandoned and removed from the table.

* Groundwater elevations have been corrected for the presence of LNAPL using a measured LNAPL density of 0.8995 gram per milliliter.

bgs = below ground surface

DRY = well was dry and depth to water could not be gauged

LNAPL = light nonaqueous phase liquid

msl = mean sea level

NM = not measured

NS = not surveyed

RACER = Revitalizing Auto Communities Environmental Response

TOC = top of casing

Table 5
Summary of Plant 2 Storm Sewer Sampling Results
RACER Trust - Plant 2 Industrial Land, Lansing, Michigan



| Location ID: Date Collected: | Units | MI Rule 57 SW (EGLE 2017) | P2-MH-2 2/7/2023 | P2-MH-2 4/25/2023 | P2-MH-W 2/7/2023 | P2-MH-W 4/25/2023 |
|-------------------------------------|-------|------------------------------|---------------------|----------------------|---------------------|----------------------|
| Results | | | | | | |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 12 | 7.6 | 6.4 | <3.8 | 1.7 J |
| Perfluorooctanoic acid (PFOA) | ng/L | 170 | 13.0 | 8.2 | 2.1 J | 2.0 J |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | 670,000 | <4.0 | 1.5 J | 1.5 J | 1.1 J |
| Other PFAS | ng/L | NC | 40.9 | 24.3 | 7.9 | 8.2 |

Notes:

Shaded Exceeds Rule 57 Human Non-Cancer Screening
Value for Surface Water from a Non-Drinking Water
Source for PFOS or PFOA

NC = No criteria

ng/L = Nanograms per liter

PFAS = Per- and polyfluoroalkyl substances

J = Indicates an estimated value below laboratory reporting limit

< = The compound was analyzed for but not detected.

All samples analyzed using USEPA Method 537M, Michigan List of 28

Table 6
Summary of Plant 3 Storm Sewer Sampling Results
RACER Trust - Plant 3 Industrial Land, Lansing, Michigan



| Location ID: Date Collected: | Units | MI Rule 57 SW (EGLE 2017) | P3-MH-284 2/7/2023 | P3-MH-284 4/25/2023 |
|-------------------------------------|-------|------------------------------|-----------------------|------------------------|
| Results | | | | |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 12 | 3.1 J | 5.9 |
| Perfluorooctanoic acid (PFOA) | ng/L | 170 | 1.4 J | 2.1 J |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | 670,000 | 1.6 J | 2.3 J |
| Other PFAS | ng/L | NC | 8.0 | 6.7 |

Notes:

Shaded Exceeds Rule 57 Human Non-Cancer Screening
Value for Surface Water from a Non-Drinking Water
Source for PFOS or PFOA

NC = No criteria

ng/L = Nanograms per liter

PFAS = Per- and polyfluoroalkyl substances

J = Indicates an estimated value below laboratory reporting limit

< = The compound was analyzed for but not detected.

All samples analyzed using USEPA Method 537M, Michigan List of 28

Table 7
Summary of Plant 6 Storm Sewer Sampling Results
RACER Trust - Plant 6 Industrial Land, Lansing, Michigan



| Location ID: Date Collected: | Units | MI Rule 57 SW (EGLE 2017) | MichAve-MH-3 2/7/2023 | MichAve-MH-3 4/25/2023 | Verlinden-MH-5 2/7/2023 | Verlinden-MH-5 4/25/2023 | Osborn-MH-1 2/7/2023 | Osborn-MH-1 4/25/2023 | Osborn-MH-1_SW 4/25/2023 | Osborn-MH-1_SE 4/25/2023 | Osborn-CB-2 4/25/2023 |
|-------------------------------------|-------|------------------------------|--------------------------|---------------------------|----------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-----------------------------|--------------------------|
| Results | | | | | | | | | | | |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 12 | 3.3 J | 2.4 J | 5.4 | 13 | 43 [45] | 16 [16] | 25 | 16 | 15 |
| Perfluorooctanoic acid (PFOA) | ng/L | 170 | 3.9 J | 4.4 | 28 | 31 | 43 [43] | 26 [25] | 32 | 16 | 26 |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | 670,000 | <4.2 | 3.7 J | 2.9 J | 4.0 | <4.1 [<3.9] | 1.4 J [1.6 J] | <3.7 | 1.5 J | 1.0 J |
| Other PFAS | ng/L | NC | 20.1 | 23.1 | 92.9 | 76.0 | 105.9 [108.0] | 72.1 [71.9] | 103.3 | 31.6 | 55.4 |

Notes:

Shaded Exceeds Rule 57 Human Non-Cancer Screening
Value for Surface Water from a Non-Drinking Water
Source for PFOS or PFOA

NC = No criteria

ng/L = Nanograms per liter

PFAS = Per- and polyfluoroalkyl substances

[] Indicates duplicate sample

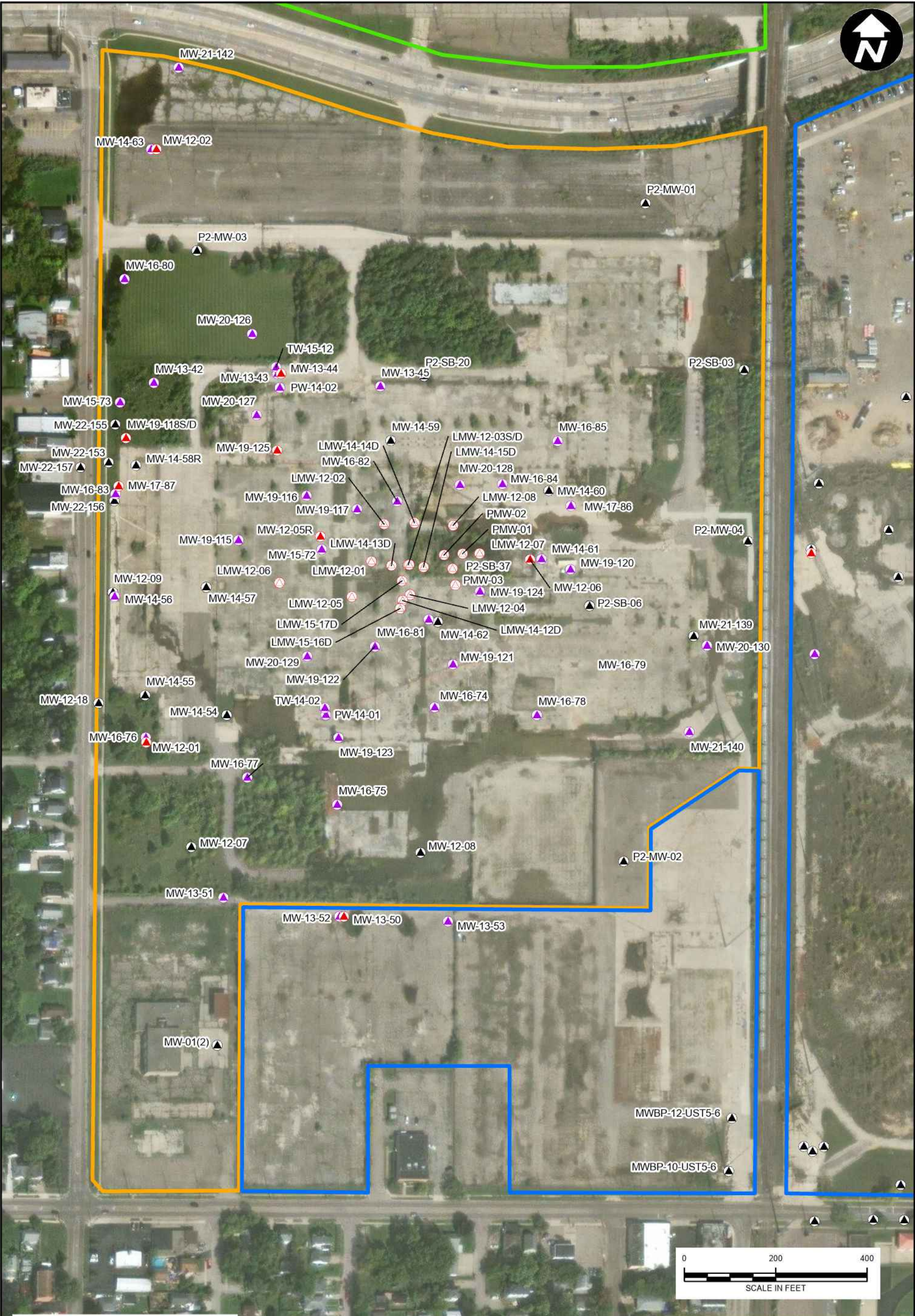
J = Indicates an estimated value below laboratory reporting limit

B = Detected in method blank

< = The compound was analyzed for but not detected.

All samples analyzed using USEPA Method 537M, Michigan List of 28

Figures



CITY: Novi DIV: ENV PIC: J. BARRETT PM: T. LINDER TM: A. VILLHAUER TR: PROJECT NUMBER: 30171056 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
T:\ENV\RACER\Buffalo\MXDs\2023 Annual Groundwater Monitoring Report\2023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/1/2023 10:34 AM BY: V.Davis

Legend

- LNAPL MONITORING WELL
- PERCHED ZONE MONITORING WELL
- DEEP OVERBURDEN MONITORING WELL
- WEATHERED BEDROCK MONITORING WELL
- BEDROCK MONITORING WELL

PLANT BOUNDARIES

- PLANT 2
- PLANT 3
- PLANT 6

NOTE:
 APC = ADAMS PLATING CO.
 AERIAL IMAGERY: 30-SEPT-2021

RACER TRUST
 PLANTS 2, 3 & 6
 LANSING, MICHIGAN

**SUMMARY OF PLANT 2
 MONITORING WELL LOCATIONS**

ARCADIS FIGURE
1A



CITY: Novi DIV: ENV PIC: J. BARRETT PM: T. LINDER TM: A. VILLHAUER TR: PROJECT NUMBER: 30171056 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl T:\ENV\RACER\Buffalo\MXDs\2023 Annual Groundwater Monitoring Report\2023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/11/2023 10:34 AM BY: V.Davis



Legend

- LNAPL MONITORING WELL
- PERCHED ZONE MONITORING WELL
- DEEP OVERBURDEN MONITORING WELL
- WEATHERED BEDROCK MONITORING WELL
- BEDROCK MONITORING WELL

PLANT BOUNDARIES

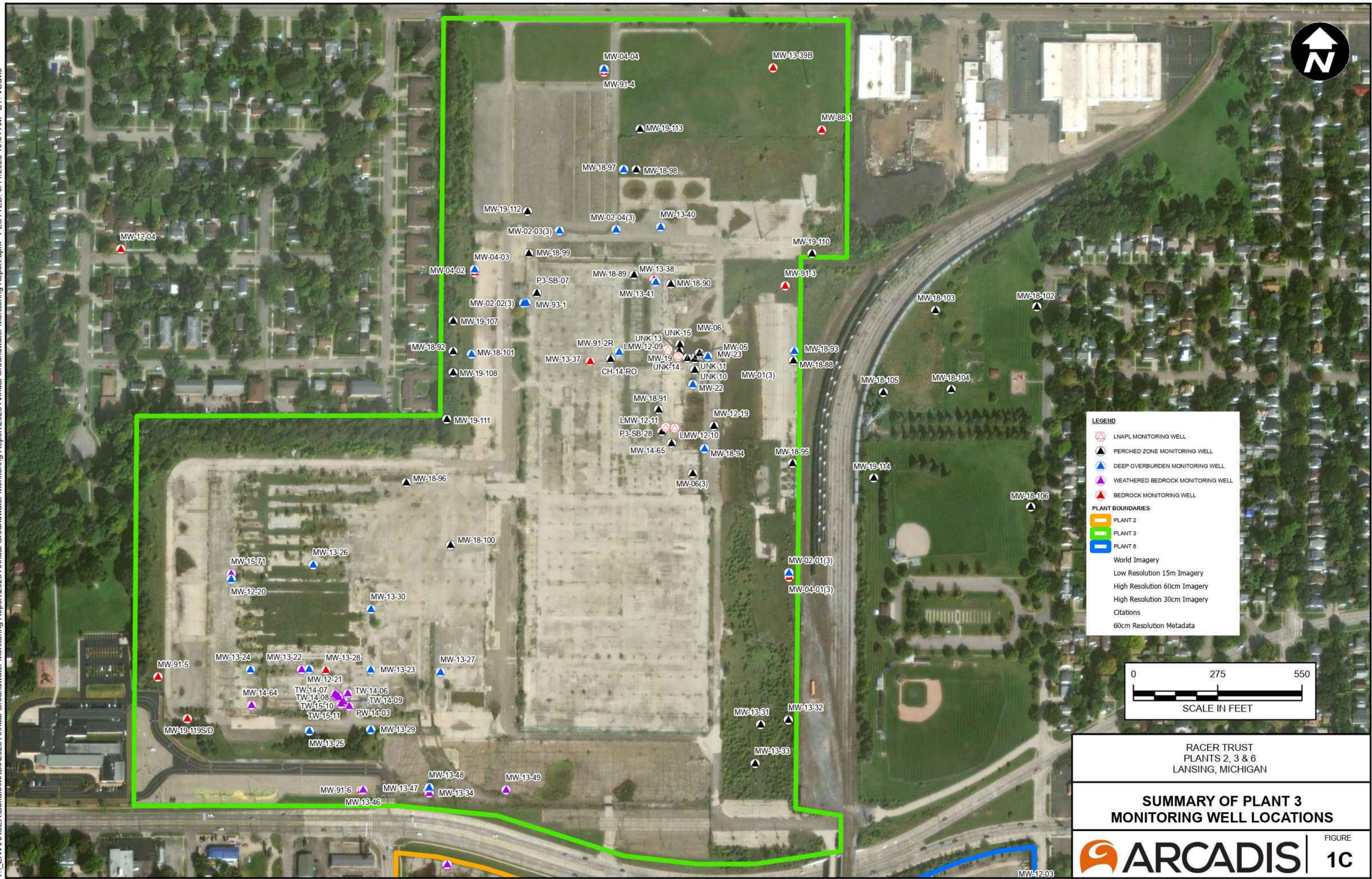
- PLANT 2
- PLANT 3
- PLANT 6

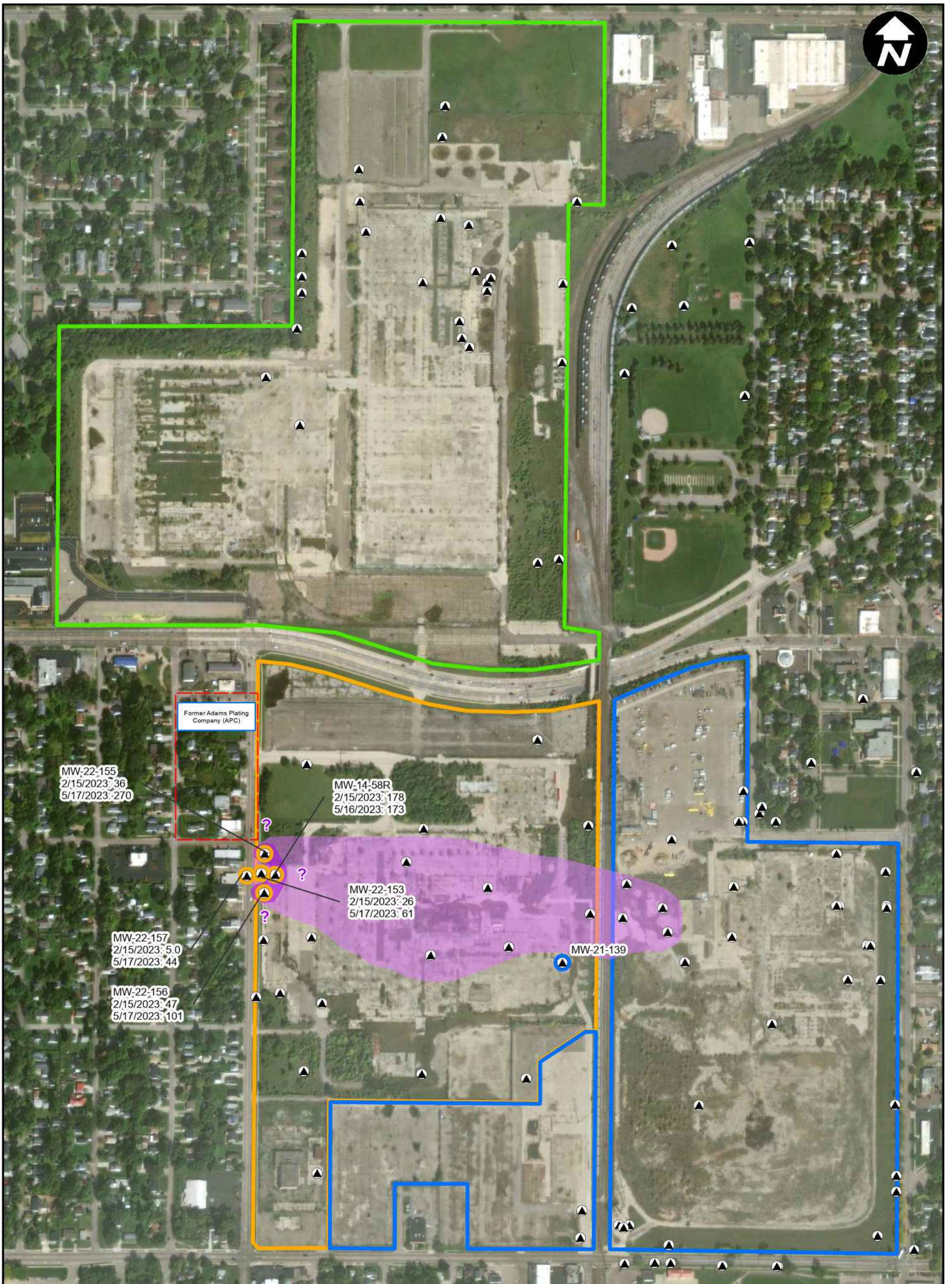
NOTE:
 APC = ADAMS PLATING CO.
 AERIAL IMAGERY: 30-SEPT-2021

RACER TRUST
 PLANTS 2, 3 & 6
 LANSING, MICHIGAN

**SUMMARY OF PLANT 6
 MONITORING WELL LOCATIONS**

ARCADIS FIGURE
1B

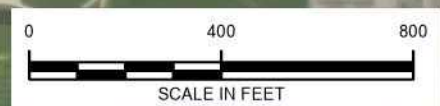




Legend

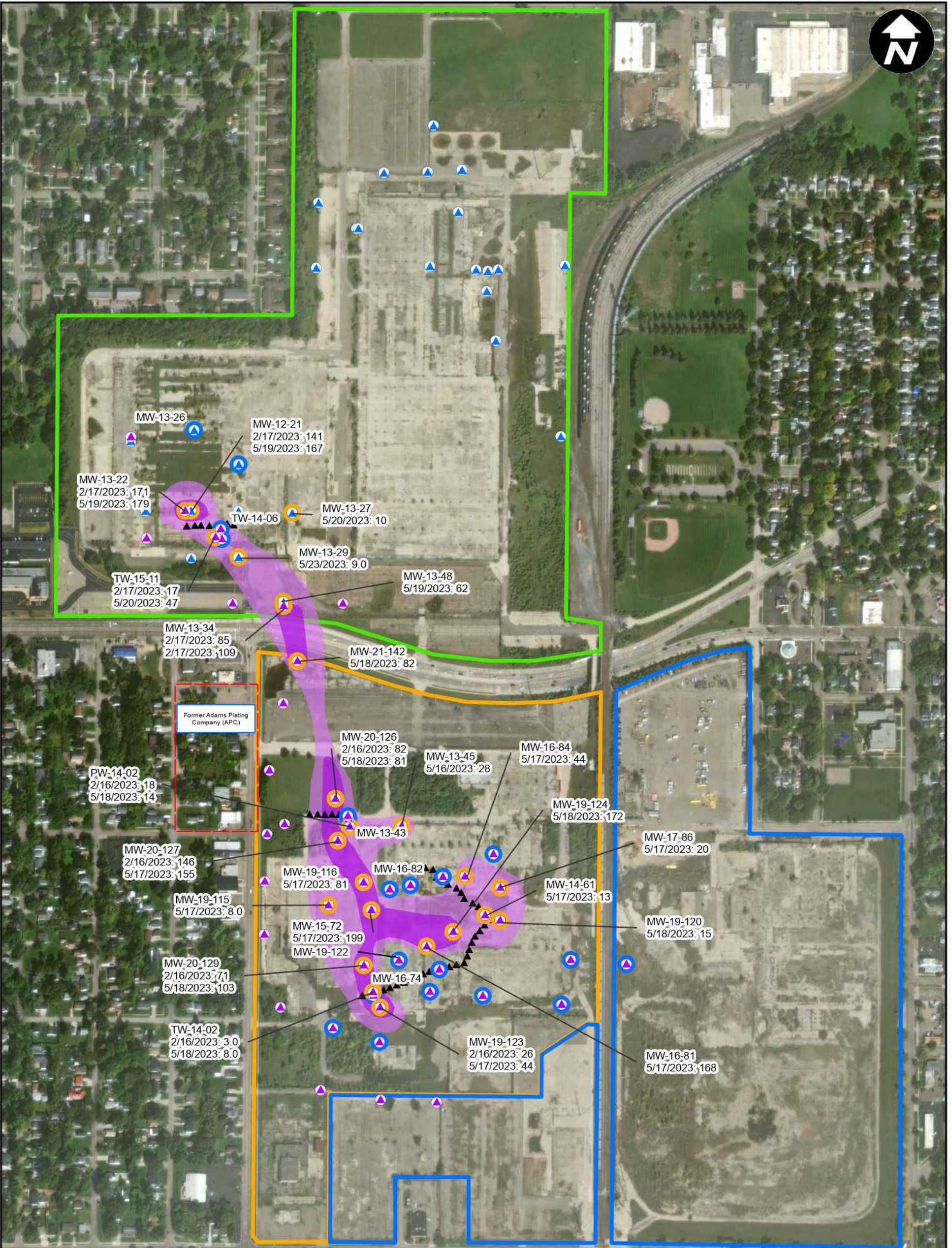
- ▲ PERCHED ZONE MONITORING WELL
- WELLS SAMPLED AND 1,4-DIOXANE EXCEEDS DW CRITERIA (7.2ug/L)
- WELLS SAMPLED AND 1,4-DIOXANE DOES NOT EXCEED DW CRITERIA
- APPROXIMATE APC SUPERFUND SITE IMPACTED AREA
- PERCHED 1,4-DIOXANE IMPACTS >72 ug/L
- PERCHED 1,4-DIOXANE IMPACTS > DW CRITERIA (7.2 ug/L)
- PLANT BOUNDARIES**
- PLANT 2
- PLANT 3
- PLANT 6

NOTES:
 APPROXIMATE EXTENT OF PERCHED 1,4-DIOXANE PLUME IS BASED ON THE ANALYTICAL DATA FROM THE MOST RECENT SAMPLING EVENT.
 ANALYTICAL DATA FROM THE FIRST QUARTER AND SECOND QUARTER 2023 ARE POSTED.
 SAMPLES ANALYZED VIA EPA METHOD 8260B SIM.
 ALL ANALYTICAL DATA IS IN ug/L.
 ? = ADDITIONAL DELINEATION WORK WILL BE COMPLETED.
 DW: EGLE Part 201 RESIDENTIAL DRINKING WATER CRITERIA.
 EGLE: MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
 EPA: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 ug/L: MICROGRAMS PER LITER.
 AERIAL IMAGERY: 30-SEPT-2021



RACER TRUST
 PLANTS 2, 3 & 6
 LANSING, MICHIGAN

SUMMARY OF 1,4-DIOXANE ANALYTICAL RESULTS PERCHED WELLS - JANUARY THROUGH JUNE 2023



CITY: Novi DIV: ENV PIC: J. BARRETT PM: T. LINDER TM: A. VILLHAUER TR: PROJECT NUMBER: 30171056 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl T:\ENVRACER\Buffalo\MXDs\2023 Annual Groundwater Monitoring Report\2023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/15/2023 8:14 AM BY: VDavis

Legend

- DEEP OVERBURDEN MONITORING WELL
- WEATHERED BEDROCK MONITORING WELL
- WELLS SAMPLED AND 1,4-DIOXANE EXCEEDS DW CRITERIA (7.2 ug/L)
- WELLS SAMPLED AND 1,4-DIOXANE DOES NOT EXCEED DW
- BIOSPARGE
- LOWER 1,4-DIOXANE PLUME > 72 ug/L
- LOWER 1,4-DIOXANE IMPACTS > DW CRITERIA (7.2 ug/L)
- APPROXIMATE EXTENT FORMER ADAMS PLATING CO. LOWER 1,4-DIOXANE PLUME > DW CRITERIA
- APPROXIMATE APC SUPERFUND SITE IMPACTED AREA

PLANT BOUNDARIES

- PLANT 2
- PLANT 3
- PLANT 6

NOTES:

APPROXIMATE EXTENT OF LOWER 1,4-DIOXANE PLUME IS BASED ON THE ANALYTICAL DATA FROM THE MOST RECENT SAMPLING EVENT.

ANALYTICAL DATA FROM THE FIRST QUARTER AND SECOND QUARTER 2023 ARE POSTED.

SAMPLES ANALYZED VIA EPA METHOD SW-846 8260B SIM.

ALL ANALYTICAL DATA IS IN ug/L.

DW: EGLE Part 201 RESIDENTIAL DRINKING WATER CRITERIA.

EGLE: MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

EPA: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

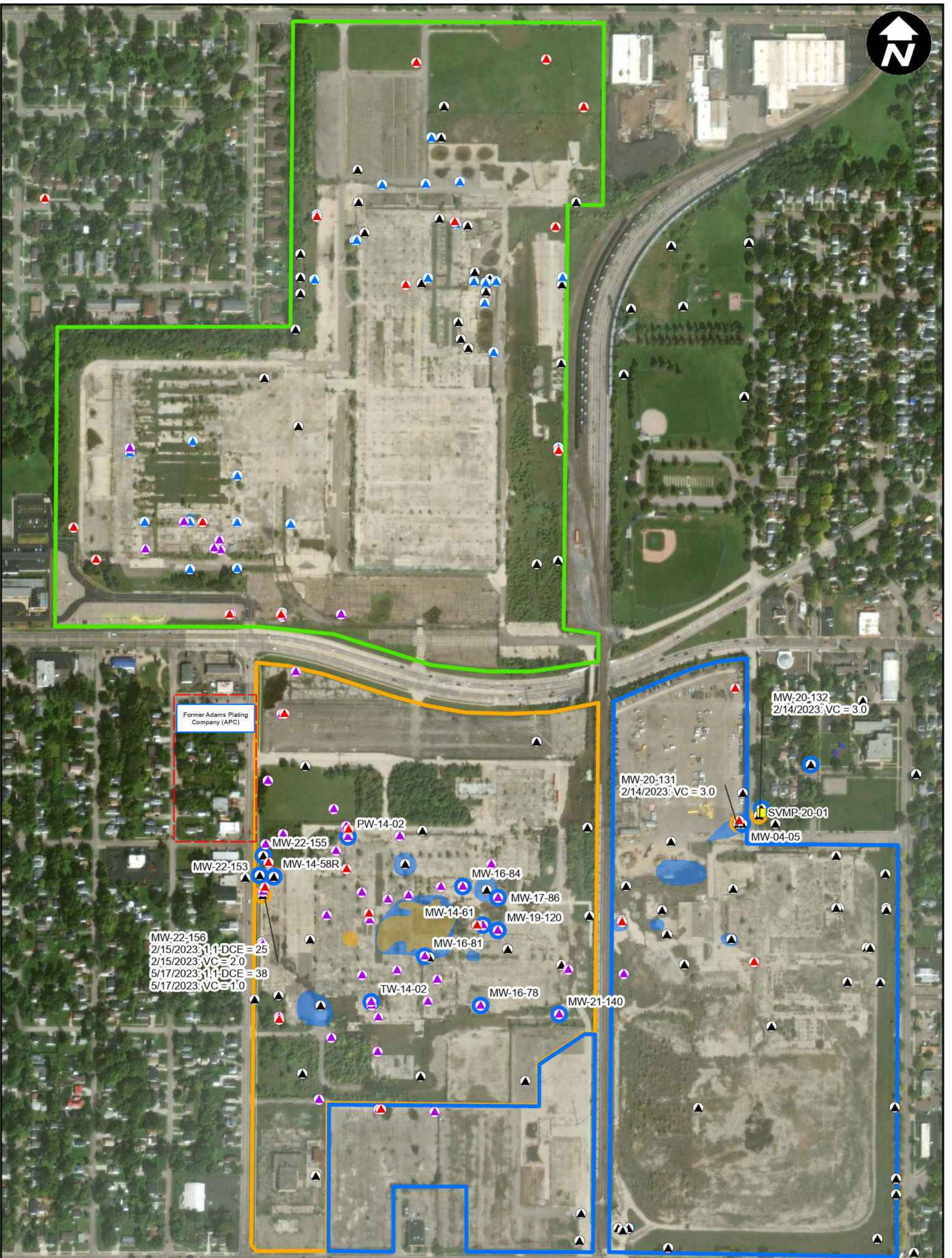
ug/L: MICROGRAMS PER LITER.

AERIAL IMAGERY: 30-SEPT-2021



RACER TRUST
PLANTS 2, 3 & 6
LANSING, MICHIGAN

SUMMARY OF 1,4-DIOXANE ANALYTICAL RESULTS IN LOWER WELLS - JANUARY THROUGH JUNE 2023



CITY: Novi DIV: ENV PIC: J. BARRETT PM: T. LINDER TM: A. VILLHAUER TR: PROJECT NUMBER: 30171056 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
T:\ENV\RACER\Buffalo\MXDs\2023 Annual Groundwater Monitoring Report\2023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/15/2023 8:14 AM BY: VDavis

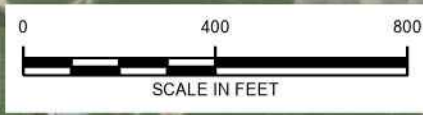
Former Adams Plating Company (APC)

MW-22-156
2/15/2023; 1,1-DCE = 25
2/15/2023; VC = 2.0
5/17/2023; 1,1-DCE = 38
5/17/2023; VC = 1.0

MW-20-131
2/14/2023; VC = 3.0

MW-20-132
2/14/2023; VC = 3.0

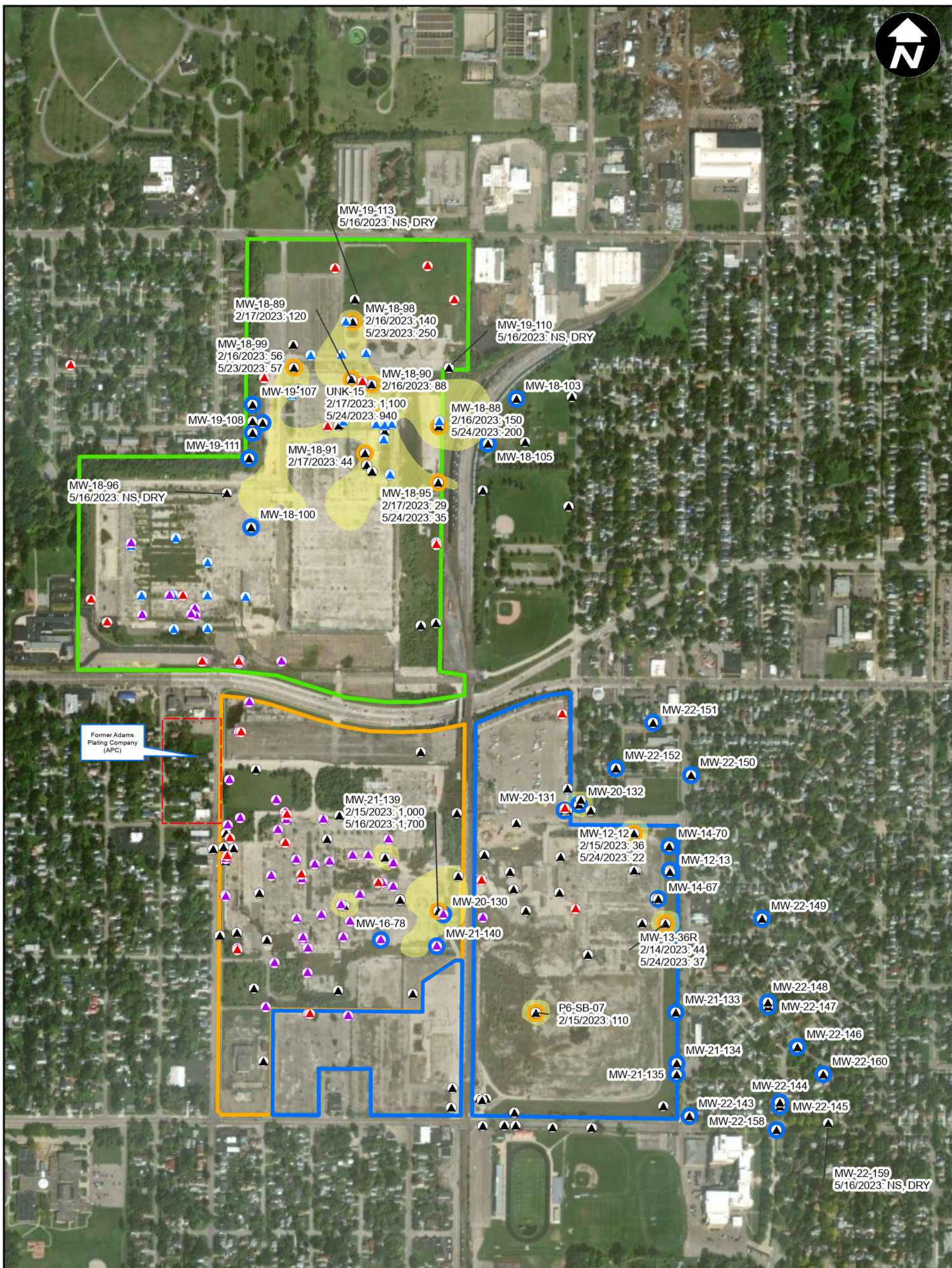
NOTES:
APPROXIMATE EXTENT OF LNAPL IMPACTS SHOWN ARE BASED ON SEVERAL INVESTIGATIONS PREVIOUSLY COMPLETED AT THE SITE.
ANALYTICAL DATA FROM THE FIRST QUARTER AND SECOND QUARTER 2023 ARE POSTED.
SAMPLES ANALYZED VIA EPA METHOD SW5030C/8260C.
ALL ANALYTICAL DATA IS IN ug/L.
DW: EGLE Part 201 RESIDENTIAL DRINKING WATER CRITERIA.
GSI: EGLE Part 201 GROUNDWATER SURFACE WATER INTERFACE CRITERIA.
EGLE: MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
EPA: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
ug/L: MICROGRAMS PER LITER.
VC: VINYL CHLORIDE
VOC: VOLATILE ORGANIC COMPOUND
1,1-DCE: 1,1-DICHLOROETHENE
AERIAL IMAGERY: 30-SEPT-2021



- Legend**
- SOIL VAPOR MONITORING POINT
 - PERCHED ZONE MONITORING WELL
 - DEEP OVERBURDEN MONITORING WELL
 - WEATHERED BEDROCK MONITORING WELL
 - BEDROCK MONITORING WELL
 - WELLS SAMPLED AND VOC'S EXCEED DW AND/OR GSI
 - WELLS SAMPLED AND VOC'S DO NOT EXCEED DW CRITERIA
 - APPROXIMATE EXTENT LNAPL
 - EXTENT VOC'S IN PERCHED ZONE > DW CRITERIA
 - APPROXIMATE APC SUPERFUND SITE IMPACTED AREA
 - PLANT BOUNDARIES
 - PLANT 2
 - PLANT 3
 - PLANT 6

RACER TRUST
PLANTS 2, 3 & 6
LANSING, MICHIGAN

**SUMMARY OF VOC ANALYTICAL RESULTS -
JANUARY THROUGH JUNE 2023**



CITY: Novi DIV: ENV PIC: J. BARRETT PM: T. LINDER TM: A. VILLHAUER TR: PROJECT NUMBER: 30171056 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl T:\ENVRACER\Buffalo\MXDs\2023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/15/2023 8:14 AM BY: VDavis

Legend

- ▲ PERCHED ZONE MONITORING WELL
 - ▲ DEEP OVERBURDEN MONITORING WELL
 - ▲ WEATHERED BEDROCK MONITORING WELL
 - ▲ BEDROCK MONITORING WELL
 - WELLS SAMPLED AND PFOS EXCEEDS GSI CRITERIA (12 ng/L) AND DW CRITERIA (16 ng/L)
 - WELLS SAMPLED AND PFOS DOES NOT EXCEED GSI OR DW CRITERIA
 - ▭ APPROXIMATE APC SUPERFUND SITE IMPACTED AREA
 - PFOS IN PERCHED GROUNDWATER (>12 ng/L)
- PLANT BOUNDARIES**
- PLANT 2
 - PLANT 3
 - PLANT 6

NOTES:

APPROXIMATE EXTENT OF IMPACTS/PLUMES SHOWN ARE BASED ON SEVERAL INVESTATIONS PREVIOUSLY COMPLETED AT THE SITE.

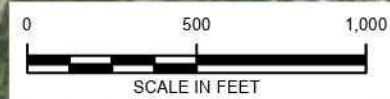
ANALYTICAL DATA FROM THE FIRST QUARTER AND SECOND QUARTER 2023 ARE POSTED.

SAMPLES ANALYZED VIA EPA METHOD 537 MODIFIED.

ALL ANALYTICAL DATA IS IN ng/L.

DW: EGLE Part 201 RESIDENTIAL DRINKING WATER CRITERIA.
 GSI: EGLE PART 201 GROUNDWATER SURFACE WATER INTERFACE CRITERION.
 EGLE: MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
 EPA: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 PFOS: PERFLUOROOCTANE SULFONIC ACID
 ng/L: NANOGRAM PER LITER.
 NS: NOT SAMPLED

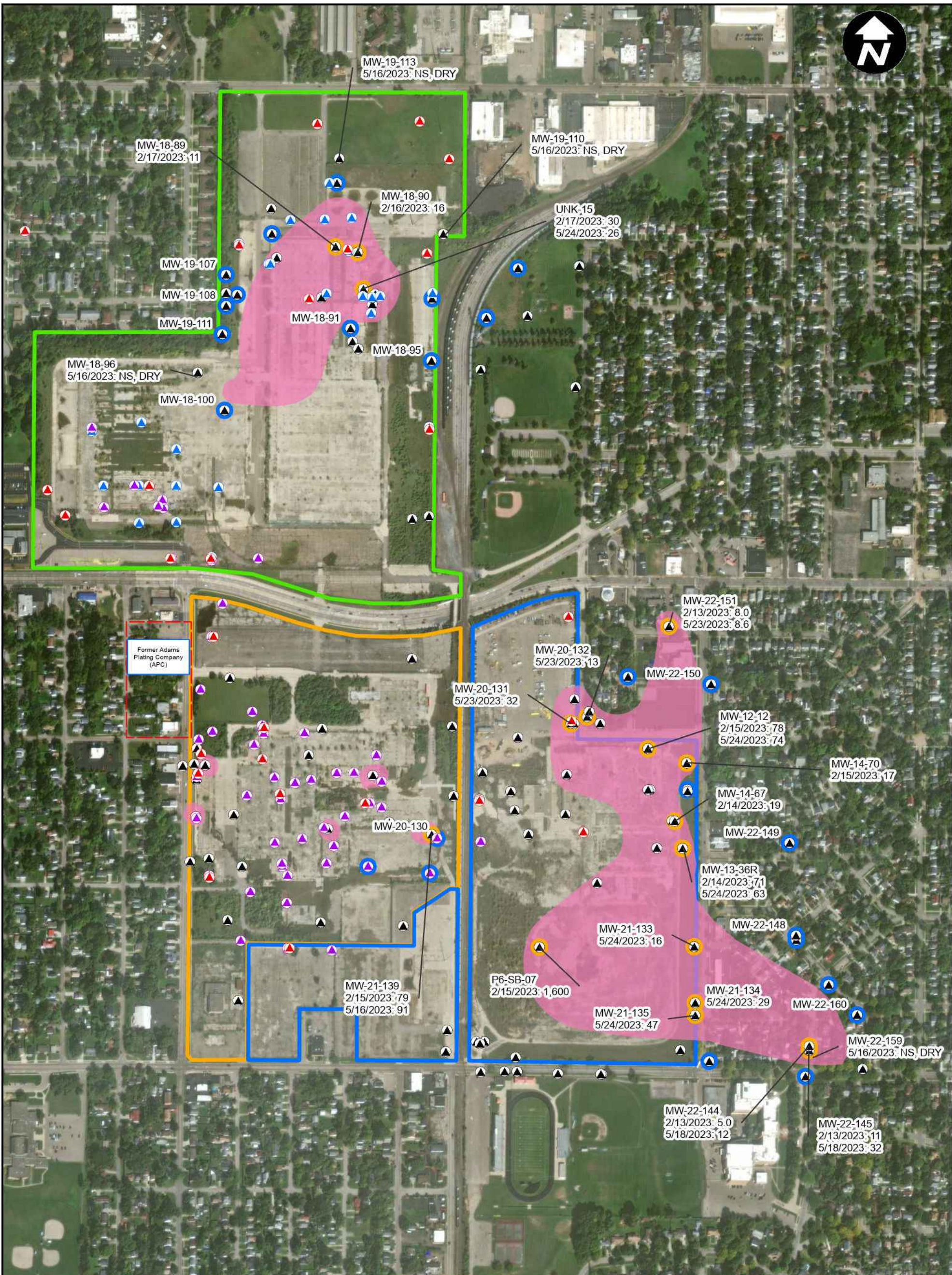
AERIAL IMAGERY: 30-SEPT-2021



RACER TRUST
PLANTS 2, 3 & 6
LANSING, MICHIGAN

SUMMARY OF PFOS ANALYTICAL RESULTS - JANUARY THROUGH JUNE 2023





CITY: Novi DIV: ENV PIC: J. BARRETT PM: T. LINDER TM: A. VILLHAUER TR: PROJECT NUMBER: 30171056 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl T:\ENV\RACER\Buffalo\MXDs\2023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/15/2023 8:14 AM BY: VDavis

Legend

- ▲ PERCHED ZONE MONITORING WELL
 - ▲ DEEP OVERBURDEN MONITORING WELL
 - ▲ WEATHERED BEDROCK MONITORING WELL
 - ▲ BEDROCK MONITORING WELL
 - WELLS SAMPLED AND PFOA EXCEEDS DW CRITERIA (8 ng/L)
 - WELLS SAMPLED AND PFOA DOES NOT EXCEED DW CRITERIA
 - PFOA IN PERCHED GROUNDWATER (> 8 ng/L)
 - APPROXIMATE APC SUPERFUND SITE IMPACTED AREA
- PLANT BOUNDARIES**
- PLANT 2
 - PLANT 3
 - PLANT 6

NOTES:

APPROXIMATE EXTENT OF IMPACTS/PLUMES SHOWN ARE BASED ON SEVERAL INVESTIGATIONS PREVIOUSLY COMPLETED AT THE SITE.

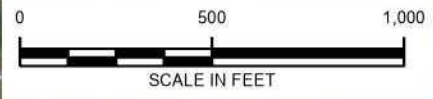
ANALYTICAL DATA FROM THE FIRST QUARTER AND SECOND QUARTER 2023 ARE POSTED.

SAMPLES ANALYZED VIA EPA METHOD 537 MODIFIED.

ALL ANALYTICAL DATA IS IN ng/L.

DW: EGLE Part 201 RESIDENTIAL DRINKING WATER CRITERIA.
 EGLE: MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
 EPA: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 PFOA: PERFLUOROOCTANOIC ACID
 ng/L: NANOGRAM PER LITER.
 NS: NOT SAMPLED

AERIAL IMAGERY: 30-SEPT-2021

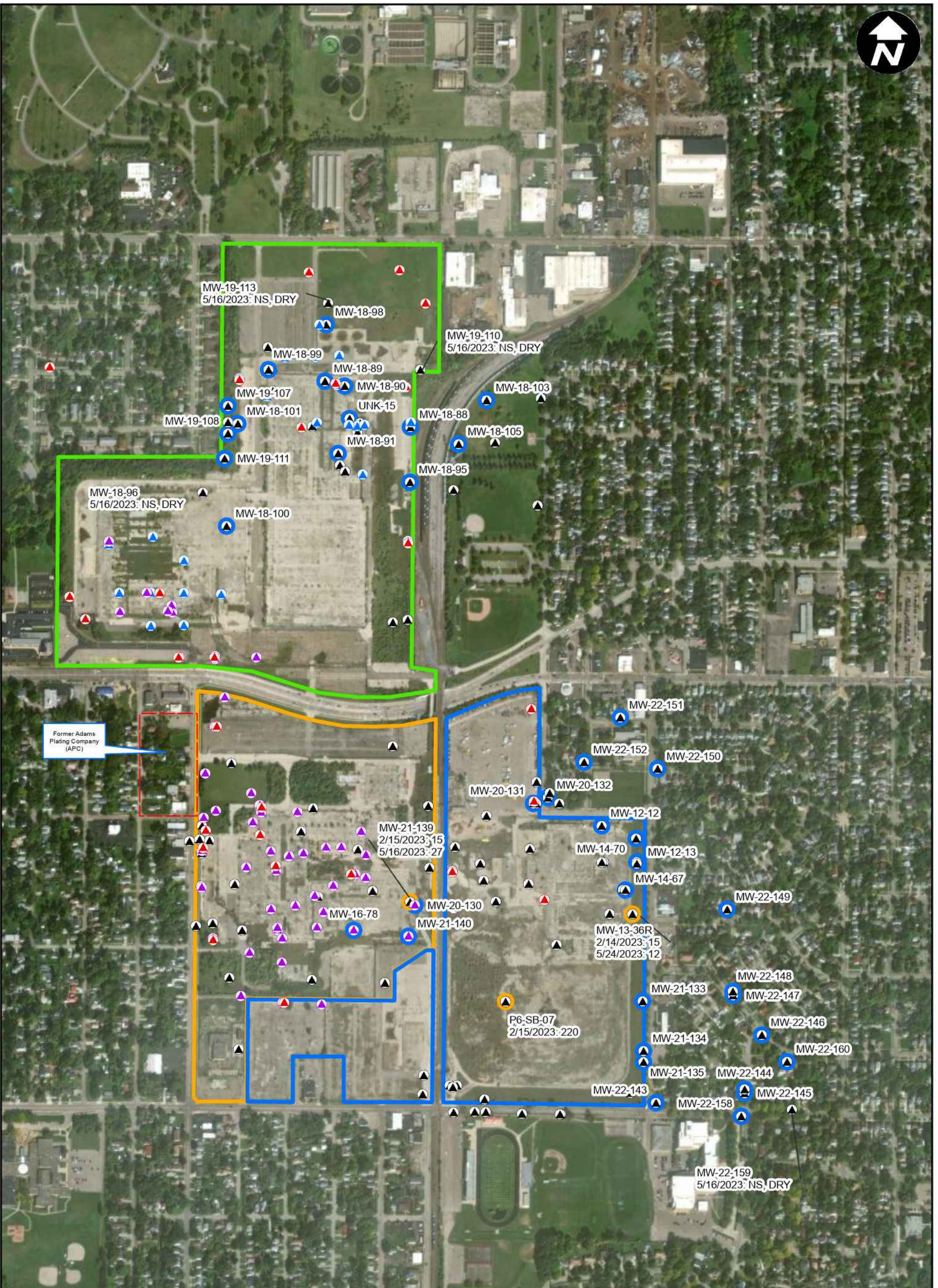


RACER TRUST
PLANTS 2, 3 & 6
LANSING, MICHIGAN

SUMMARY OF PFOA ANALYTICAL RESULTS - JANUARY THROUGH JUNE 2023



FIGURE 6



CITY: Novi DIV: ENV PIC: J. BARRETT PM: T. LINDER TM: A. VILLHAUER TR: PROJECT NUMBER: 30171056 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl T:\ENV\RACER\Buffalo\MXDs\2023 Annual Groundwater Monitoring Report\2023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/15/2023 8:14 AM BY: VDavis

Legend

- ▲ PERCHED ZONE MONITORING WELL
- ▲ DEEP OVERBURDEN MONITORING WELL
- ▲ WEATHERED BEDROCK MONITORING WELL
- ▲ BEDROCK MONITORING WELL
- WELLS SAMPLED AND PFNA EXCEEDS DW CRITERIA (6 ng/L)
- WELLS SAMPLED AND PFNA DOES NOT EXCEED DW CRITERIA
- APPROXIMATE APC SUPERFUND SITE IMPACTED AREA

PLANT BOUNDARIES

- PLANT 2
- PLANT 3
- PLANT 6

NOTES:

ANALYTICAL DATA FROM THE FIRST QUARTER AND SECOND QUARTER 2023 ARE POSTED.

SAMPLES ANALYZED VIA EPA METHOD 537 MODIFIED.

ALL ANALYTICAL DATA IS IN ng/L.

DW: EGLE Part 201 RESIDENTIAL DRINKING WATER CRITERIA
 EGLE: MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
 EPA: UNITES STATES ENVIRONMENTAL PROTECTION AGENCY
 PFNA: PERFLUORONONANOIC ACID
 ng/L: NANOGRAM PER LITER.
 NS: NOT SAMPLED

AERIAL IMAGERY: 30-SEPT-2021



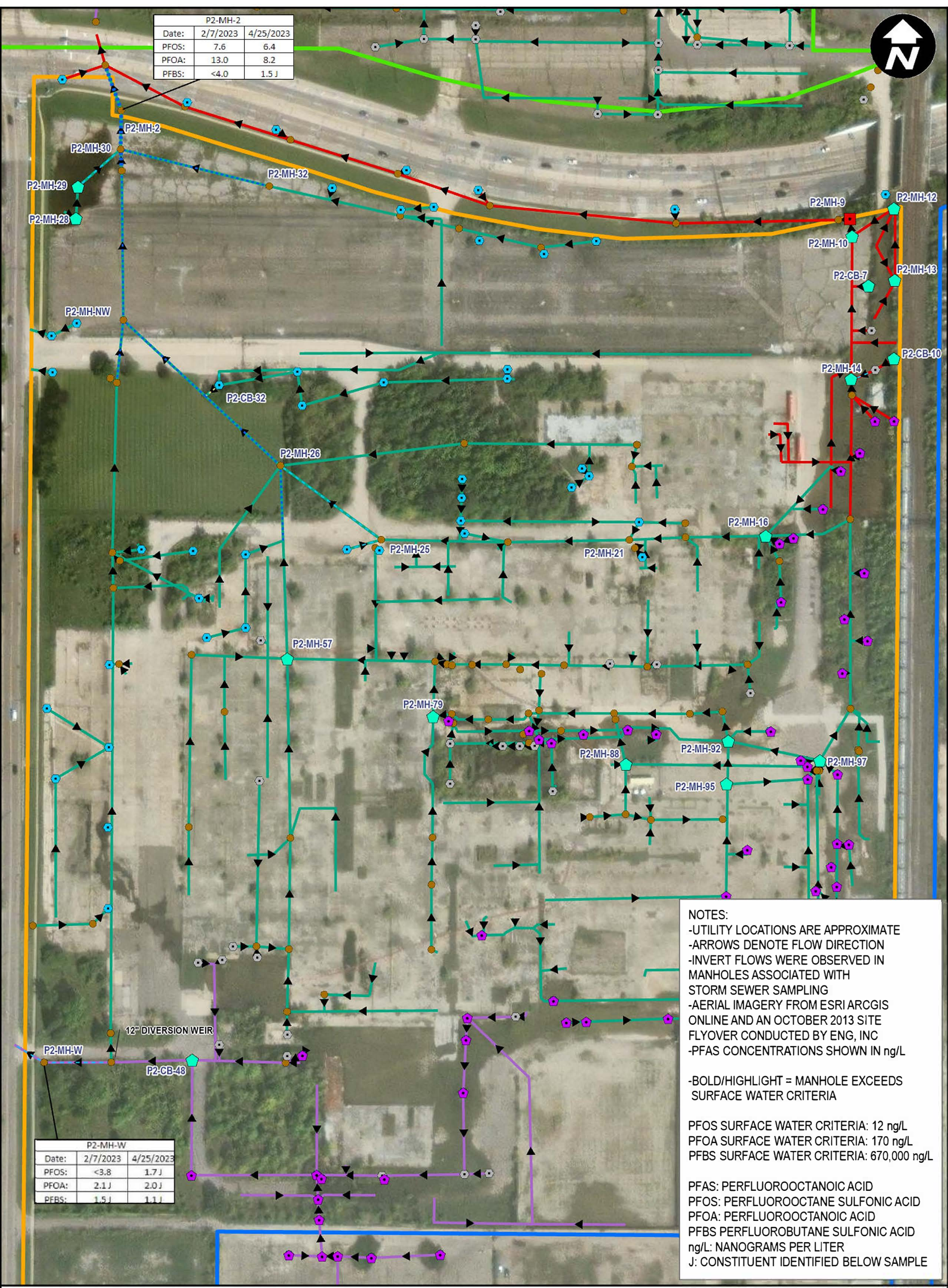
RACER TRUST
 PLANTS 2, 3 & 6
 LANSING, MICHIGAN

**SUMMARY OF PFNA ANALYTICAL RESULTS -
 JANUARY THROUGH JUNE 2023**

ARCADIS

FIGURE
7

| P2-MH-2 | |
|---------|--------------------|
| Date: | 2/7/2023 4/25/2023 |
| PFOS: | 7.6 6.4 |
| PFOA: | 13.0 8.2 |
| PFBS: | <4.0 1.5 J |



NOTES:

- UTILITY LOCATIONS ARE APPROXIMATE
- ARROWS DENOTE FLOW DIRECTION
- INVERT FLOWS WERE OBSERVED IN MANHOLES ASSOCIATED WITH STORM SEWER SAMPLING
- AERIAL IMAGERY FROM ESRI ARCGIS ONLINE AND AN OCTOBER 2013 SITE FLYOVER CONDUCTED BY ENG, INC
- PFAS CONCENTRATIONS SHOWN IN ng/L

-BOLD/HIGHLIGHT = MANHOLE EXCEEDS SURFACE WATER CRITERIA

PFOS SURFACE WATER CRITERIA: 12 ng/L
 PFOA SURFACE WATER CRITERIA: 170 ng/L
 PFBS SURFACE WATER CRITERIA: 670,000 ng/L

PFAS: PERFLUOROCTANOIC ACID
 PFOS: PERFLUOROCTANE SULFONIC ACID
 PFOA: PERFLUOROCTANOIC ACID
 PFBS PERFLUOROBUTANE SULFONIC ACID
 ng/L: NANOGRAMS PER LITER
 J: CONSTITUENT IDENTIFIED BELOW SAMPLE

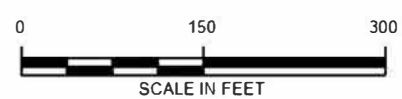
| P2-MH-W | |
|---------|--------------------|
| Date: | 2/7/2023 4/25/2023 |
| PFOS: | <3.8 1.7 J |
| PFOA: | 2.1 J 2.0 J |
| PFBS: | 1.5 J 1.1 J |

CITY: Novi DIV: ENV PIC: J. BARRETT PM: T. LINDER TR: J. SALING PROJECT NUMBER: 30171056 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl T:\ENVRACER\Buffalo\MXDs\2023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/11/2023 10:34 AM BY: V.Davis

- ADJUSTMENT TYPE**
- FILLED STRUCTURE
 - CAPPED STRUCTURE
 - COULD NOT LOCATE STRUCTURE
 - CATCH BASIN REMAINING OPEN
- STRUCTURES & SAMPLE POINTS**
- MANHOLE
 - DRY MANHOLE

- PLANT 2 DRAINAGE NETWORKS**
- NORTHEAST (ABANDONED)
 - CENTRAL (PARTIALLY ABANDONED)
 - SOUTHWEST (ABANDONED)
- OBSERVED FLOW (April 2023)**
- NO FLOW
 - TRICKLE (~1 GPM OR LESS)
 - LITTLE (~1-3 GPM)
 - MODERATE (~3 GPM OR GREATER)

- PLANT BOUNDARIES**
- PLANT 2
 - PLANT 3
 - PLANT 6



RACER TRUST
 PLANTS 2, 3 & 6
 LANSING, MICHIGAN

PLANT 2 PFAS STORM SEWER SAMPLING ANALYTICAL RESULTS - JANUARY THROUGH JUNE 2023

ARCADIS

FIGURE **8**



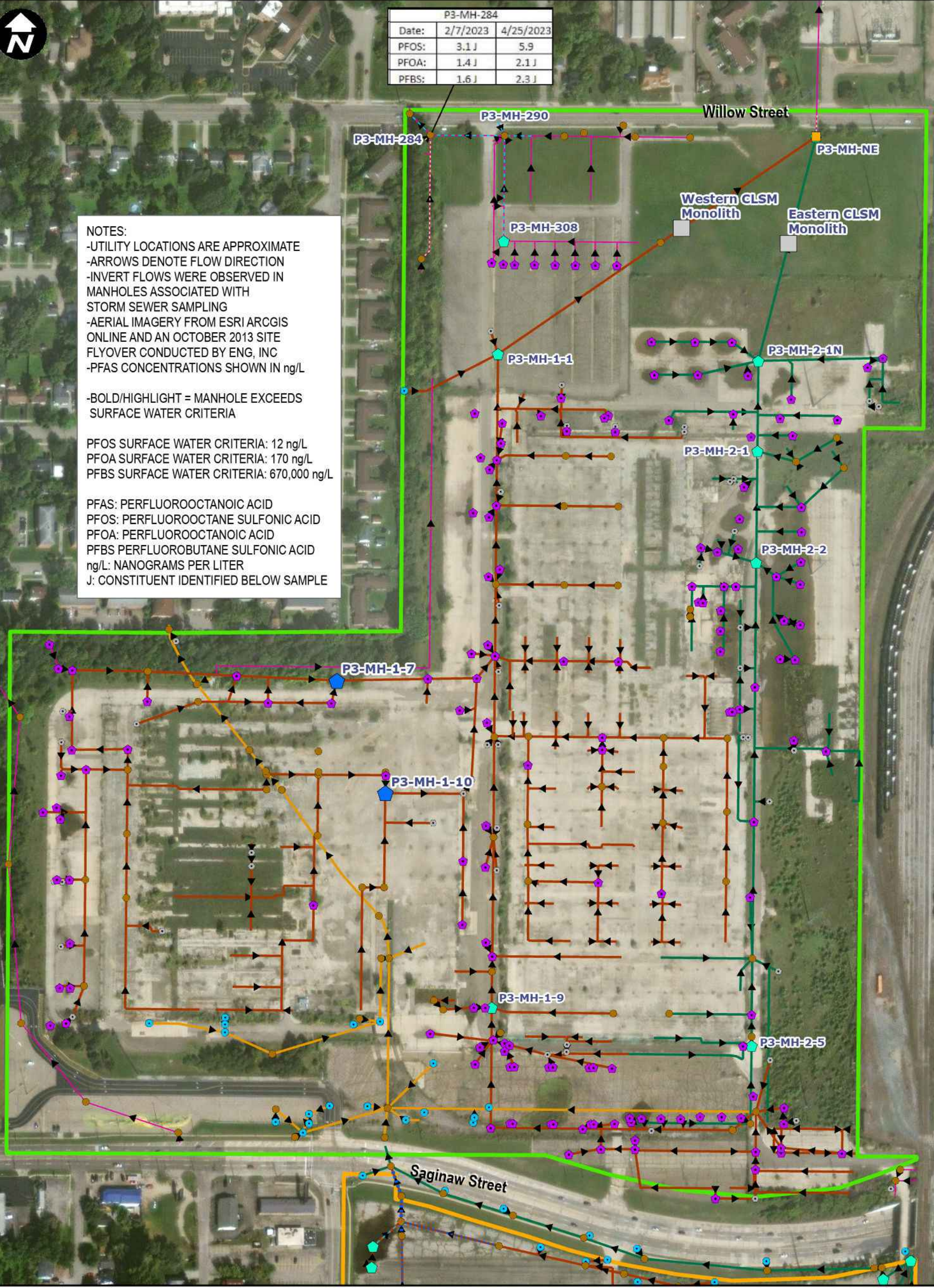
| P3-MH-284 | |
|-----------|--------------------|
| Date: | 2/7/2023 4/25/2023 |
| PFOS: | 3.1 J 5.9 |
| PFOA: | 1.4 J 2.1 J |
| PFBS: | 1.6 J 2.3 J |

NOTES:
 -UTILITY LOCATIONS ARE APPROXIMATE
 -ARROWS DENOTE FLOW DIRECTION
 -INVERT FLOWS WERE OBSERVED IN MANHOLES ASSOCIATED WITH STORM SEWER SAMPLING
 -AERIAL IMAGERY FROM ESRI ARCGIS ONLINE AND AN OCTOBER 2013 SITE FLYOVER CONDUCTED BY ENG, INC
 -PFAS CONCENTRATIONS SHOWN IN ng/L

-BOLD/HIGHLIGHT = MANHOLE EXCEEDS SURFACE WATER CRITERIA

PFOS SURFACE WATER CRITERIA: 12 ng/L
 PFOA SURFACE WATER CRITERIA: 170 ng/L
 PFBS SURFACE WATER CRITERIA: 670,000 ng/L

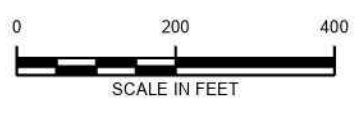
PFAS: PERFLUOROCTANOIC ACID
 PFOS: PERFLUOROCTANE SULFONIC ACID
 PFOA: PERFLUOROCTANOIC ACID
 PFBS: PERFLUOROBUTANE SULFONIC ACID
 ng/L: NANOGRAMS PER LITER
 J: CONSTITUENT IDENTIFIED BELOW SAMPLE



- STRUCTURES & SAMPLE POINTS**
- FILLED STRUCTURE
 - CAPPED STRUCTURE
 - CLSM MONOLITH
 - BULKHEAD
 - DISCHARGE OPEN WITH CUSTOM POUR
 - MANHOLE
 - MANHOLE COULD NOT BE LOCATED
 - CATCH BASIN REMAINING OPEN
 - CATCH BASIN COULD NOT BE LOCATED

- PLANT 3 DRAINAGE NETWORKS**
- COUNTY MAIN (ACTIVE)
 - EAST MAIN (ABANDONED)
 - WEST MAIN (ABANDONED)
 - OTHER (ACTIVE)
- OBSERVED FLOW (April 2023)**
- NO FLOW
 - TRICKLE (~1 GPM OR LESS)
 - LITTLE (~1-3 GPM)
 - MODERATE (~3 GPM OR GREATER)

- PLANT BOUNDARIES**
- PLANT 2
 - PLANT 3



RACER TRUST
 PLANTS 2, 3 & 6
 LANSING, MICHIGAN

PLANT 3 PFAS STORM SEWER SAMPLING ANALYTICAL RESULTS - JANUARY THROUGH JUNE 2023

ARCADIS

FIGURE **9**

CITY: NOVI DIV: ENV PIC: J. BARRETT PM: T. LINDER TR: A. LORENZ TD: 1983 StatePlane Michigan South FIPS 2113 Feet Int
 T:\ENVRACER\B\p\10052023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/11/2023 10:34 AM BY: VDavis

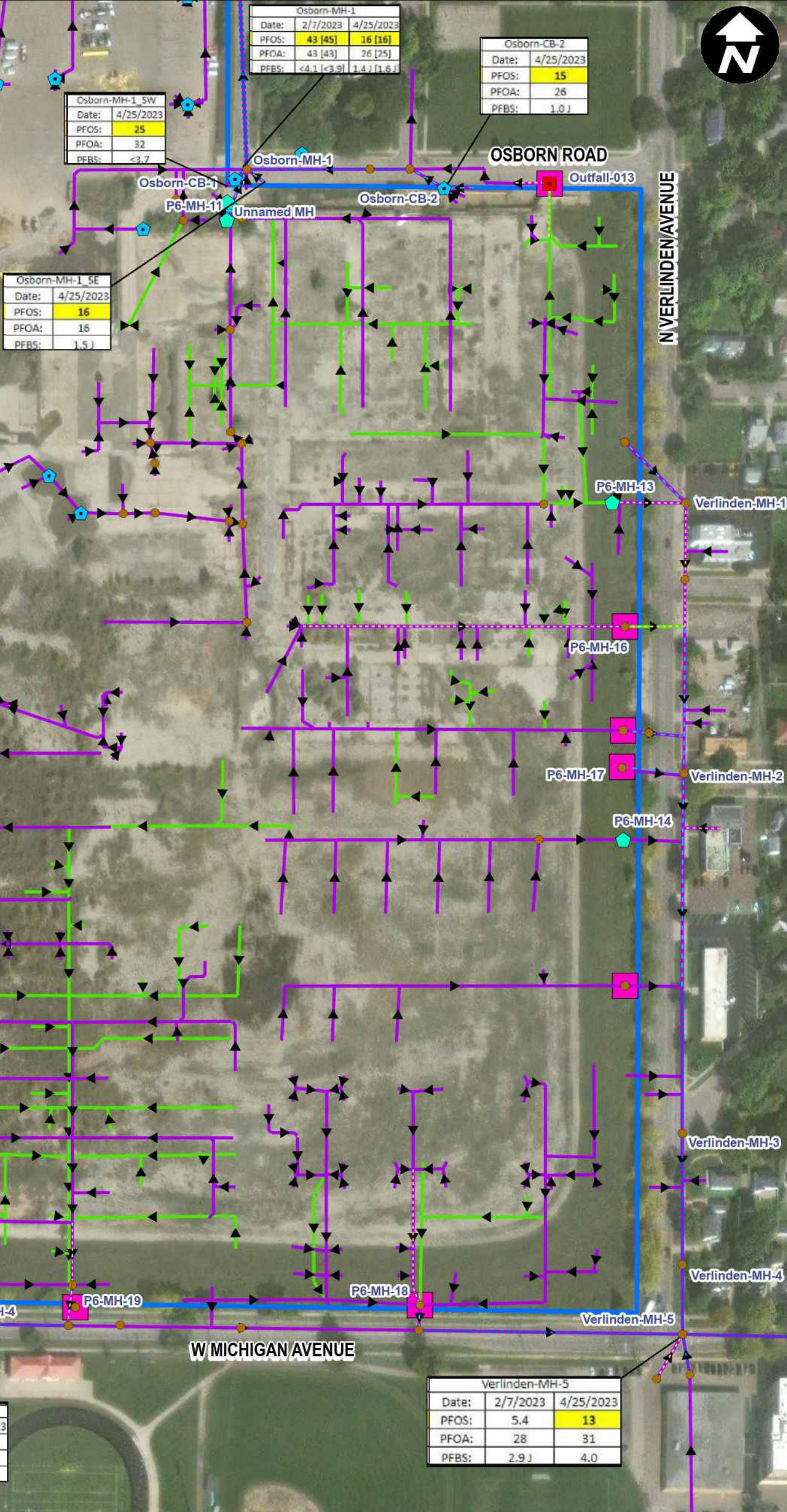
CITY: Novi DIV: ENV PIC: J. BARRETT PM: T. LINDER TR: A. LORENZ TM: A. LORENZ PROJECT NUMBER: 30171056 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
 T:\ENV\RACER\Buffalo\MXDs\2023 Annual Groundwater Monitoring Report.aprx PLOTTED: 9/11/2023 10:34 AM BY: V.Davis

NOTES:
 -UTILITY LOCATIONS ARE APPROXIMATE
 -ARROWS DENOTE FLOW DIRECTION
 -INVERT FLOWS WERE OBSERVED IN MANHOLES ASSOCIATED WITH STORM SEWER SAMPLING
 -AERIAL IMAGERY FROM ESRI ARCGIS ONLINE AND AN OCTOBER 2013 SITE FLYOVER CONDUCTED BY ENG, INC
 -PFAS CONCENTRATIONS SHOWN IN ng/L

-BOLD/HIGHLIGHT = MANHOLE EXCEEDS SURFACE WATER CRITERIA

PFOS SURFACE WATER CRITERIA: 12 ng/L
 PFOA SURFACE WATER CRITERIA: 170 ng/L
 PFBS SURFACE WATER CRITERIA: 670,000 ng/L

PFAS: PERFLUOROCTANOIC ACID
 PFOS: PERFLUOROCTANE SULFONIC ACID
 PFOA: PERFLUOROCTANOIC ACID
 PFBS PERFLUOROBUTANE SULFONIC ACID
 ng/L: NANOGRAMS PER LITER
 J: CONSTITUENT IDENTIFIED BELOW SAMPLE



- ◆ BULKHEAD
- ◆ FILLED STRUCTURE
- ◆ CAPPED STRUCTURE
- STRUCTURES & SAMPLE POINTS**
- MANHOLE
- MANHOLE COULD NOT BE LOCATED
- ◆ CATCH BASIN REMAINING OPEN
- DRY MANHOLE
- PLANT BOUNDARIES**
- PLANT 2
- PLANT 6
- PLANT 6 DRAINAGE NETWORKS**
- ▶ STORM LINE
- ▶ SANITARY LINE
- OBSERVED FLOW (April 2023)**
- NO FLOW
- TRICKLE (~1 GPM OR LESS)
- LITTLE (~1-3 GPM)
- MODERATE (~3 GPM OR GREATER)
- SEWER LINE CUT AND CAPPED AT PROPERTY LINE DURING 2014 DEMOLITION

RACER TRUST
 PLANTS 2, 3 & 6
 LANSING, MICHIGAN

**PLANT 6 PFAS STORM SEWER
 SAMPLING ANALYTICAL RESULTS -
 JANUARY THROUGH JUNE 2023**

ARCADIS

FIGURE
10

Attachment 1

Low-Flow Groundwater Sampling Logs – January to June 2023

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | AS-19-A06 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 19.9 degrees F and Light Snow. The wind is blowing N/NW at 8.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 68.81 | Total Depth (ft-bmp) | 92.6 | Water Column (ft) | 23.79 |
| | | | | Gallons in Well | 3.87 |
| Purge Start | 11:35 | Pump Intake (ft-bmp) | 90 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 12:10 | Volumes Purged | 0.24 | Sample ID | AS-19-A06_021723 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 12:10 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:35 | 0 | 0 | 100 | 68.81 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 11:40 | 5 | 5 | 100 | 69.22 | 0.13 | 7.48 | 1.3 | 28 | 2.95 | 9.1 | 73.8 | Clear | None |
| 11:45 | 5 | 10 | 100 | 69.50 | 0.26 | 7.49 | 1.37 | 27.1 | 1.25 | 5 | 75.6 | Clear | None |
| 11:50 | 5 | 15 | 100 | 69.74 | 0.40 | 7.53 | 1.32 | 26.3 | 1.07 | 4.3 | 71.7 | Clear | None |
| 11:55 | 5 | 20 | 100 | 69.98 | 0.53 | 7.52 | 1.31 | 25.3 | 1.07 | 5.7 | 63.9 | Clear | None |
| 12:00 | 5 | 25 | 100 | 70.21 | 0.66 | 7.52 | 1.31 | 23.8 | 1.24 | 6 | 56.9 | Clear | None |
| 12:05 | 5 | 30 | 100 | 70.44 | 0.79 | 7.52 | 1.31 | 22.1 | 1.26 | 6.1 | 53.6 | Clear | None |
| 12:10 | 5 | 35 | 100 | 70.62 | 0.92 | 7.52 | 1.31 | 21 | 1.27 | 6.2 | 52.5 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| 1,4-Dioxane 522 | 40 mL Glass | 3 | HCL |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: no |
| Condition of Well: Good condition | Well Locked at Departure: no |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|---|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | AS-19-A06 | Date | 5/19/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 64.4 degrees F and Clear. The wind is blowing SW at 16.1 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 65.04 | Total Depth (ft-bmp) | 92.6 | Water Column (ft) | 27.56 | Gallons in Well | 4.48 |
| Purge Start | 13:40 | Pump Intake (ft-bmp) | 90 | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 14:20 | Volumes Purged | 0.24 | Sample ID | AS-19-A06_051923 | Sampled by | Billy Cobern |
| Sample Time | 14:20 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:45 | 0 | 0 | 100 | 65.45 | 0.13 | 7.6 | 0.73 | 10.9 | 3.28 | 19.4 | 133.7 | Clear | None |
| 13:50 | 5 | 5 | 100 | 65.75 | 0.26 | 7.6 | 1.33 | 9.36 | 4.64 | 18.1 | 126.9 | Clear | None |
| 13:55 | 5 | 10 | 100 | 66.02 | 0.40 | 7.48 | 1.36 | 9.84 | 1.49 | 17.6 | 124 | Clear | None |
| 14:00 | 5 | 15 | 100 | 66.28 | 0.53 | 7.47 | 1.37 | 9.2 | 0.68 | 16.9 | 120.2 | Clear | None |
| 14:05 | 5 | 20 | 100 | 66.52 | 0.66 | 7.47 | 1.36 | 9.61 | 0.6 | 16.8 | 119 | Clear | None |
| 14:10 | 5 | 25 | 100 | 66.75 | 0.79 | 7.47 | 1.36 | 9.02 | 0.52 | 16.8 | 118.3 | Clear | None |
| 14:15 | 5 | 30 | 100 | 66.99 | 0.92 | 7.48 | 1.36 | 8.79 | 0.49 | 16.9 | 117.6 | Clear | None |
| 14:20 | 5 | 35 | 100 | 67.19 | 1.06 | 7.48 | 1.36 | 8.69 | 0.49 | 16.9 | 116.9 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|-------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: no |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>no</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | AS-19-A07 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| Static Water Level (ft-bmp) | 69.51 | Total Depth (ft-bmp) | 91.2 | Water Column (ft) | 21.69 |
| Purge Start | 10:20 | Pump Intake (ft-bmp) | 89 | Purge Method | Low-Flow |
| Purge End | 11:00 | Volumes Purged | 0.30 | Sample ID | AS-19-A07_021723 |
| Sample Time | 11:00 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Well Casing Material | PVC |
| | | | | Gallons in Well | 3.52 |
| | | | | Purge Equipment | Bladder |
| | | | | Sampled by | Billy Cobern |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:20 | 0 | 0 | 100 | 69.51 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 10:25 | 5 | 5 | 100 | 70.50 | 0.13 | 7.04 | 1.62 | 31 | 4.34 | 7.4 | 68.7 | Clear | None |
| 10:30 | 5 | 10 | 100 | 71.48 | 0.26 | 7.04 | 1.62 | 28.3 | 4.4 | 6.9 | 68.4 | Clear | None |
| 10:35 | 5 | 15 | 100 | 72.40 | 0.40 | 7.04 | 1.66 | 21.7 | 4.74 | 5.1 | 68.4 | Clear | None |
| 10:40 | 5 | 20 | 100 | 73.42 | 0.53 | 7.05 | 1.65 | 23.1 | 4.8 | 2.3 | 68.7 | Clear | None |
| 10:45 | 5 | 25 | 100 | 74.39 | 0.66 | 7.06 | 1.68 | 20.5 | 4.65 | 2.1 | 68.2 | Clear | None |
| 10:50 | 5 | 30 | 100 | 75.35 | 0.79 | 7.07 | 1.68 | 20.8 | 4.59 | 2.2 | 67.7 | Clear | None |
| 10:55 | 5 | 35 | 100 | 76.31 | 0.92 | 7.07 | 1.67 | 21.3 | 4.49 | 2.3 | 67.5 | Clear | None |
| 11:00 | 5 | 40 | 100 | 77.32 | 1.06 | 7.08 | 1.66 | 21.2 | 4.5 | 2.3 | 66.8 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| 1,4-Dioxane 522 | 40 mL Glass | 3 | HCL |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: no |
| Condition of Well: Good condition | Well Locked at Departure: no |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|---|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | AS-19-A07 | Date | 5/19/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 64.4 degrees F and Clear. The wind is blowing SW at 16.1 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 67.09 | Total Depth (ft-bmp) | 91.2 | Water Column (ft) | 24.11 | Gallons in Well | 3.92 |
| Purge Start | 12:45 | Pump Intake (ft-bmp) | 88 | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 13:10 | Volumes Purged | 0.17 | Sample ID | AS-19-A07_051923 | Sampled by | Billy Cobern |
| Sample Time | 13:10 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:50 | 0 | 0 | 100 | 67.59 | 0.13 | 7.07 | 0.85 | 12.4 | 7.47 | 18.9 | 83.9 | Clear | None |
| 12:55 | 5 | 5 | 100 | 68.05 | 0.26 | 7.03 | 1.67 | 10.9 | 6.84 | 17.1 | 90.2 | Clear | None |
| 13:00 | 5 | 10 | 100 | 68.49 | 0.40 | 6.99 | 1.66 | 9.72 | 6.04 | 16.8 | 92.6 | Clear | None |
| 13:05 | 5 | 15 | 100 | 68.91 | 0.53 | 6.98 | 1.66 | 9.81 | 5.73 | 16.6 | 93.8 | Clear | None |
| 13:10 | 5 | 20 | 100 | 69.36 | 0.66 | 6.98 | 1.66 | 9.48 | 5.72 | 16.5 | 94.4 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|-------------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: <u>no</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>no</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|--------------------|
| Project Number | 30171056 | Well ID | MW-04-05(6) | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 78 °F, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 9.21 | Total Depth (ft-bmp) | 29.61 | Water Column (ft) | 20.40 |
| | | | | Gallons in Well | 3.31 |
| Purge Start | 14:45 | Pump Intake (ft-bmp) | 27.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:20 | Volumes Purged | 0.60 | Sample ID | MW-04-05(6)_052323 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 15:20 | Gallons Purged | 2 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:50 | 0 | 0 | 125 | 11.02 | 0.00 | 7.46 | 2.22 | 5.49 | 0.32 | 13.5 | -79 | Clear | None |
| 14:55 | 5 | 5 | 125 | 11.78 | 0.00 | 7.45 | 2.21 | 1.77 | 0.14 | 13.4 | -96 | Clear | None |
| 15:00 | 5 | 10 | 125 | 12.27 | 0.00 | 7.45 | 2.2 | 1.09 | 0.13 | 13.3 | -102.8 | Clear | None |
| 15:05 | 5 | 15 | 125 | 13.00 | 0.00 | 7.44 | 2.2 | 0.85 | 0.09 | 13.3 | -109 | Clear | None |
| 15:10 | 5 | 20 | 125 | 13.20 | 0.00 | 7.45 | 2.23 | 0.86 | 0.09 | 13.8 | -112.4 | Clear | None |
| 15:15 | 5 | 25 | 125 | 13.20 | 0.00 | 7.43 | 2.23 | 0.89 | 0.09 | 13.7 | -113.8 | Clear | None |
| 15:20 | 5 | 30 | 125 | 13.41 | 0.00 | 7.43 | 2.21 | 1.3 | 0.09 | 13.6 | -115.3 | Clear | None |

| | | | |
|-----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM; VOCs | 40 mL Glass | 6 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|---------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: _____ |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: _____ |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-12-12 | Date | 2/15/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 52.0 degrees F and Cloudy. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 5.68 | Total Depth (ft-bmp) | 17.2 | Water Column (ft) | 11.52 |
| | | | | Gallons in Well | 1.87 |
| Purge Start | 11:20 | Pump Intake (ft-bmp) | 15 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 11:55 | Volumes Purged | 0.49 | Sample ID | MW-12-12_021523 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 11:55 | Gallons Purged | | Replicate/Code No. | DUP-05_021523 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:20 | 0 | 0 | 100 | 5.68 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 11:25 | 5 | 5 | 100 | 6.20 | 0.13 | 7.74 | 0.71 | 23.4 | 1.06 | 9.9 | 32.4 | Clear | None |
| 11:30 | 5 | 10 | 100 | 6.86 | 0.26 | 7.81 | 0.698 | 18 | 0.83 | 9.9 | 31.3 | Clear | None |
| 11:35 | 5 | 15 | 100 | 7.22 | 0.40 | 7.82 | 0.699 | 15.2 | 0.62 | 10 | 32.1 | Clear | None |
| 11:40 | 5 | 20 | 100 | 7.65 | 0.53 | 7.81 | 0.71 | 12.3 | 0.57 | 10 | 35 | Clear | None |
| 11:45 | 5 | 25 | 100 | 7.99 | 0.66 | 7.76 | 0.72 | 9.6 | 0.53 | 10 | 36.9 | Clear | None |
| 11:50 | 5 | 30 | 100 | 8.41 | 0.79 | 7.73 | 0.73 | 9.45 | 0.52 | 10 | 38.9 | Clear | None |
| 11:55 | 5 | 35 | 100 | 8.80 | 0.92 | 7.69 | 0.74 | 9.21 | 0.49 | 10.1 | 40.6 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 4 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|---|-------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: no |
| Condition of Well: <u>Missing bolts</u> | Well Locked at Departure: no |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-12-12 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 61 °F, Windy, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 8.40 | Total Depth (ft-bmp) | 17.19 | Water Column (ft) | 8.79 |
| | | | | Gallons in Well | 1.43 |
| Purge Start | 10:40 | Pump Intake (ft-bmp) | 15.75 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 11:20 | Volumes Purged | 1.40 | Sample ID | MW-12-12_052423 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 11:20 | Gallons Purged | 2 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:45 | 0 | 0 | 150 | 9.90 | 0.00 | 7.52 | 0.79 | 3.03 | 0.38 | 11.4 | 34.7 | Clear | None |
| 10:50 | 5 | 5 | 125 | 10.42 | 0.00 | 7.52 | 0.77 | 3.06 | 0.21 | 11.5 | 29.8 | Clear | None |
| 10:55 | 5 | 10 | 125 | 11.09 | 0.00 | 7.58 | 0.78 | 2.6 | 0.15 | 11.5 | 26.6 | Clear | None |
| 11:00 | 5 | 15 | 125 | 11.61 | 0.00 | 7.57 | 0.79 | 3 | 0.15 | 11.5 | 24 | Clear | None |
| 11:05 | 5 | 20 | 125 | 12.08 | 0.00 | 7.54 | 0.8 | 1.99 | 0.14 | 11.5 | 23.4 | Clear | None |
| 11:10 | 5 | 25 | 125 | 12.53 | 0.00 | 7.52 | 0.81 | 3.09 | 0.14 | 11.4 | 23.2 | Clear | None |
| 11:15 | 5 | 30 | 125 | 12.79 | 0.00 | 7.5 | 0.81 | 2.84 | 0.15 | 11.4 | 23.5 | Clear | None |
| 11:20 | 5 | 35 | 125 | 13.04 | 0.00 | 7.49 | 0.82 | 3 | 0.15 | 11.5 | 23.8 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--------------------------|---------------------------------|
| Well Location: _____ | Well Locked at Arrival: _____ |
| Condition of Well: _____ | Well Locked at Departure: _____ |
| Well Completion: _____ | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-12-13 | Date | 2/15/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 48.0 degrees F and Cloudy. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 9.64 | Total Depth (ft-bmp) | 25.4 | Water Column (ft) | 15.76 |
| | | | | Gallons in Well | 2.56 |
| Purge Start | 13:40 | Pump Intake (ft-bmp) | 23 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 14:20 | Volumes Purged | 0.41 | Sample ID | MW-12-13_021523 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 14:20 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:40 | 0 | 0 | 100 | 9.64 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 13:45 | 5 | 5 | 100 | 10.02 | 0.13 | 7.65 | 0.79 | 10.8 | 7.92 | 7.8 | 50.6 | Clear | None |
| 13:50 | 5 | 10 | 100 | 10.43 | 0.26 | 7.58 | 0.78 | 8.13 | 6.87 | 8 | 54.7 | Clear | None |
| 13:55 | 5 | 15 | 100 | 10.88 | 0.40 | 7.54 | 0.75 | 5.65 | 5.87 | 8.1 | 60.1 | Clear | None |
| 14:00 | 5 | 20 | 100 | 11.23 | 0.53 | 7.52 | 0.74 | 4.96 | 5.51 | 8.3 | 62 | Clear | None |
| 14:05 | 5 | 25 | 100 | 11.60 | 0.66 | 7.5 | 0.74 | 4.72 | 5.03 | 8.4 | 62.9 | Clear | None |
| 14:10 | 5 | 30 | 100 | 11.92 | 0.79 | 7.49 | 0.74 | 4.93 | 4.68 | 8.4 | 62 | Clear | None |
| 14:15 | 5 | 35 | 100 | 12.25 | 0.92 | 7.49 | 0.74 | 4.52 | 4.61 | 8.4 | 61.8 | Clear | None |
| 14:20 | 5 | 40 | 100 | 12.49 | 1.06 | 7.49 | 0.73 | 4.2 | 4.59 | 8.4 | 61.5 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-12-13 | Date | 5/24/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 59.0 degrees F and Cloudy. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 11.51 | Total Depth (ft-bmp) | 23.5 | Water Column (ft) | 11.99 | Gallons in Well | 1.95 |
| Purge Start | 11:45 | Pump Intake (ft-bmp) | 22 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 12:50 | Volumes Purged | 1.03 | Sample ID | MW-12-13_052423 | Sampled by | Kaitlyn Hunt |
| Sample Time | | Gallons Purged | 2 | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:50 | 0 | 0 | 100 | 12.19 | 0.13 | 7.53 | 0.59 | 4.07 | 1.85 | 11.7 | 118 | Clear | None |
| 11:55 | 5 | 5 | 100 | 12.30 | 0.26 | 7.54 | 0.59 | 2.77 | 1.8 | 11.9 | 112.9 | Clear | None |
| 12:00 | 5 | 10 | 100 | 12.43 | 0.40 | 7.54 | 0.59 | 5.76 | 1.8 | 11.7 | 107.5 | Clear | None |
| 12:05 | 5 | 15 | 100 | 12.58 | 0.53 | 7.53 | 0.58 | 5.17 | 1.65 | 11.4 | 101.8 | Clear | None |
| 12:10 | 5 | 20 | 100 | 12.68 | 0.66 | 7.53 | 0.58 | 4.29 | 1.59 | 11.3 | 97.3 | Clear | None |
| 12:15 | 5 | 25 | 100 | 12.77 | 0.79 | 7.52 | 0.58 | 3.76 | 1.32 | 11.5 | 90.3 | Clear | None |
| 12:20 | 5 | 30 | 100 | 12.82 | 0.92 | 7.52 | 0.58 | 4.16 | 1.19 | 11.5 | 79.5 | Clear | None |
| 12:25 | 5 | 35 | 100 | 12.85 | 1.06 | 7.51 | 0.58 | 5.41 | 1.03 | 11.4 | 64 | Clear | None |
| 12:30 | 5 | 40 | 100 | 12.86 | 1.19 | 7.51 | 0.58 | 4.9 | 1.06 | 11.6 | 48.9 | Clear | None |
| 12:35 | 5 | 45 | 100 | 12.88 | 1.32 | 7.5 | 0.58 | 1.97 | 0.93 | 11.5 | 34.2 | Clear | None |
| 12:40 | 5 | 50 | 100 | 12.94 | 1.45 | 7.5 | 0.58 | 4.19 | 0.82 | 11.5 | 20.1 | Clear | None |
| 12:45 | 5 | 55 | 100 | 12.94 | 1.59 | 7.49 | 0.58 | 1.8 | 0.7 | 11.5 | 5.6 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments: Tablet deleted readings before 1100

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-12-21 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 65.92 | Total Depth (ft-bmp) | 78.04 | Water Column (ft) | 12.12 |
| | | | | Gallons in Well | 1.97 |
| Purge Start | 13:10 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 13:45 | Volumes Purged | | Sample ID | MW-12-21_021723 |
| | | | | Sampled by | Donald Richmond |
| Sample Time | 13:45 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:25 | 0 | 0 | 200 | 65.92 | 0.00 | 7 | 1.17 | 42.8 | 1.86 | 8.2 | -13.7 | Clear | None |
| 13:30 | 5 | 5 | 200 | 65.92 | 0.00 | 6.95 | 1.16 | 46.6 | 1.87 | 8 | -8.9 | Clear | None |
| 13:35 | 5 | 10 | 200 | 65.92 | 0.00 | 6.9 | 1.1 | | 1.6 | 5.6 | -2.8 | Clear | None |
| 13:35 | 5 | 10 | 200 | 65.92 | 0.00 | 6.9 | 1.1 | 55 | 1.6 | 5.6 | -2.8 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|-------------|--------|--------------|
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: _____ | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | MW-12-21 | Date | 5/19/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 64.4 degrees F and Clear. The wind is blowing SW at 16.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 64.40 | Total Depth (ft-bmp) | 78.1 | Water Column (ft) | 13.70 |
| | | | | Gallons in Well | 2.23 |
| Purge Start | 11:20 | Pump Intake (ft-bmp) | 75 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 12:15 | Volumes Purged | 0.65 | Sample ID | MW-12-21_051923 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 12:15 | Gallons Purged | | Replicate/ Code No. | DUP-05 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:25 | 0 | 0 | 100 | 64.75 | 0.13 | 6.91 | 1.85 | 19.2 | 4.78 | 17.1 | -18.9 | Clear | None |
| 11:30 | 5 | 5 | 100 | 64.95 | 0.26 | 6.89 | 1.84 | 18.3 | 3.07 | 17.5 | -24.2 | Clear | None |
| 11:35 | 5 | 10 | 100 | 65.15 | 0.40 | 6.87 | 1.83 | 14.8 | 2.21 | 17.7 | -30.1 | Clear | None |
| 11:40 | 5 | 15 | 100 | 65.34 | 0.53 | 6.86 | 1.83 | 14.6 | 1.67 | 17.9 | -33.5 | Clear | None |
| 11:45 | 5 | 20 | 100 | 65.52 | 0.66 | 6.86 | 1.83 | 11.7 | 1.32 | 18.1 | -36.1 | Clear | None |
| 11:50 | 5 | 25 | 100 | 65.70 | 0.79 | 6.86 | 1.84 | 10.2 | 1.16 | 181 | -38.1 | Clear | None |
| 11:55 | 5 | 30 | 100 | 65.89 | 0.92 | 6.86 | 1.85 | 9.7 | 1.01 | 17.9 | -41.5 | Clear | None |
| 12:00 | 5 | 35 | 100 | 66.07 | 1.06 | 6.85 | 1.85 | 9.62 | 0.88 | 18 | -43.5 | Clear | None |
| 12:05 | 5 | 40 | 100 | 66.07 | 1.19 | 6.85 | 1.85 | 9.34 | 0.8 | 18 | -45.4 | Clear | None |
| 12:10 | 5 | 45 | 100 | 66.21 | 1.32 | 6.85 | 1.85 | 9.07 | 0.79 | 18 | -47.2 | Clear | None |
| 12:15 | 5 | 50 | 100 | 66.35 | 1.45 | 6.85 | 1.85 | 8.79 | 0.77 | 18.1 | -48.7 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 6 | HCL |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | MW-13-22 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 21.0 degrees F and Mostly Cloudy. The wind is blowing NW at 11.4 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 69.25 | Total Depth (ft-bmp) | 96.15 | Water Column (ft) | 26.90 |
| | | | | Gallons in Well | 4.37 |
| Purge Start | 13:00 | Pump Intake (ft-bmp) | 93.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 13:40 | Volumes Purged | 0.24 | Sample ID | MW-13-22_021723 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 13:40 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:00 | 0 | 0 | 100 | 69.25 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 13:05 | 5 | 5 | 100 | 69.55 | 0.13 | 7.01 | 2.02 | 16.2 | 8.48 | 2.7 | 16.6 | Clear | None |
| 13:10 | 5 | 10 | 100 | 69.55 | 0.26 | 6.88 | 2.05 | 16.5 | 2.07 | 3.1 | 7.5 | Clear | None |
| 13:15 | 5 | 15 | 100 | 69.55 | 0.40 | 6.87 | 2.04 | 13.2 | 1.46 | 2.9 | 4.2 | Clear | None |
| 13:20 | 5 | 20 | 100 | 69.55 | 0.53 | 6.87 | 2.05 | 12.2 | 1.2 | 2.7 | -1.3 | Clear | None |
| 13:25 | 5 | 25 | 100 | 69.55 | 0.66 | 6.88 | 2.05 | 10.1 | 0.78 | 2.6 | -10.8 | Clear | None |
| 13:30 | 5 | 30 | 100 | 69.55 | 0.79 | 6.87 | 2.03 | 9.78 | 1.01 | 3.2 | -19.1 | Clear | None |
| 13:35 | 5 | 35 | 100 | 69.55 | 0.92 | 6.87 | 2.04 | 9.4 | 0.99 | 3.4 | -20.6 | Clear | None |
| 13:40 | 5 | 40 | 100 | 69.55 | 1.06 | 6.87 | 2.03 | 9.05 | 0.98 | 3.4 | -21.9 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| 1,4-Dioxane 522 | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|---|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-13-22 | Date | 5/19/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 64.4 degrees F and Clear. The wind is blowing SW at 16.1 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 67.52 | Total Depth (ft-bmp) | 96.15 | Water Column (ft) | 28.63 | Gallons in Well | 4.65 |
| Purge Start | 10:15 | Pump Intake (ft-bmp) | 93 | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 10:50 | Volumes Purged | 0.20 | Sample ID | MW-13-22_051923 | Sampled by | Billy Cobern |
| Sample Time | 10:50 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:20 | 0 | 0 | 100 | 67.79 | 0.13 | 7.04 | 2.03 | 37 | 5.93 | 19.9 | 7.8 | Clear | None |
| 10:25 | 5 | 5 | 100 | 67.79 | 0.26 | 6.83 | 2.03 | 16.7 | 2.74 | 17.8 | -1 | Clear | None |
| 10:30 | 5 | 10 | 100 | 67.79 | 0.40 | 6.81 | 2.03 | 12.2 | 1.69 | 17.2 | -2.5 | Clear | None |
| 10:35 | 5 | 15 | 100 | 67.79 | 0.53 | 6.81 | 2.02 | 10.7 | 1.52 | 17.4 | -3.4 | Clear | None |
| 10:40 | 5 | 20 | 100 | 67.79 | 0.66 | 6.81 | 2.01 | 9.09 | 1.4 | 17.5 | -4 | Clear | None |
| 10:45 | 5 | 25 | 100 | 67.79 | 0.79 | 6.81 | 2.01 | 8.78 | 1.42 | 17.5 | -4.5 | Clear | None |
| 10:50 | 5 | 30 | 100 | 67.79 | 0.92 | 6.81 | 2.01 | 8.57 | 1.39 | 17.6 | -5.1 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | MW-13-26 | Date | 5/20/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 50.0 degrees F and Cloudy. The wind is blowing W at 13.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 63.70 | Total Depth (ft-bmp) | 79.2 | Water Column (ft) | 15.50 |
| | | | | Gallons in Well | 2.52 |
| Purge Start | 10:20 | Pump Intake (ft-bmp) | 77 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 11:10 | Volumes Purged | 0.52 | Sample ID | MW-13-26_052023 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 11:10 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:25 | 0 | 0 | 100 | 63.85 | 0.13 | 7.2 | 1.05 | 11.1 | 2.61 | 12.5 | 33.6 | Clear | None |
| 10:30 | 5 | 5 | 100 | 63.85 | 0.26 | 7.08 | 1.05 | 15.6 | 0.93 | 12.5 | 29.6 | Clear | None |
| 10:35 | 5 | 10 | 100 | 63.85 | 0.40 | 7.04 | 1.06 | 19.2 | 0.65 | 12.4 | 25.4 | Clear | None |
| 10:40 | 5 | 15 | 100 | 63.85 | 0.53 | 7.02 | 1.06 | 17.7 | 0.5 | 12.4 | 18.8 | Clear | None |
| 10:45 | 5 | 20 | 100 | 63.85 | 0.66 | 7.01 | 1.07 | 14.3 | 0.48 | 12.3 | 12.2 | Clear | None |
| 10:50 | 5 | 25 | 100 | 63.85 | 0.79 | 7.01 | 1.07 | 12.4 | 0.44 | 12.3 | 6.6 | Clear | None |
| 10:55 | 5 | 30 | 100 | 63.85 | 0.92 | 7 | 1.08 | 11.3 | 0.33 | 12.3 | 1.1 | Clear | None |
| 11:00 | 5 | 35 | 100 | 63.85 | 1.06 | 7 | 1.09 | 10.2 | 0.37 | 12.3 | -3.5 | Clear | None |
| 11:05 | 5 | 40 | 100 | 63.85 | 1.19 | 7 | 1.1 | 9.81 | 0.36 | 12.3 | -8.3 | Clear | None |
| 11:10 | 5 | 45 | 100 | 63.85 | 1.32 | 7 | 1.11 | 9.92 | 0.36 | 12.3 | -10.1 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-13-27 | Date | 5/20/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 50.0 degrees F and Cloudy. The wind is blowing W/NW at 13.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 64.98 | Total Depth (ft-bmp) | 75.7 | Water Column (ft) | 10.72 |
| | | | | Gallons in Well | 1.74 |
| Purge Start | 07:35 | Pump Intake (ft-bmp) | 73 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 08:30 | Volumes Purged | 0.84 | Sample ID | MW-13-27_052023 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 08:30 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 07:40 | 0 | 0 | 100 | 65.05 | 0.13 | 6.82 | 1.9 | 10.3 | 0.63 | 12.9 | -13.8 | Clear | None |
| 07:45 | 5 | 5 | 100 | 65.02 | 0.26 | 6.82 | 1.92 | 16.8 | 0.59 | 12.8 | -17.2 | Clear | None |
| 07:50 | 5 | 10 | 100 | 65.02 | 0.40 | 6.82 | 1.94 | 23.8 | 0.64 | 12.6 | -20.4 | Clear | None |
| 07:55 | 5 | 15 | 100 | 65.02 | 0.53 | 6.82 | 1.94 | 29.3 | 0.5 | 12.5 | -21.6 | Clear | None |
| 08:00 | 5 | 20 | 100 | 65.02 | 0.66 | 6.82 | 1.94 | 24.1 | 0.59 | 12.5 | -22.5 | Clear | None |
| 08:05 | 5 | 25 | 100 | 65.02 | 0.79 | 6.82 | 1.95 | 16.9 | 0.74 | 12.4 | -23.3 | Clear | None |
| 08:10 | 5 | 30 | 100 | 65.02 | 0.92 | 6.82 | 1.95 | 12.3 | 0.78 | 12.3 | -24.1 | Clear | None |
| 08:15 | 5 | 35 | 100 | 65.02 | 1.06 | 6.82 | 1.95 | 10 | 0.67 | 12.2 | -24.8 | Clear | None |
| 08:20 | 5 | 40 | 100 | 65.02 | 1.19 | 6.82 | 1.96 | 9.7 | 0.74 | 12.1 | -25.6 | Clear | None |
| 08:25 | 5 | 45 | 100 | 65.02 | 1.32 | 6.82 | 1.96 | 9.34 | 0.75 | 12.1 | -26.2 | Clear | None |
| 08:30 | 5 | 50 | 100 | 65.02 | 1.45 | 6.82 | 1.96 | 9.41 | 0.79 | 12.1 | -27.2 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-13-29 | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 71 °F, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 35.42 | Total Depth (ft-bmp) | 76.3 | Water Column (ft) | 40.88 |
| | | | | Gallons in Well | 6.64 |
| Purge Start | 11:45 | Pump Intake (ft-bmp) | 72 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 12:25 | Volumes Purged | 0.11 | Sample ID | MW-13-29_052323 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 12:25 | Gallons Purged | 0.75 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:50 | 0 | 0 | 125 | 35.42 | 0.00 | 6.44 | 2.34 | 145 | 3.15 | 20.9 | 179.7 | Clear | None |
| 11:55 | 5 | 5 | 125 | 38.97 | 0.00 | 6.44 | 1.62 | 137 | 3.57 | 18 | 167.4 | Clear | None |
| 12:00 | 5 | 10 | 125 | 40.23 | 0.00 | 6.45 | 2.94 | 122 | 3.27 | 19 | 157 | Clear | None |
| 12:05 | 5 | 15 | 125 | 44.20 | 0.00 | 6.44 | 2.96 | 118 | 3.37 | 18.9 | 142.2 | Clear | None |
| 12:10 | 5 | 20 | 125 | 43.20 | 0.00 | 6.44 | 2.9 | 136 | 3.37 | 19 | 140.6 | Clear | None |
| 12:15 | 5 | 25 | 125 | 46.98 | 0.00 | 6.46 | 3 | 119 | 3.32 | 18.9 | 132.9 | Clear | None |
| 12:20 | 5 | 30 | 125 | 46.98 | 0.00 | 6.46 | 3.02 | 123 | 3.43 | 18.9 | 129.4 | Clear | None |
| 12:25 | 5 | 35 | 125 | 45.21 | 0.00 | 6.44 | 3 | 118 | 3.51 | 18.9 | 124.5 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------------|----------------|--------|--------------|
| TKN, total P | 250 mL Plastic | 1 | H2SO4 |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |
| Nitrogen, Nitrate-Nitrite | 125 mL Plastic | 1 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Plant 3 Well Locked at Arrival: yes

Condition of Well: Good condition Well Locked at Departure: yes

Well Completion: Stick-up Key Number To Well: NA

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | MW-13-30 | Date | 5/20/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 51.1 degrees F and Cloudy. The wind is blowing W at 12.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 65.65 | Total Depth (ft-bmp) | 79.8 | Water Column (ft) | 14.15 |
| | | | | Gallons in Well | 2.30 |
| Purge Start | 09:00 | Pump Intake (ft-bmp) | 77 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 09:50 | Volumes Purged | 0.57 | Sample ID | MW-13-30_052023 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 09:50 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:05 | 0 | 0 | 100 | 65.75 | 0.13 | 7.18 | 1.07 | 27.8 | 7.88 | 11.8 | 33.6 | Clear | None |
| 09:10 | 5 | 5 | 100 | 65.85 | 0.26 | 6.81 | 1.25 | 36.3 | 1.08 | 12.3 | -22.5 | Clear | None |
| 09:15 | 5 | 10 | 100 | 65.95 | 0.40 | 6.8 | 1.25 | 30.6 | 1.03 | 12.3 | -25.7 | Clear | None |
| 09:20 | 5 | 15 | 100 | 65.95 | 0.53 | 6.8 | 1.25 | 27.2 | 1.01 | 12.2 | -28.2 | Clear | None |
| 09:25 | 5 | 20 | 100 | 65.95 | 0.66 | 6.8 | 1.25 | 25.1 | 1.02 | 12.1 | -29.9 | Clear | None |
| 09:30 | 5 | 25 | 100 | 65.95 | 0.79 | 6.8 | 1.25 | 21.7 | 0.99 | 12 | -31 | Clear | None |
| 09:35 | 5 | 30 | 100 | 65.95 | 0.92 | 6.79 | 1.25 | 18.9 | 1.01 | 11.9 | -32.1 | Clear | None |
| 09:40 | 5 | 35 | 100 | 65.95 | 1.06 | 6.79 | 1.25 | 17.8 | 0.95 | 11.8 | -33.1 | Clear | None |
| 09:45 | 5 | 40 | 100 | 65.95 | 1.19 | 6.79 | 1.25 | 16.6 | 0.9 | 11.7 | -34.1 | Clear | None |
| 09:50 | 5 | 45 | 100 | 65.95 | 1.32 | 6.79 | 1.25 | 16.9 | 0.9 | 11.7 | -35.1 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-13-34 | Date | 2/17/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 64.97 | Total Depth (ft-bmp) | 79.75 | Water Column (ft) | 14.78 | Gallons in Well | 2.40 |
| Purge Start | 09:20 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 10:29 | Volumes Purged | | Sample ID | MW-13-34_021723 | Sampled by | Donald Richmond |
| Sample Time | 10:30 | Gallons Purged | | Replicate/ Code No. | DUP-04_021723 | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:50 | 0 | 0 | 200 | 64.97 | 0.00 | 7.2 | 1.36 | 47.7 | 1.51 | 7.3 | 107.9 | Clear | None |
| 09:55 | 5 | 5 | 200 | 64.97 | 0.00 | 7.22 | 1.39 | 47.8 | 0.88 | 7.6 | 85.4 | Clear | None |
| 10:00 | 5 | 10 | 200 | 64.97 | 0.00 | 7.17 | 1.43 | 72.5 | 0.4 | 8.1 | 58.2 | Clear | None |
| 10:05 | 5 | 15 | 200 | 64.97 | 0.00 | 7.15 | 1.48 | 121 | 0.22 | 7.9 | 30.4 | Clear | None |
| 10:10 | 5 | 20 | 200 | 64.97 | 0.00 | 7.11 | 1.53 | 119 | 0.17 | 8 | 16 | Clear | None |
| 10:15 | 5 | 25 | 200 | 64.97 | 0.00 | 7.06 | 1.59 | 118 | 0.16 | 7.8 | -4.5 | Clear | None |
| 10:20 | 5 | 30 | 200 | 64.97 | 0.00 | 7.05 | 1.6 | 113 | 0.17 | 8.4 | -15.9 | Clear | None |
| 10:25 | 5 | 35 | 200 | 64.97 | 0.00 | 7.03 | 1.62 | 119 | 0.16 | 8 | -26.7 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|-------------|--------|--------------|
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 6 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: _____ | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-13-34 | Date | 5/19/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 53.1 degrees F and Clear. The wind is blowing S/SE at 9.2 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 63.98 | Total Depth (ft-bmp) | 79.9 | Water Column (ft) | 15.92 |
| | | | | Gallons in Well | 2.59 |
| Purge Start | 09:10 | Pump Intake (ft-bmp) | 77 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 09:45 | Volumes Purged | 0.36 | Sample ID | MW-13-34_051923 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 09:45 | Gallons Purged | | Replicate/ Code No. | MW-13-34_051923 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:15 | 0 | 0 | 100 | 64.24 | 0.13 | 7.24 | 2.24 | 28.7 | 5.83 | 17.2 | -20.7 | Clear | None |
| 09:20 | 5 | 5 | 100 | 64.24 | 0.26 | 7.09 | 2.28 | 25 | 2.07 | 15.3 | -49.7 | Clear | None |
| 09:25 | 5 | 10 | 100 | 64.24 | 0.40 | 7.08 | 2.28 | 20.1 | 1 | 15 | -64.3 | Clear | None |
| 09:30 | 5 | 15 | 100 | 64.24 | 0.53 | 7.06 | 2.31 | 17.8 | 1 | 14.9 | -73.4 | Clear | None |
| 09:35 | 5 | 20 | 100 | 64.24 | 0.66 | 7.05 | 2.33 | 15.2 | 1.02 | 15 | -78.5 | Clear | None |
| 09:40 | 5 | 25 | 100 | 64.24 | 0.79 | 7.05 | 2.33 | 15 | 0.98 | 14.9 | -79.2 | Clear | None |
| 09:45 | 5 | 30 | 100 | 64.24 | 0.92 | 7.05 | 2.33 | 14.8 | 0.99 | 15 | -80 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 9 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-13-36R | Date | 2/14/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 55.9 degrees F and Clear. The wind is blowing S/SE at 15.0 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 4.68 | Total Depth (ft-bmp) | 12.6 | Water Column (ft) | 7.92 |
| | | | | Gallons in Well | 1.29 |
| Purge Start | 15:30 | Pump Intake (ft-bmp) | 10.1 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 16:10 | Volumes Purged | 1.64 | Sample ID | MW-13-36R_021423 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 16:05 | Gallons Purged | | Replicate/Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:35 | 0 | 0 | 200 | 4.68 | 0.26 | 11.79 | 1.828 | 26.9 | 0.51 | 7.2 | -316.8 | Clear | None |
| 15:40 | 5 | 5 | 200 | 4.68 | 0.53 | 11.81 | 1.857 | 13.8 | 0.6 | 7.2 | -341.9 | Clear | None |
| 15:45 | 5 | 10 | 200 | 4.68 | 0.79 | 11.86 | 1.878 | 5.63 | 0.81 | 7.2 | -363.3 | Clear | None |
| 15:50 | 5 | 15 | 200 | 4.68 | 1.06 | 11.92 | 1.907 | 3.59 | 0.84 | 7.3 | -378.5 | Clear | None |
| 15:55 | 5 | 20 | 200 | 4.68 | 1.32 | 11.94 | 1.91 | 3.2 | 0.6 | 7.3 | -384.3 | Clear | None |
| 16:00 | 5 | 25 | 200 | 4.68 | 1.59 | 11.97 | 1.909 | 3.02 | 0.58 | 7.3 | -385.7 | Clear | None |
| 16:05 | 5 | 30 | 200 | 4.68 | 1.85 | 11.98 | 1.914 | 2.59 | 0.56 | 7.3 | -389.6 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: See figure | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: 6000B |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-13-36R | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 61 °F, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 6.94 | Total Depth (ft-bmp) | 12.62 | Water Column (ft) | 5.68 |
| | | | | Gallons in Well | 0.92 |
| Purge Start | 11:45 | Pump Intake (ft-bmp) | 11 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 12:35 | Volumes Purged | 2.72 | Sample ID | MW-13-36R_052423 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 12:35 | Gallons Purged | 2.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:50 | 0 | 0 | 125 | 6.98 | 0.00 | 10.13 | 0.489 | 2.15 | 5.18 | 13.6 | 90.2 | Clear | None |
| 11:55 | 5 | 5 | 125 | 6.98 | 0.00 | 10.12 | 0.487 | 2.96 | 4.66 | 13.6 | 85.9 | Clear | None |
| 12:00 | 5 | 10 | 125 | 6.98 | 0.00 | 11.44 | 0.77 | 4.44 | 2.08 | 13.1 | 49.8 | Clear | None |
| 12:05 | 5 | 15 | 125 | 6.98 | 0.00 | 11.71 | 1.12 | 4.4 | 0.61 | 12.8 | 22.6 | Clear | None |
| 12:10 | 5 | 20 | 125 | 6.98 | 0.00 | 11.84 | 1.26 | 4.65 | 0.24 | 12.5 | 5.2 | Clear | None |
| 12:15 | 5 | 25 | 125 | 6.98 | 0.00 | 11.94 | 1.31 | 4.84 | 0.15 | 12.7 | -14.1 | Clear | None |
| 12:20 | 5 | 30 | 125 | 6.98 | 0.00 | 11.97 | 1.32 | 2.6 | 0.15 | 12.5 | -23.8 | Clear | None |
| 12:25 | 5 | 35 | 125 | 6.98 | 0.00 | 12 | 1.34 | 3.09 | 0.14 | 12.3 | -33.2 | Clear | None |
| 12:30 | 5 | 40 | 125 | 6.98 | 0.00 | 12.02 | 1.35 | 2.23 | 0.14 | 12.3 | -39.7 | Clear | None |
| 12:35 | 5 | 45 | 125 | 6.98 | 0.00 | 12.06 | 1.37 | 2.78 | 0.14 | 12.3 | -42.7 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 6</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|--|
| Location ID: | MW-13-43 | Date(s): | 2023-05-16 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 2 |
| Weather(°F): | CLEAR, T:74.21 °F, rH:35%, Clouds: 0%, Wind:13.8mph W-SW | | | Field Technician: | Austin Westhuis | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 55.43 | Total Depth (ft-bmp): | 77.7 | Water Column(ft): | 22.27 | Liters in Well: 3.62 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Dedicated Bladder |
| Purge Start Time: | 14:10 | Total Volume Purged (liters): | 7 | Sample ID: | MW-13-43 | Sample Time: 14:40 |
| Purge End Time: | 14:40 | Well Volumes Purged (total): | 1.93 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: YSI ProPlus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 14:15 | 0 | 200 | mL/min | 55.43 | 7.18 | 0.91 | 382 | 11.94 | 16.9 | -43.3 | Clear | No Odor |
| 14:20 | 5 | 200 | mL/min | 55.43 | 7.12 | 2.45 | 331 | 11.2 | 16.7 | 128.1 | Clear | No Odor |
| 14:25 | 10 | 200 | mL/min | 55.43 | 7.15 | 2.64 | 309 | 11.12 | 16.7 | 129.1 | Clear | No Odor |
| 14:30 | 15 | 200 | mL/min | 55.43 | 7.22 | 2.69 | 259 | 11.06 | 16.7 | 129.9 | Clear | No Odor |
| 14:35 | 20 | 200 | mL/min | 55.43 | 7.22 | 2.69 | 214 | 10.57 | 17.1 | 129.9 | Clear | No Odor |
| 14:40 | 25 | 200 | mL/min | 55.43 | 7.24 | 2.74 | 297 | 10.51 | 17 | 128.2 | Clear | No Odor |

| Constituent Sampled | Container | Number | Preservative |
|------------------------|-------------|--------|--------------|
| 1,4-Dioxane 8260B-SIMS | Clear Glass | 3 | HCl |

Comments: Turbidity did not stabilize near the active biosparge transect.

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|---------------------------------|-------------------|
| Location ID: | MW-13-45 | Date(s): | 2023-05-16 | Work Order(s): | Q2 2023 GWS (Q, SA event) | | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: | 2 |
| Weather(°F): | CLEAR, T:76.73 °F, rH:33%, Clouds: 0%, Wind:16.11mph W | | | Field Technician: | Austin Westhuis | | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: | PVC |
| Static Water Level (ft-bmp): | 64.51 | Total Depth (ft-bmp): | 78.32 | Water Column(ft): | 13.81 | Liters in Well: | 2.24 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: | Dedicated Bladder |
| Purge Start Time: | 15:50 | Total Volume Purged (liters): | 9 | Sample ID: | MW-13-45_051623 | Sample Time: | 16:30 |
| Purge End Time: | 16:30 | Well Volumes Purged (total): | 4.02 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: | YSI ProPlus / NA |
| Scope of work completed? | Yes | | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^c) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 15:55 | 0 | 200 | mL/min | 64.51 | 6.4 | 1.43 | 22.6 | 8.05 | 15 | 0.1 | Clear | No Odor |
| 16:00 | 5 | 200 | mL/min | 64.51 | 6.47 | 1.44 | 11.58 | 7.07 | 15 | -15.6 | Clear | No Odor |
| 16:05 | 10 | 200 | mL/min | 64.53 | 6.49 | 1.44 | 7.54 | 6.58 | 15.1 | -22.2 | Clear | No Odor |
| 16:10 | 15 | 200 | mL/min | 64.53 | 6.52 | 1.43 | 5.63 | 6.52 | 15.1 | -29.3 | Clear | No Odor |
| 16:15 | 20 | 200 | mL/min | 64.54 | 6.52 | 1.43 | 5.11 | 5.77 | 15 | -32 | Clear | No Odor |
| 16:20 | 25 | 200 | mL/min | 64.54 | 6.54 | 1.43 | 4.89 | 5.71 | 15.1 | -38.4 | Clear | No Odor |
| 16:25 | 30 | 200 | mL/min | 64.54 | 6.54 | 1.43 | 4.39 | 5.68 | 15.1 | -39 | Clear | No Odor |
| 16:30 | 35 | 200 | mL/min | 64.54 | 6.54 | 1.43 | 4.29 | 5.61 | 15 | -41.1 | Clear | No Odor |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8260B-SIMS | Clear Glass | 3 | HCl |

Comments: Turbidity did not stabilize near the active biosparge transect.

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|--|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-13-48 | Date | 5/19/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 53.1 degrees F and Clear. The wind is blowing S/SE at 9.2 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 55.58 | Total Depth (ft-bmp) | 73.25 | Water Column (ft) | 17.67 | Gallons in Well | 2.87 |
| Purge Start | 08:05 | Pump Intake (ft-bmp) | 70 | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 08:45 | Volumes Purged | 0.37 | Sample ID | MW-13-48 | Sampled by | Billy Cobern |
| Sample Time | 08:45 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 08:10 | 0 | 0 | 100 | 55.88 | 0.13 | 6.79 | 2.6 | 21.2 | 0.63 | 14.9 | 207.1 | Clear | None |
| 08:15 | 5 | 5 | 100 | 55.88 | 0.26 | 6.78 | 2.59 | 17.3 | 0.61 | 15.2 | 206.1 | Clear | None |
| 08:20 | 5 | 10 | 100 | 55.88 | 0.40 | 6.78 | 2.58 | 15.4 | 0.65 | 15.3 | 205.4 | Clear | None |
| 08:25 | 5 | 15 | 100 | 55.88 | 0.53 | 6.78 | 2.59 | 12.1 | 0.65 | 15.5 | 204.7 | Clear | None |
| 08:30 | 5 | 20 | 100 | 55.88 | 0.66 | 6.78 | 2.6 | 10.3 | 0.63 | 15.6 | 204.2 | Clear | None |
| 08:35 | 5 | 25 | 100 | 55.88 | 0.79 | 6.78 | 2.59 | 9.84 | 0.59 | 15.7 | 203.6 | Clear | None |
| 08:40 | 5 | 30 | 100 | 55.88 | 0.92 | 6.78 | 2.6 | 9.57 | 0.65 | 15.8 | 203.1 | Clear | None |
| 08:45 | 5 | 35 | 100 | 55.88 | 1.06 | 6.78 | 2.6 | 9.49 | 0.63 | 15.7 | 202.6 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-14-58R | Date | 2/15/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 51.1 degrees F and Mostly Cloudy. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 13.17 | Total Depth (ft-bmp) | 29.61 | Water Column (ft) | 16.44 |
| | | | | Gallons in Well | 2.67 |
| Purge Start | 12:45 | Pump Intake (ft-bmp) | 27.11 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 13:30 | Volumes Purged | 0.89 | Sample ID | MW-14-58R_021523 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 13:25 | Gallons Purged | | Replicate/Code No. | Dup-01_021523 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:50 | 0 | 0 | 200 | 13.17 | 0.26 | 7.26 | 2.777 | 22.6 | 1.21 | 12.9 | -112.5 | Clear | None |
| 12:55 | 5 | 5 | 200 | 13.17 | 0.53 | 7.2 | 2.786 | 15.8 | 0.21 | 12.9 | -131.5 | Clear | None |
| 13:00 | 5 | 10 | 200 | 13.17 | 0.79 | 7.18 | 2.793 | 11.9 | 0.17 | 13 | -149 | Clear | None |
| 13:05 | 5 | 15 | 200 | 13.17 | 1.06 | 7.02 | 2.834 | 6.98 | 0.09 | 13 | -154.9 | Clear | None |
| 13:10 | 5 | 20 | 200 | 13.17 | 1.32 | 7.01 | 2.842 | 7.01 | 0.07 | 13.1 | -162.3 | Clear | None |
| 13:15 | 5 | 25 | 200 | 13.17 | 1.59 | 7.01 | 2.845 | 5.91 | 0.07 | 13 | -165.2 | Clear | None |
| 13:20 | 5 | 30 | 200 | 13.17 | 1.85 | 7.01 | 2.841 | 5.43 | 0.07 | 13 | -173.6 | Clear | None |
| 13:25 | 5 | 35 | 200 | 13.17 | 2.11 | 7.01 | 2.847 | 4.93 | 0.07 | 12.9 | -175.1 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| VOCs | 40 mL Glass | 6 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>2035</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|--|
| Location ID: | MW-14-58R | Date(s): | 2023-05-16 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 2 |
| Weather(°F): | CLEAR, T:76.33 °F, rH:33%, Clouds: 0%, Wind:16.11mph W | | | Field Technician: | NA | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 12.83 | Total Depth (ft-bmp): | 15.35 | Water Column(ft): | 2.52 | Liters in Well: 0.41 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 10000 | Sample ID: | NA | Sample Time: NA |
| Purge End Time: | 16:25 | Well Volumes Purged (total): | 24,390.24 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q,YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^c) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 15:40 | 0 | 200 | mL/min | 12.88 | 7.45 | 3.05 | 1.01 | 1.32 | 13.9 | 200.9 | Clear | No Odor |
| 15:45 | 5 | 200 | mL/min | 12.88 | 7.51 | 3.07 | 0.02 | 0.6 | 13.9 | 191.1 | Clear | No Odor |
| 15:50 | 10 | 200 | mL/min | 12.88 | 7.53 | 3.03 | 0.47 | 0.72 | 13.9 | 185.4 | Clear | No Odor |
| 15:55 | 15 | 200 | mL/min | 12.88 | 7.52 | 3.03 | 1.48 | 0.45 | 14 | 181.7 | Clear | No Odor |
| 16:00 | 20 | 200 | mL/min | 12.88 | 7.26 | 3.08 | 1.46 | 0.72 | 14.2 | 154.4 | Clear | No Odor |
| 16:05 | 25 | 200 | mL/min | 12.88 | 6.98 | 3.1 | 0.82 | 0.16 | 14.2 | 120.7 | Clear | No Odor |
| 16:10 | 30 | 200 | mL/min | 12.88 | 6.98 | 3.1 | 0.67 | 0.13 | 14.2 | 109.6 | Clear | No Odor |
| 16:15 | 35 | 200 | mL/min | 12.88 | 6.98 | 3.1 | 0.36 | 0.09 | 14.3 | 102.4 | Clear | No Odor |
| 16:20 | 40 | 200 | mL/min | 12.88 | 6.98 | 3.09 | 1 | 0.08 | 14.4 | 96.9 | Clear | No Odor |
| 16:25 | 45 | 200 | mL/min | 12.88 | 6.98 | 3.09 | 1.27 | 0.16 | 14.2 | 92.5 | Clear | No Odor |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| VOCs | 40 mL Glass | 3 | HCL |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|---|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-14-61 | Date | 5/17/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 50.0 degrees F and Clear. The wind is blowing E/NE at 10.3 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 65.87 | Total Depth (ft-bmp) | 77.4 | Water Column (ft) | 11.53 | Gallons in Well | 1.87 |
| Purge Start | 11:25 | Pump Intake (ft-bmp) | 75 | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 12:20 | Volumes Purged | 0.78 | Sample ID | MW-14-61_051723 | Sampled by | Billy Cobern |
| Sample Time | 12:20 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:30 | 0 | 0 | 100 | 66.11 | 0.13 | 7.28 | 2.62 | 36.7 | 6.65 | 13.9 | 226.4 | Clear | None |
| 11:35 | 5 | 5 | 100 | 66.17 | 0.26 | 7.12 | 2.66 | 39.1 | 4.21 | 14 | 230.5 | Clear | None |
| 11:40 | 5 | 10 | 100 | 66.19 | 0.40 | 7.1 | 2.67 | 33.4 | 4.01 | 14 | 231.5 | Clear | None |
| 11:45 | 5 | 15 | 100 | 66.19 | 0.53 | 7.06 | 2.69 | 28.7 | 2.92 | 13.8 | 234.5 | Clear | None |
| 11:50 | 5 | 20 | 100 | 66.19 | 0.66 | 7.06 | 2.7 | 28.8 | 2.69 | 13.8 | 235.5 | Clear | None |
| 11:55 | 5 | 25 | 100 | 66.19 | 0.79 | 7.1 | 2.68 | 25.9 | 3.75 | 13.6 | 237.4 | Clear | None |
| 12:00 | 5 | 30 | 100 | 66.19 | 0.92 | 7.12 | 2.66 | 23.8 | 4.17 | 13.8 | 239.5 | Clear | None |
| 12:05 | 5 | 35 | 100 | 66.19 | 1.06 | 7.08 | 2.68 | 22.8 | 3.13 | 13.9 | 241.2 | Clear | None |
| 12:10 | 5 | 40 | 100 | 66.19 | 1.19 | 7.03 | 2.7 | 22.4 | 2.11 | 14 | 240 | Clear | None |
| 12:15 | 5 | 45 | 100 | 66.19 | 1.32 | 7.03 | 2.71 | 20.8 | 2.07 | 14 | 239.7 | Clear | None |
| 12:20 | 5 | 50 | 100 | 66.19 | 1.45 | 7.03 | 2.7 | 21.1 | 2.11 | 14 | 239.1 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|----------------------------|----------------|--------|--------------|
| Nitrate | 125 mL Plastic | 1 | None |
| TKN/Total Phosphorus | 250 mL Plastic | 1 | H2SO4 |
| 1,4-Dioxane 8270D SIM,VOCs | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-14-67 | Date | 2/14/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 57.0 degrees F and Clear. The wind is blowing S at 11.4 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 4.40 | Total Depth (ft-bmp) | 20.83 | Water Column (ft) | 16.43 |
| | | | | Gallons in Well | 2.67 |
| Purge Start | 14:30 | Pump Intake (ft-bmp) | 18.33 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:15 | Volumes Purged | 0.89 | Sample ID | MW-14-67_021423 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 15:10 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:35 | 0 | 0 | 200 | 4.40 | 0.26 | 7.38 | 1.326 | 3.17 | 2.65 | 9.8 | -145.5 | Clear | None |
| 14:40 | 5 | 5 | 200 | 4.40 | 0.53 | 7.29 | 1.339 | 2.58 | 1.94 | 9.8 | -177.9 | Clear | None |
| 14:45 | 5 | 10 | 200 | 4.40 | 0.79 | 7.28 | 1.342 | 2.12 | 1.68 | 10 | -189.6 | Clear | None |
| 14:50 | 5 | 15 | 200 | 4.40 | 1.06 | 7.29 | 1.344 | 1.91 | 1.48 | 10 | -197.2 | Clear | None |
| 14:55 | 5 | 20 | 200 | 4.40 | 1.32 | 7.27 | 1.362 | 1.65 | 1.12 | 10 | -208.7 | Clear | None |
| 15:00 | 5 | 25 | 200 | 4.40 | 1.59 | 7.23 | 1.364 | 1.47 | 0.76 | 10 | -218.4 | Clear | None |
| 15:05 | 5 | 30 | 200 | 4.40 | 1.85 | 7.22 | 1.363 | 1.41 | 0.73 | 10.1 | -220.9 | Clear | None |
| 15:10 | 5 | 35 | 200 | 4.40 | 2.11 | 7.22 | 1.368 | 1.23 | 0.71 | 10.1 | -222.6 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-14-70 | Date | 2/15/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 51.1 degrees F and Mostly Cloudy. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 9.79 | Total Depth (ft-bmp) | 23.1 | Water Column (ft) | 13.31 |
| | | | | Gallons in Well | 2.16 |
| Purge Start | 12:30 | Pump Intake (ft-bmp) | 20.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 13:15 | Volumes Purged | 0.55 | Sample ID | MW-14-70_021523 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 13:15 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:30 | 0 | 0 | 100 | 9.79 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 12:35 | 5 | 5 | 100 | 10.11 | 0.13 | 7.34 | 1.5 | 11.8 | 1.51 | 9.6 | 65.2 | Clear | None |
| 12:40 | 5 | 10 | 100 | 10.11 | 0.26 | 7.37 | 1.51 | 9.9 | 0.81 | 9.5 | 64.5 | Clear | None |
| 12:45 | 5 | 15 | 100 | 10.11 | 0.40 | 7.38 | 1.51 | 8.93 | 0.75 | 9.3 | 63.8 | Clear | None |
| 12:50 | 5 | 20 | 100 | 10.11 | 0.53 | 7.38 | 1.51 | 7.83 | 0.56 | 9.1 | 63.3 | Clear | None |
| 12:55 | 5 | 25 | 100 | 10.11 | 0.66 | 7.37 | 1.51 | 7.34 | 0.64 | 9.2 | 62.8 | Clear | None |
| 13:00 | 5 | 30 | 100 | 10.11 | 0.79 | 7.35 | 1.52 | 7.17 | 0.79 | 9.5 | 62.8 | Clear | None |
| 13:05 | 5 | 35 | 100 | 10.11 | 0.92 | 7.35 | 1.52 | 7.67 | 0.57 | 9.4 | 62.1 | Clear | None |
| 13:10 | 5 | 40 | 100 | 10.11 | 1.06 | 7.34 | 1.51 | 7.2 | 0.55 | 9.5 | 62 | Clear | None |
| 13:15 | 5 | 45 | 100 | 10.11 | 1.19 | 7.34 | 1.51 | 7.48 | 0.52 | 9.5 | 62 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|-------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: yes |
| Well Completion: <u>Stick-up</u> | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | MW-15-72 | Date | 5/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 48.9 degrees F and Clear. The wind is blowing NE at 12.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 56.70 | Total Depth (ft-bmp) | 70.35 | Water Column (ft) | 13.65 |
| | | | | Gallons in Well | 2.22 |
| Purge Start | 10:20 | Pump Intake (ft-bmp) | 67.85 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 10:55 | Volumes Purged | 0.83 | Sample ID | MW-15-72_051723 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 10:50 | Gallons Purged | 1.85 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:25 | 0 | 0 | 200 | 56.70 | 0.26 | 6.88 | 1.09 | 24.4 | 5.17 | 14.2 | -49.3 | Clear | None |
| 10:30 | 5 | 5 | 200 | 56.70 | 0.53 | 6.87 | 1.11 | 14.3 | 4.66 | 14.2 | -59.8 | Clear | None |
| 10:35 | 5 | 10 | 200 | 56.70 | 0.79 | 6.87 | 1.12 | 5.33 | 3.88 | 14.2 | -74.1 | Clear | None |
| 10:40 | 5 | 15 | 200 | 56.70 | 1.06 | 6.86 | 1.13 | 4.12 | 3.42 | 14.2 | -77.8 | Clear | None |
| 10:45 | 5 | 20 | 200 | 56.70 | 1.32 | 6.86 | 1.13 | 3.69 | 3.35 | 14.2 | -81.1 | Clear | None |
| 10:50 | 5 | 25 | 200 | 56.70 | 1.59 | 6.86 | 1.13 | 3.41 | 3.31 | 14.1 | -83.7 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|------------------------|-------------|--------|--------------|
| 1,4-Dioxane 8260B-SIMS | 40 mL Glass | 3 | HCL |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|-----------------------------|------------------------|----------------------|----------------------|--------------------|----------------------|-----------------|-----------------|
| Project Number | 30171056 | Well ID | MW-16-74 | Date | 5/17/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 64.50 | Total Depth (ft-bmp) | 73.68 | Water Column (ft) | 9.18 | Gallons in Well | 1.49 |
| Purge Start | 10:00 | Pump Intake (ft-bmp) | 68.5 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 11:00 | Volumes Purged | | Sample ID | MW-16-74_051723 | Sampled by | Donald Richmond |
| Sample Time | 11:00 | Gallons Purged | | Replicate/Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:20 | 0 | 0 | 200 | 64.50 | 0.00 | 6.72 | 1.85 | 714 | 0.31 | 14.1 | 29.3 | Gray | None |
| 10:20 | 0 | 0 | 200 | 64.50 | 1.06 | 6.72 | 1.85 | 714 | 0.31 | 14.1 | 29.3 | Gray | None |
| 10:25 | 5 | 5 | 200 | 64.50 | 0.00 | 6.71 | 1.85 | 584 | 0.53 | 14.2 | 26.8 | Gray | None |
| 10:25 | 5 | 5 | 200 | 64.50 | 1.32 | 6.71 | 1.85 | 584 | 0.53 | 14.2 | 26.8 | Gray | None |
| 10:30 | 5 | 10 | 200 | 64.50 | 0.00 | 6.71 | 1.85 | 478 | 0.3 | 14.3 | 22 | Gray | None |
| 10:30 | 5 | 10 | 200 | 64.50 | 1.59 | 6.71 | 1.85 | 478 | 0.3 | 14.3 | 22 | Gray | None |
| 10:35 | 5 | 15 | 200 | 64.50 | 0.00 | 6.71 | 1.85 | 368 | 0.28 | 14.2 | 20.1 | Gray | None |
| 10:35 | 5 | 15 | 200 | 64.50 | 1.85 | 6.71 | 1.85 | 368 | 0.28 | 14.2 | 20.1 | Gray | None |
| 10:40 | 5 | 20 | 200 | 64.50 | 0.00 | 6.71 | 1.85 | 306 | 0.33 | 14.2 | 17.8 | Gray | None |
| 10:40 | 5 | 20 | 200 | 64.50 | 2.11 | 6.71 | 1.85 | 306 | 0.33 | 14.2 | 17.8 | Gray | None |
| 10:45 | 5 | 25 | 200 | 64.50 | 0.00 | 6.71 | 1.85 | 275 | 0.29 | 14.4 | 15.4 | Gray | None |
| 10:45 | 5 | 25 | 200 | 64.50 | 2.38 | 6.71 | 1.85 | 275 | 0.29 | 14.4 | 15.4 | Gray | None |
| 10:50 | 5 | 30 | 200 | 64.50 | 0.00 | 6.71 | 1.85 | 235 | 0.28 | 14.3 | 13 | Gray | None |
| 10:50 | 5 | 30 | 200 | 64.50 | 2.64 | 6.71 | 1.85 | 235 | 0.28 | 14.3 | 13 | Gray | None |
| 10:55 | 5 | 35 | 200 | 64.50 | 0.00 | 6.71 | 1.85 | 213 | 0.27 | 14.3 | 12.4 | Gray | None |
| 10:55 | 5 | 35 | 200 | 64.50 | 2.91 | 6.71 | 1.85 | 213 | 0.27 | 14.3 | 12.4 | Gray | None |

| | | | |
|-----------------------|-------------|--------|--------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|
| Location ID: | MW-16-75 | Date(s): | 2023-05-16 | Work Order(s): | Q2 2023 GWS (Q, SA event) |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI |
| Weather(°F): | CLEAR, T:16.88 °C, rH:40%, Clouds: 0%, Wind:0m/s N | | | Field Technician: | Donald Richmond |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (m-bgs): | - | Casing Diameter (in): | 2.00 |
| Static Water Level (m-bmp): | 60.78 | Total Depth (m-bmp): | 74.45 | Water Column(m): | 13.670000000000002 |
| Depth to Product (m-bmp): | NA | Pump Intake Depth(m-bmp): | NA | Purge Method: | Low Flow |
| Purge Start Time: | NA | Total Volume Purged (liters): | 12 | Sample ID: | MW-16-75 |
| Purge End Time: | 14:00 | Well Volumes Purged (total): | 0.43 | Replicate Type / Replicate ID: | NA / NA |
| Scope of work completed? | Yes | | | | |
| Well Casing Material: | PVC | | | | |
| Liters in Well: | 27.71 | | | | |
| Purging Equipment: | Dedicated Bladder | | | | |
| Sample Time: | 14:00 | | | | |
| Water Quality Meter/ ID: | Hach 2100Q, YSI Pro Plus / 3690, 5943 | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^c) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 13:05 | 0 | 200 | mL/min | 60.78 | 6.89 | 1.72 | 10.6 | 2.12 | 16.9 | 160 | Clear | No Odor |
| 13:10 | 5 | 200 | mL/min | 60.78 | 6.78 | 1.84 | 3.9 | 0.92 | 18.1 | 116.2 | Clear | No Odor |
| 13:15 | 10 | 200 | mL/min | 60.78 | 6.78 | 1.94 | 3.02 | 0.47 | 18.5 | 65.5 | Clear | No Odor |
| 13:20 | 15 | 200 | mL/min | 60.78 | 6.78 | 1.97 | 2.43 | 0.39 | 19.1 | 33.7 | Clear | No Odor |
| 13:25 | 20 | 200 | mL/min | 60.78 | 6.78 | 1.98 | 38.4 | 0.35 | 19.8 | 12.9 | Clear | No Odor |
| 13:30 | 25 | 200 | mL/min | 60.78 | 6.78 | 2.04 | 114 | 0.33 | 19.3 | -4.6 | Clear | No Odor |
| 13:35 | 30 | 200 | mL/min | 60.78 | 6.78 | 2.04 | 106 | 0.32 | 19.4 | -11.2 | Clear | No Odor |
| 13:40 | 35 | 200 | mL/min | 60.78 | 6.79 | 2.05 | 91.9 | 0.29 | 19.9 | -19.9 | Clear | No Odor |
| 13:45 | 40 | 200 | mL/min | 60.78 | 6.79 | 2.04 | 79.3 | 0.28 | 20 | -26.1 | Clear | No Odor |
| 13:50 | 45 | 200 | mL/min | 60.78 | 6.8 | 2.03 | 60.8 | 0.26 | 20 | -33.2 | Clear | No Odor |
| 13:55 | 50 | 200 | mL/min | 60.78 | 6.8 | 2.04 | 57.8 | 0.26 | 20.6 | -37.2 | Clear | No Odor |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4 D | Clear Glass | 3 | HCl |

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

- ft-bmp = feet below measuring point
- in = inches
- ft = feet
- mL/min = milliliters per minute
- uS/cm = microSiemens per centimeter
- NTU = Nephelometric Turbidity Unit
- mg/L = milligrams per liter
- S.U = standard units
- mS/cm = milli

Groundwater Sampling Form



| | | | | | | |
|------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|---|
| Location ID: | MW-16-77 | Date(s): | 2023-05-17 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 2 |
| Weather(°F): | CLEAR, T:16.88 °C, rH:40%, Clouds: 0%, Wind:0m/s N | | | Field Technician: | Donald Richmond | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (m-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (m-bmp): | 59.8 | Total Depth (m-bmp): | 73.98 | Water Column(m): | 14.180000000000007 | Liters in Well: 28.74 |
| Depth to Product (m-bmp): | NA | Pump Intake Depth(m-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Dedicated Bladder |
| Purge Start Time: | NA | Total Volume Purged (liters): | 12 | Sample ID: | MW-16-77_051723 | Sample Time: 09:15 |
| Purge End Time: | 09:15 | Well Volumes Purged (total): | 0.42 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 08:30 | 0 | 200 | mL/min | 59.8 | 6.84 | 3.04 | 15.7 | 1.46 | 11.8 | 61.3 | Clear | No Odor |
| 08:35 | 5 | 200 | mL/min | 59.8 | 6.94 | 3.03 | 16 | 2.7 | 11.3 | 59.1 | Clear | No Odor |
| 08:40 | 10 | 200 | mL/min | 59.8 | 6.94 | 3.03 | 16.9 | 1.86 | 11.3 | 59 | Clear | No Odor |
| 08:45 | 15 | 200 | mL/min | 59.8 | 6.83 | 3.14 | 40 | 2.27 | 11.8 | 57.8 | Clear | No Odor |
| 08:50 | 20 | 200 | mL/min | 59.8 | 6.95 | 3.15 | 24.7 | 2.62 | 11.6 | 50.4 | Clear | No Odor |
| 08:55 | 25 | 200 | mL/min | 59.8 | 6.85 | 3.16 | 157 | 2.02 | 11.8 | 43.1 | Clear | No Odor |
| 09:00 | 30 | 200 | mL/min | 59.8 | 6.86 | 3.17 | 623 | 2.2 | 11.9 | 38.9 | Clear | No Odor |
| 09:05 | 35 | 200 | mL/min | 59.8 | 6.85 | 3.17 | 197 | 1.59 | 11.9 | 36.6 | Clear | No Odor |
| 09:10 | 40 | 200 | mL/min | 59.8 | 6.86 | 3.17 | 139 | 1.47 | 11.9 | 34.6 | Clear | No Odor |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4 D | Clear Glass | 3 | HCl |

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

- ft-bmp = feet below measuring point
- in = inches
- ft = feet
- mL/min = milliliters per minute
- uS/cm = microSiemens per centimeter
- NTU = Nephelometric Turbidity Unit
- mg/L = milligrams per liter
- S.U = standard units
- mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-16-78 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 32.0 degrees F and Cloudy. The wind is blowing NE at 12.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 64.54 | Total Depth (ft-bmp) | 76.18 | Water Column (ft) | 11.64 |
| | | | | Gallons in Well | 1.89 |
| Purge Start | 10:45 | Pump Intake (ft-bmp) | 74.68 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 11:50 | Volumes Purged | 1.82 | Sample ID | MW-16-78_021623 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 11:20 | Gallons Purged | | Replicate/Code No. | DUP-02_021623 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:50 | 0 | 0 | 200 | 64.54 | 0.26 | 7.1 | 1.483 | 206 | 0.68 | 11.9 | -120.4 | Clear | None |
| 10:55 | 5 | 5 | 200 | 64.54 | 0.53 | 7.11 | 1.496 | 85.4 | 0.82 | 12.2 | -124.5 | Clear | None |
| 11:00 | 5 | 10 | 200 | 64.54 | 0.79 | 7.09 | 1.494 | 22.6 | 0.95 | 12.2 | -124.9 | Clear | None |
| 11:05 | 5 | 15 | 200 | 64.54 | 1.06 | 7.08 | 1.487 | 9.62 | 1.08 | 12.2 | -124.4 | Clear | None |
| 11:10 | 5 | 20 | 200 | 64.54 | 1.32 | 7.06 | 1.489 | 3.09 | 1.19 | 12.1 | -126 | Clear | None |
| 11:15 | 5 | 25 | 200 | 64.54 | 1.59 | 7.05 | 1.49 | 2.57 | 1.18 | 12.2 | -125.4 | Clear | None |
| 11:20 | 5 | 30 | 200 | 64.54 | 1.85 | 7.04 | 1.491 | 2.12 | 1.22 | 12.2 | -124 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 4 | None |
| SVOCs | 1L Amber | 4 | None |
| VOCs | 40 mL Glass | 6 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: See figure. | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: 10G200 |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|---|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-16-78 | Date | 5/17/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 50.0 degrees F and Clear. The wind is blowing E/NE at 10.3 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 64.44 | Total Depth (ft-bmp) | 76.19 | Water Column (ft) | 11.75 | Gallons in Well | 1.91 |
| Purge Start | 11:25 | Pump Intake (ft-bmp) | 61.94 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 11:55 | Volumes Purged | 0.83 | Sample ID | MW-16-78_051723 | Sampled by | Austin Westhuis |
| Sample Time | 11:50 | Gallons Purged | 1.59 | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:30 | 0 | 0 | 200 | 64.44 | 0.26 | 6.87 | 1.17 | 11.6 | 0.22 | 13 | -102.5 | Clear | None |
| 11:35 | 5 | 5 | 200 | 64.44 | 0.53 | 6.88 | 1.17 | 6.23 | 0.21 | 12.9 | -101.3 | Clear | None |
| 11:40 | 5 | 10 | 200 | 64.44 | 0.79 | 6.9 | 1.17 | 3.09 | 0.16 | 12.9 | -92.9 | Clear | None |
| 11:45 | 5 | 15 | 200 | 64.44 | 1.06 | 6.9 | 1.18 | 2.69 | 0.15 | 12.9 | -88.3 | Clear | None |
| 11:50 | 5 | 20 | 200 | 64.44 | 1.32 | 6.91 | 1.18 | 2.34 | 0.15 | 12.9 | -85.9 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|------------------------|-------------|--------|--------------|
| 1,4-Dioxane 8260B-SIMS | 40 mL Glass | 3 | HCL |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-16-81 | Date | 5/17/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 64.10 | Total Depth (ft-bmp) | 77.21 | Water Column (ft) | 13.11 | Gallons in Well | 2.13 |
| Purge Start | 11:30 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 12:05 | Volumes Purged | | Sample ID | MW-16-81_051723 | Sampled by | Donald Richmond |
| Sample Time | 12:05 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:40 | 0 | 0 | 200 | 64.10 | 0.00 | 6.62 | 2.42 | 3.9 | 1.32 | 15.9 | 55 | Gray | None |
| 11:40 | 0 | 0 | 200 | 64.10 | 0.53 | 6.62 | 2.42 | 3.9 | 1.32 | 15.9 | 55 | Gray | None |
| 11:45 | 5 | 5 | 200 | 64.10 | 0.00 | 6.62 | 2.48 | 1.52 | 1.06 | 16.1 | 55.5 | Gray | None |
| 11:45 | 5 | 5 | 200 | 64.10 | 0.79 | 6.62 | 2.48 | 1.52 | 1.06 | 16.1 | 55.5 | Gray | None |
| 11:50 | 5 | 10 | 200 | 64.10 | 0.00 | 6.61 | 2.67 | 18 | 0.73 | 16 | 55.7 | Gray | None |
| 11:50 | 5 | 10 | 200 | 64.10 | 1.06 | 6.61 | 2.67 | 18 | 0.73 | 16 | 55.7 | Gray | None |
| 11:55 | 5 | 15 | 200 | 64.10 | 0.00 | 6.62 | 2.68 | 17.5 | 0.8 | 16 | 55.3 | Gray | None |
| 11:55 | 5 | 15 | 200 | 64.10 | 1.32 | 6.62 | 2.68 | 17.5 | 0.8 | 16 | 55.3 | Gray | None |
| 12:00 | 5 | 20 | 200 | 64.10 | 0.00 | 6.62 | 2.69 | 17.3 | 0.79 | 16.2 | 55.3 | Gray | None |
| 12:00 | 5 | 20 | 200 | 64.10 | 1.59 | 6.62 | 2.69 | 17.3 | 0.79 | 16.2 | 55.3 | Gray | None |

| Constituent Sampled | Container | Number | Preservative |
|--|-------------|--------|--------------|
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |
| 1,4-Dioxane 8270D SIM, VOCs SW-846 8260B | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|--|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-16-82 | Date | 5/17/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 52.0 degrees F and Clear. The wind is blowing E/NE at 9.2 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 65.24 | Total Depth (ft-bmp) | 77.17 | Water Column (ft) | 11.93 | Gallons in Well | 1.94 |
| Purge Start | 12:20 | Pump Intake (ft-bmp) | 74.67 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 12:50 | Volumes Purged | 0.82 | Sample ID | MW-16-82_051723 | Sampled by | Austin Westhuis |
| Sample Time | 12:45 | Gallons Purged | 1.59 | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:25 | 0 | 0 | 200 | 65.24 | 0.26 | 6.93 | 1.02 | 34.7 | 0.29 | 14.9 | -74.7 | Clear | None |
| 12:30 | 5 | 5 | 200 | 65.24 | 0.53 | 6.94 | 1.03 | 5.99 | 0.25 | 14.9 | -71.1 | Clear | None |
| 12:35 | 5 | 10 | 200 | 65.24 | 0.79 | 6.93 | 1.03 | 3.31 | 0.22 | 14.8 | -69.8 | Clear | None |
| 12:40 | 5 | 15 | 200 | 65.24 | 1.06 | 6.94 | 1.03 | 2.92 | 0.22 | 14.8 | -75.2 | Clear | None |
| 12:45 | 5 | 20 | 200 | 65.24 | 1.32 | 6.95 | 1.03 | 2.81 | 0.21 | 14.8 | -72.9 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|------------------------|-------------|--------|--------------|
| 1,4-Dioxane 8260B-SIMS | 40 mL Glass | 3 | HCL |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|-----------------------------|------------------------|----------------------|----------------------|-------------------|----------------------|-----------------|------|
| Project Number | 30171056 | Well ID | MW-16-84 | Date | 5/17/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 68.46 | Total Depth (ft-bmp) | 81.15 | Water Column (ft) | 12.69 | Gallons in Well | 2.06 |
| Purge Start | 12:55 | Pump Intake (ft-bmp) | Purge Method | Low-Flow | Purge Equipment | Peristaltic | |
| Purge End | 13:55 | Volumes Purged | Sample ID | MW-16-84_051723 | Sampled by | Donald Richmond | |
| Sample Time | 13:55 | Gallons Purged | Replicate/Code No. | NA | Sample Type | Grab | |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:05 | 0 | 0 | 200 | 68.46 | 0.00 | 7.03 | 1.19 | 5.53 | 0.48 | 15.8 | 36 | Gray | None |
| 13:05 | 0 | 0 | 200 | 68.46 | 0.53 | 7.03 | 1.19 | 5.53 | 0.48 | 15.8 | 36 | Gray | None |
| 13:10 | 5 | 5 | 200 | 68.46 | 0.00 | 7.02 | 1.21 | 30.3 | 0.37 | 15.9 | 31.4 | Gray | None |
| 13:10 | 5 | 5 | 200 | 68.46 | 0.79 | 7.02 | 1.21 | 30.3 | 0.37 | 15.9 | 31.4 | Gray | None |
| 13:15 | 5 | 10 | 200 | 68.46 | 0.00 | 6.96 | 1.52 | 105 | 0.26 | 15.8 | 21.3 | Gray | None |
| 13:15 | 5 | 10 | 200 | 68.46 | 1.06 | 6.96 | 1.52 | 105 | 0.26 | 15.8 | 21.3 | Gray | None |
| 13:20 | 5 | 15 | 200 | 68.46 | 0.00 | 6.95 | 1.69 | 113 | 0.27 | 15.8 | 7.1 | Gray | None |
| 13:20 | 5 | 15 | 200 | 68.46 | 1.32 | 6.95 | 1.69 | 113 | 0.27 | 15.8 | 7.1 | Gray | None |
| 13:25 | 5 | 20 | 200 | 68.46 | 0.00 | 6.95 | 1.74 | 91.4 | 0.21 | 15.7 | -2.9 | Gray | None |
| 13:25 | 5 | 20 | 200 | 68.46 | 1.59 | 6.95 | 1.74 | 91.4 | 0.21 | 15.7 | -2.9 | Gray | None |
| 13:30 | 5 | 25 | 200 | 68.46 | 0.00 | 6.95 | 1.76 | 79.1 | 0.24 | 16 | -8.4 | Gray | None |
| 13:30 | 5 | 25 | 200 | 68.46 | 1.85 | 6.95 | 1.76 | 79.1 | 0.24 | 16 | -8.4 | Gray | None |
| 13:35 | 5 | 30 | 200 | 68.46 | 0.00 | 6.95 | 1.79 | 67.7 | 0.21 | 15.9 | -18.3 | Gray | None |
| 13:35 | 5 | 30 | 200 | 68.46 | 2.11 | 6.95 | 1.79 | 67.7 | 0.21 | 15.9 | -18.3 | Gray | None |
| 13:40 | 5 | 35 | 200 | 68.46 | 0.00 | 6.95 | 1.81 | 56.7 | 0.22 | 16.1 | -27.4 | Gray | None |
| 13:40 | 5 | 35 | 200 | 68.46 | 2.38 | 6.95 | 1.81 | 56.7 | 0.22 | 16.1 | -27.4 | Gray | None |
| 13:45 | 5 | 40 | 200 | 68.46 | 0.00 | 6.95 | 1.82 | 51.4 | 0.21 | 16 | -30.7 | Gray | None |
| 13:45 | 5 | 40 | 200 | 68.46 | 2.64 | 6.95 | 1.82 | 51.4 | 0.21 | 16 | -30.7 | Gray | None |
| 13:50 | 5 | 45 | 200 | 68.46 | 0.00 | 6.95 | 1.82 | 46.5 | 0.23 | 16 | -32.3 | Gray | None |
| 13:50 | 5 | 45 | 200 | 68.46 | 2.91 | 6.95 | 1.82 | 46.5 | 0.23 | 16 | -32.3 | Gray | None |

| | | | |
|---|-------------|--------|--------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM,VOCs SW-846 8260B | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|-----------------------------|------------------------|----------------------|----------------------|-------------------|----------------------|-----------------|------|
| Project Number | 30171056 | Well ID | MW-16-85 | Date | 5/18/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 58.07 | Total Depth (ft-bmp) | 71.6 | Water Column (ft) | 13.53 | Gallons in Well | 2.20 |
| Purge Start | 15:30 | Pump Intake (ft-bmp) | Purge Method | Low-Flow | Purge Equipment | Peristaltic | |
| Purge End | 16:30 | Volumes Purged | Sample ID | MW-16-85_051823 | Sampled by | Donald Richmond | |
| Sample Time | 16:30 | Gallons Purged | Replicate/Code No. | NA | Sample Type | Grab | |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:40 | 0 | 0 | 200 | 58.07 | 0.00 | 7.47 | 0.61 | 20.9 | 3.32 | 16.1 | 45.8 | Clear | None |
| 15:40 | 0 | 0 | 200 | 58.07 | 0.53 | 7.47 | 0.61 | 20.9 | 3.32 | 16.1 | 45.8 | Clear | None |
| 15:45 | 5 | 5 | 200 | 58.07 | 0.00 | 7.43 | 0.6 | 21.1 | 4.18 | 15.9 | 50.4 | Clear | None |
| 15:45 | 5 | 5 | 200 | 58.07 | 0.79 | 7.43 | 0.6 | 21.1 | 4.18 | 15.9 | 50.4 | Clear | None |
| 15:50 | 5 | 10 | 200 | 58.07 | 0.00 | 7.42 | 0.6 | 27.7 | 4.62 | 16.2 | 53.1 | Clear | None |
| 15:50 | 5 | 10 | 200 | 58.07 | 1.06 | 7.42 | 0.6 | 27.7 | 4.62 | 16.2 | 53.1 | Clear | None |
| 15:55 | 5 | 15 | 200 | 58.07 | 0.00 | 7.42 | 0.6 | 24.5 | 4.25 | 16.3 | 54.5 | Clear | None |
| 15:55 | 5 | 15 | 200 | 58.07 | 1.32 | 7.42 | 0.6 | 24.5 | 4.25 | 16.3 | 54.5 | Clear | None |
| 16:00 | 5 | 20 | 200 | 58.07 | 0.00 | 7.36 | 0.62 | 12.3 | 3.1 | 17.7 | 55.5 | Clear | None |
| 16:00 | 5 | 20 | 200 | 58.07 | 1.59 | 7.36 | 0.62 | 12.3 | 3.1 | 17.7 | 55.5 | Clear | None |
| 16:05 | 5 | 25 | 200 | 58.07 | 0.00 | 7.23 | 0.7 | 161 | 1.72 | 18.2 | 48.5 | Clear | None |
| 16:05 | 5 | 25 | 200 | 58.07 | 1.85 | 7.23 | 0.7 | 161 | 1.72 | 18.2 | 48.5 | Clear | None |
| 16:10 | 5 | 30 | 200 | 58.07 | 0.00 | 7.18 | 0.75 | 222 | 0.9 | 18.1 | 27.4 | Clear | None |
| 16:10 | 5 | 30 | 200 | 58.07 | 2.11 | 7.18 | 0.75 | 222 | 0.9 | 18.1 | 27.4 | Clear | None |
| 16:15 | 5 | 35 | 200 | 58.07 | 0.00 | 7.18 | 0.76 | 238 | 0.75 | 18.5 | 19.2 | Clear | None |
| 16:15 | 5 | 35 | 200 | 58.07 | 2.38 | 7.18 | 0.76 | 238 | 0.75 | 18.5 | 19.2 | Clear | None |
| 16:20 | 5 | 40 | 200 | 58.07 | 0.00 | 7.17 | 0.78 | 243 | 0.64 | 18.1 | 9.6 | Clear | None |
| 16:20 | 5 | 40 | 200 | 58.07 | 2.64 | 7.17 | 0.78 | 243 | 0.64 | 18.1 | 9.6 | Clear | None |
| 16:25 | 5 | 45 | 200 | 58.07 | 0.00 | 7.17 | 0.79 | 214 | 0.58 | 18 | 2.8 | Clear | None |
| 16:25 | 5 | 45 | 200 | 58.07 | 2.91 | 7.17 | 0.79 | 214 | 0.58 | 18 | 2.8 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-17-86 | Date | 5/17/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 65.39 | Total Depth (ft-bmp) | 81.42 | Water Column (ft) | 16.03 | Gallons in Well | 2.60 |
| Purge Start | 14:40 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 15:40 | Volumes Purged | | Sample ID | MW-17-86_051723 | Sampled by | Donald Richmond |
| Sample Time | 15:40 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:50 | 0 | 0 | 200 | 65.39 | 0.00 | 7.38 | 1.68 | 5.28 | 5.25 | 16.5 | 57.5 | Clear | None |
| 14:50 | 0 | 0 | 200 | 65.39 | 0.53 | 7.38 | 1.68 | 5.28 | 5.25 | 16.5 | 57.5 | Clear | None |
| 14:55 | 5 | 5 | 200 | 65.39 | 0.00 | 7.26 | 1.7 | 4.24 | 4.79 | 16.6 | 55 | Clear | None |
| 14:55 | 5 | 5 | 200 | 65.39 | 0.79 | 7.26 | 1.7 | 4.24 | 4.79 | 16.6 | 55 | Clear | None |
| 15:00 | 5 | 10 | 200 | 65.39 | 0.00 | 7.06 | 1.8 | 2.16 | 3.2 | 16.7 | 43.3 | Clear | None |
| 15:00 | 5 | 10 | 200 | 65.39 | 1.06 | 7.06 | 1.8 | 2.16 | 3.2 | 16.7 | 43.3 | Clear | None |
| 15:05 | 5 | 15 | 200 | 65.39 | 0.00 | 6.96 | 1.88 | 3.92 | 2.53 | 16.8 | 33 | Clear | None |
| 15:05 | 5 | 15 | 200 | 65.39 | 1.32 | 6.96 | 1.88 | 3.92 | 2.53 | 16.8 | 33 | Clear | None |
| 15:10 | 5 | 20 | 200 | 65.39 | 0.00 | 6.95 | 1.96 | 3.06 | 2.13 | 16.7 | -1.2 | Clear | None |
| 15:10 | 5 | 20 | 200 | 65.39 | 1.59 | 6.95 | 1.96 | 3.06 | 2.13 | 16.7 | -1.2 | Clear | None |
| 15:15 | 5 | 25 | 200 | 65.39 | 0.00 | 6.94 | 1.98 | 2.71 | 1.71 | 16.6 | -6.7 | Clear | None |
| 15:15 | 5 | 25 | 200 | 65.39 | 1.85 | 6.94 | 1.98 | 2.71 | 1.71 | 16.6 | -6.7 | Clear | None |
| 15:20 | 5 | 30 | 200 | 65.39 | 0.00 | 6.94 | 1.99 | 1.77 | 1.49 | 16.7 | -17.7 | Clear | None |
| 15:20 | 5 | 30 | 200 | 65.39 | 2.11 | 6.94 | 1.99 | 1.77 | 1.49 | 16.7 | -17.7 | Clear | None |
| 15:25 | 5 | 35 | 200 | 65.39 | 0.00 | 6.94 | 1.98 | 1.67 | 1.26 | 16.6 | -26.9 | Clear | None |
| 15:25 | 5 | 35 | 200 | 65.39 | 2.38 | 6.94 | 1.98 | 1.67 | 1.26 | 16.6 | -26.9 | Clear | None |
| 15:30 | 5 | 40 | 200 | 65.39 | 0.00 | 6.95 | 1.98 | 2.55 | 0.97 | 16.5 | -32.6 | Clear | None |
| 15:30 | 5 | 40 | 200 | 65.39 | 2.64 | 6.95 | 1.98 | 2.55 | 0.97 | 16.5 | -32.6 | Clear | None |
| 15:35 | 5 | 45 | 200 | 65.39 | 0.00 | 6.95 | 1.99 | 1.93 | 0.86 | 16.7 | -35.1 | Clear | None |
| 15:35 | 5 | 45 | 200 | 65.39 | 2.91 | 6.95 | 1.99 | 1.93 | 0.86 | 16.7 | -35.1 | Clear | None |

| | | | |
|--|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM, VOCs SW-846 8260B | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-18-88 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 28.9 degrees F and Fog/Mist. The wind is blowing NE at 17.2 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 4.94 | Total Depth (ft-bmp) | 15.02 | Water Column (ft) | 10.08 |
| | | | | Gallons in Well | 1.64 |
| Purge Start | 15:15 | Pump Intake (ft-bmp) | 12.52 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:45 | Volumes Purged | 0.97 | Sample ID | MW-18-88_021623 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 15:40 | Gallons Purged | | Replicate/Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:20 | 0 | 0 | 200 | 4.98 | 0.26 | 7.06 | 0.672 | 4.89 | 0.25 | 6.4 | -69.9 | Clear | None |
| 15:25 | 5 | 5 | 200 | 4.98 | 0.53 | 7.06 | 0.667 | 2.02 | 0.15 | 6.3 | -87 | Clear | None |
| 15:30 | 5 | 10 | 200 | 4.98 | 0.79 | 7.06 | 0.667 | 1.71 | 0.13 | 6.3 | -94.9 | Clear | None |
| 15:35 | 5 | 15 | 200 | 4.98 | 1.06 | 7.07 | 0.668 | 1.51 | 0.12 | 6.3 | -102.5 | Clear | None |
| 15:40 | 5 | 20 | 200 | 4.98 | 1.32 | 7.07 | 0.667 | 1.44 | 0.12 | 6.3 | -104.8 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>10G200</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | MW-18-88 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 61.0 degrees F and Mostly Cloudy. The wind is blowing NE at 13.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 5.64 | Total Depth (ft-bmp) | 11 | Water Column (ft) | 5.36 |
| | | | | Gallons in Well | 0.87 |
| Purge Start | 13:45 | Pump Intake (ft-bmp) | 10 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 14:40 | Volumes Purged | 1.72 | Sample ID | MW-18-88_052423 |
| | | | | Sampled by | Kaitlyn Hunt |
| Sample Time | 14:35 | Gallons Purged | 1.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:50 | 0 | 0 | 100 | 5.86 | 0.13 | 7.13 | 0.53 | 3.67 | 0.34 | 13.4 | 103.8 | Clear | None |
| 13:55 | 5 | 5 | 100 | 5.86 | 0.26 | 7.15 | 0.53 | 2.54 | 0.86 | 13.8 | 97.4 | Clear | None |
| 14:00 | 5 | 10 | 100 | 5.82 | 0.40 | 7.15 | 0.53 | 2.52 | 0.3 | 14 | 91.9 | Clear | None |
| 14:05 | 5 | 15 | 100 | 5.82 | 0.53 | 7.15 | 0.53 | 1.83 | 0.42 | 13.9 | 89.6 | Clear | None |
| 14:10 | 5 | 20 | 100 | 5.82 | 0.66 | 7.16 | 0.53 | 1.51 | 0.45 | 13.9 | 86 | Clear | None |
| 14:15 | 5 | 25 | 100 | 5.82 | 0.79 | 7.15 | 0.53 | 1.94 | 0.36 | 13.8 | 82.8 | Clear | None |
| 14:20 | 5 | 30 | 100 | 5.82 | 0.92 | 7.15 | 0.53 | 1.46 | 0.36 | 13.9 | 79.3 | Clear | None |
| 14:25 | 5 | 35 | 100 | 5.82 | 1.06 | 7.15 | 0.53 | 1.33 | 0.28 | 13.8 | 76.6 | Clear | None |
| 14:30 | 5 | 40 | 100 | 5.82 | 0.00 | 7.14 | 0.53 | 1.39 | 0.27 | 13.7 | 73.3 | Clear | None |
| 14:35 | 5 | 45 | 100 | 5.82 | 1.32 | 7.14 | 0.53 | 1.23 | 0.29 | 13.6 | 71.2 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-18-89 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 17.1 degrees F and Clear. The wind is blowing N/NW at 8.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 6.98 | Total Depth (ft-bmp) | 15.62 | Water Column (ft) | 8.64 |
| | | | | Gallons in Well | 1.40 |
| Purge Start | 08:45 | Pump Intake (ft-bmp) | 13.12 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 09:15 | Volumes Purged | 1.13 | Sample ID | MW-18-89_021723 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 09:10 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 08:50 | 0 | 0 | 200 | 8.90 | 0.26 | 7.39 | 0.815 | 2.48 | 3.16 | 6.8 | -172.2 | Clear | None |
| 08:55 | 5 | 5 | 200 | 9.44 | 0.53 | 7.4 | 0.815 | 2.1 | 3.53 | 6.6 | -168.5 | Clear | None |
| 09:00 | 5 | 10 | 200 | 9.69 | 0.79 | 7.41 | 0.815 | 1.67 | 3.26 | 6.6 | -175.7 | Clear | None |
| 09:05 | 5 | 15 | 200 | 9.82 | 1.06 | 7.43 | 0.814 | 1.6 | 3.2 | 6.6 | -179.6 | Clear | None |
| 09:10 | 5 | 20 | 200 | 9.89 | 1.32 | 7.43 | 0.814 | 1.33 | 3.18 | 6.6 | -183.3 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: Well did not meet drawdown requirements.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>10G200</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-18-90 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 30.0 degrees F and Light Freezing Rain and Fog/Mist. The wind is blowing NE at 16.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 9.97 | Total Depth (ft-bmp) | 23 | Water Column (ft) | 13.03 |
| | | | | Gallons in Well | 2.12 |
| Purge Start | 14:20 | Pump Intake (ft-bmp) | 20.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 14:55 | Volumes Purged | 0.87 | Sample ID | MW-18-90_021623 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 14:50 | Gallons Purged | | Replicate/Code No. | DUP-03_021623 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:25 | 0 | 0 | 200 | 9.97 | 0.26 | 12.11 | 2.049 | 22.9 | 1.1 | 9.8 | -229.9 | Clear | None |
| 14:30 | 5 | 5 | 200 | 9.97 | 0.53 | 12.18 | 2.063 | 12.6 | 0.93 | 9.6 | -243.2 | Clear | None |
| 14:35 | 5 | 10 | 200 | 9.97 | 0.79 | 12.19 | 2.101 | 4.38 | 0.69 | 9.7 | -262.2 | Clear | None |
| 14:40 | 5 | 15 | 200 | 9.97 | 1.06 | 12.2 | 2.132 | 2.26 | 0.52 | 9.9 | -274.4 | Clear | None |
| 14:45 | 5 | 20 | 200 | 9.97 | 1.32 | 12.21 | 2.141 | 2.06 | 0.5 | 9.9 | -278.6 | Clear | None |
| 14:50 | 5 | 25 | 200 | 9.97 | 1.59 | 12.21 | 2.158 | 1.81 | 0.48 | 9.9 | -284 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-18-91 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 17.1 degrees F and Clear. The wind is blowing N/NW at 8.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 5.95 | Total Depth (ft-bmp) | 14.99 | Water Column (ft) | 9.04 |
| | | | | Gallons in Well | 1.47 |
| Purge Start | 09:20 | Pump Intake (ft-bmp) | 12.49 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 09:50 | Volumes Purged | 1.08 | Sample ID | MW-18-91_021723 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 09:45 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:25 | 0 | 0 | 200 | 7.35 | 0.26 | 7.52 | 0.71 | 3.12 | 0.56 | 6.6 | -166.5 | Clear | None |
| 09:30 | 5 | 5 | 200 | 7.88 | 0.53 | 7.53 | 0.709 | 1.79 | 0.51 | 6.4 | -150.3 | Clear | None |
| 09:35 | 5 | 10 | 200 | 8.09 | 0.79 | 7.55 | 0.708 | 1.47 | 0.49 | 6.5 | -173.5 | Clear | None |
| 09:40 | 5 | 15 | 200 | 8.20 | 1.06 | 7.55 | 0.707 | 1.41 | 0.48 | 6.4 | -178.8 | Clear | None |
| 09:45 | 5 | 20 | 200 | 8.24 | 1.32 | 7.55 | 0.707 | 1.23 | 0.47 | 6.4 | -180.6 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: Well did not meet drawdown requirements.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>10G200</u> |

ft-bmp = feet below measuring point mS/cm = milliSiemens per centimeter mV = millivolts
 in = inches NTU = Nephelometric Turbidity Unit °F = degrees Fahrenheit
 ft = feet mg/L = milligrams per liter °C = degrees Celsius
 mL/min = milliliters per minute

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-18-95 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 17.1 degrees F and Clear. The wind is blowing N/NW at 8.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 6.56 | Total Depth (ft-bmp) | 12.45 | Water Column (ft) | 5.89 |
| | | | | Gallons in Well | 0.96 |
| Purge Start | 10:05 | Pump Intake (ft-bmp) | 9.95 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 10:35 | Volumes Purged | 1.65 | Sample ID | MW-18-95_021723 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 10:30 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:10 | 0 | 0 | 200 | 6.56 | 0.26 | 7.42 | 0.501 | 2.44 | 7.1 | 5.6 | -3.9 | Clear | None |
| 10:15 | 5 | 5 | 200 | 6.56 | 0.53 | 7.41 | 0.502 | 2.08 | 7.16 | 5.4 | 6 | Clear | None |
| 10:20 | 5 | 10 | 200 | 6.56 | 0.79 | 7.4 | 0.506 | 1.94 | 7.05 | 5.3 | 6.9 | Clear | None |
| 10:25 | 5 | 15 | 200 | 6.56 | 1.06 | 7.39 | 0.509 | 1.55 | 7.07 | 5.4 | 9.5 | Clear | None |
| 10:30 | 5 | 20 | 200 | 6.56 | 1.32 | 7.37 | 0.514 | 1.5 | 7.1 | 5.3 | 13.9 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: See figure. | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: 10G200 |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | MW-18-95 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 62.1 degrees F and Clear. The wind is blowing E/NE at 18.3 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 7.02 | Total Depth (ft-bmp) | 10 | Water Column (ft) | 2.98 |
| | | | | Gallons in Well | 0.48 |
| Purge Start | 16:30 | Pump Intake (ft-bmp) | 9 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 17:00 | Volumes Purged | 2.60 | Sample ID | MW-18-95_052423 |
| | | | | Sampled by | Kaitlyn Hunt |
| Sample Time | 16:55 | Gallons Purged | 1.25 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 16:35 | 0 | 0 | 150 | 7.48 | 0.20 | 7.5 | 0.407 | 11.6 | 1.28 | 13.2 | 102.1 | Clear | None |
| 16:40 | 5 | 5 | 150 | 7.48 | 0.40 | 7.54 | 0.411 | 7.01 | 1.53 | 13.7 | 86 | Clear | None |
| 16:45 | 5 | 10 | 150 | 7.65 | 0.59 | 7.53 | 0.407 | 4.74 | 1.66 | 13.6 | 81.6 | Clear | None |
| 16:50 | 5 | 15 | 150 | 7.72 | 0.79 | 7.53 | 0.407 | 4.55 | 1.66 | 13.6 | 76.5 | Clear | None |
| 16:55 | 5 | 20 | 150 | 7.72 | 0.99 | 7.52 | 0.408 | 4.03 | 1.54 | 13.7 | 73.2 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-18-98 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 30.9 degrees F and Fog/Mist. The wind is blowing N/NE at 12.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 3.98 | Total Depth (ft-bmp) | 14.9 | Water Column (ft) | 10.92 |
| | | | | Gallons in Well | 1.77 |
| Purge Start | 13:30 | Pump Intake (ft-bmp) | 12.4 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 14:05 | Volumes Purged | 1.04 | Sample ID | MW-18-98_021623 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 14:00 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:35 | 0 | 0 | 200 | 3.98 | 0.26 | 7.7 | 1.606 | 2.89 | 0.31 | 6 | -93.7 | Clear | None |
| 13:40 | 5 | 5 | 200 | 3.98 | 0.53 | 7.69 | 1.609 | 2.41 | 0.43 | 6 | -104.9 | Clear | None |
| 13:45 | 5 | 10 | 200 | 3.98 | 0.79 | 7.65 | 1.614 | 1.81 | 0.52 | 6 | -113.9 | Clear | None |
| 13:50 | 5 | 15 | 200 | 3.98 | 1.06 | 7.62 | 1.625 | 1.4 | 0.74 | 5.9 | -114.4 | Clear | None |
| 13:55 | 5 | 20 | 200 | 3.98 | 1.32 | 7.59 | 1.628 | 1.22 | 0.79 | 5.9 | -114.9 | Clear | None |
| 14:00 | 5 | 25 | 200 | 3.98 | 1.59 | 7.56 | 1.63 | 1.11 | 0.81 | 5.9 | -116 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | MW-18-98 | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 55.9 degrees F and Clear. The wind is blowing E at 3.4 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 6.24 | Total Depth (ft-bmp) | 12 | Water Column (ft) | 5.76 |
| | | | | Gallons in Well | 0.94 |
| Purge Start | 12:50 | Pump Intake (ft-bmp) | 11 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 13:58 | Volumes Purged | 2.13 | Sample ID | MW-18-98_052323 |
| | | | | Sampled by | Kaitlyn Hunt |
| Sample Time | 13:50 | Gallons Purged | 2 | Replicate/ Code No. | DUP-04_052323 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:55 | 0 | 0 | 100 | 7.15 | 0.13 | 7.53 | 1.08 | 2.8 | 0.46 | 13.9 | 30 | Clear | None |
| 13:00 | 5 | 5 | 100 | 7.59 | 0.26 | 7.56 | 1.07 | 1.36 | 0.5 | 14.2 | 22.1 | Clear | None |
| 13:05 | 5 | 10 | 100 | 7.94 | 0.40 | 7.62 | 1.05 | 1.58 | 2.03 | 15.2 | 14.8 | Clear | None |
| 13:10 | 5 | 15 | 100 | 8.08 | 0.53 | 7.66 | 1.03 | 1.13 | 0.9 | 15.2 | 15.5 | Clear | None |
| 13:15 | 5 | 20 | 100 | 8.24 | 0.00 | 7.71 | 0.97 | 1.33 | 2.7 | 14.8 | 25.1 | Clear | None |
| 13:15 | 5 | 20 | 100 | 8.24 | 0.66 | 7.71 | 0.97 | 1.33 | 2.7 | 14.8 | 25.1 | Clear | None |
| 13:20 | 5 | 25 | 100 | 8.42 | 0.79 | 7.7 | 0.95 | 2.67 | 1.97 | 14.6 | 35.3 | Clear | None |
| 13:25 | 5 | 30 | 100 | 8.59 | 0.92 | 7.69 | 0.95 | 1.59 | 2.11 | 14.6 | 41.2 | Clear | None |
| 13:30 | 5 | 35 | 100 | 8.74 | 1.06 | 7.67 | 0.95 | 1.27 | 1.98 | 14.9 | 45.4 | Clear | None |
| 13:35 | 5 | 40 | 100 | 8.94 | 1.19 | 7.65 | 0.95 | 1.24 | 1.73 | 14.4 | 48.9 | Clear | None |
| 13:40 | 5 | 45 | 100 | 9.12 | 1.32 | 7.65 | 0.95 | 1 | 1.46 | 14.6 | 50.3 | Clear | None |
| 13:45 | 5 | 50 | 100 | 9.12 | 1.45 | 7.63 | 0.95 | 1.45 | 1.42 | 14.6 | 51.3 | Clear | None |
| 13:50 | 5 | 55 | 100 | 9.12 | 1.59 | 7.63 | 0.95 | 1.05 | 1.42 | 14.7 | 51.5 | Clear | None |
| 13:50 | 5 | 55 | 100 | 9.12 | 1.56 | 7.63 | 0.95 | 1.05 | 1.42 | 14.7 | 51.5 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 4 | None |

Comments: Specific conductivity measured

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | MW-18-99 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 28.9 degrees F and Light Freezing Rain and Fog/Mist. The wind is blowing NE at 16.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 3.94 | Total Depth (ft-bmp) | 16.85 | Water Column (ft) | 12.91 |
| | | | | Gallons in Well | 2.10 |
| Purge Start | 16:00 | Pump Intake (ft-bmp) | 14.35 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 16:35 | Volumes Purged | 0.88 | Sample ID | MW-18-99_021623 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 16:30 | Gallons Purged | | Replicate/Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 16:05 | 0 | 0 | 200 | 4.04 | 0.26 | 7.83 | 1.661 | 2.46 | 3.27 | 6.8 | -109.8 | Clear | None |
| 16:10 | 5 | 5 | 200 | 4.10 | 0.53 | 7.85 | 1.669 | 2.07 | 2.67 | 6.5 | -142.7 | Clear | None |
| 16:15 | 5 | 10 | 200 | 4.12 | 0.79 | 7.85 | 1.648 | 1.71 | 2.57 | 6.6 | -156.1 | Clear | None |
| 16:20 | 5 | 15 | 200 | 4.12 | 1.06 | 7.86 | 1.623 | 1.51 | 2 | 6.7 | -164.5 | Clear | None |
| 16:25 | 5 | 20 | 200 | 4.12 | 1.32 | 7.88 | 1.613 | 1.44 | 2.06 | 6.7 | -170.4 | Clear | None |
| 16:30 | 5 | 25 | 200 | 4.14 | 1.59 | 7.88 | 1.61 | 1.17 | 2.07 | 6.7 | -172.4 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | MW-18-99 | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 63.0 degrees F and Clear. The wind is blowing undefined at 0.0 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 4.20 | Total Depth (ft-bmp) | 14 | Water Column (ft) | 9.80 |
| | | | | Gallons in Well | 1.59 |
| Purge Start | 10:58 | Pump Intake (ft-bmp) | 12.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 12:35 | Volumes Purged | 1.57 | Sample ID | MW-18-99_052323 |
| | | | | Sampled by | Kaitlyn Hunt |
| Sample Time | 12:30 | Gallons Purged | 2.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:00 | 0 | 0 | 100 | 4.84 | 0.00 | 7.78 | 1.3 | 3.86 | 0.57 | 15 | 149.4 | Clear | None |
| 11:00 | 0 | 0 | 100 | 4.84 | 0.05 | 7.78 | 1.3 | 3.86 | 0.57 | 15 | 149.4 | Clear | None |
| 11:05 | 5 | 5 | 100 | 5.25 | 0.18 | 7.79 | 1.31 | 1.87 | 0.22 | 14.9 | 135.4 | Clear | None |
| 11:05 | 5 | 5 | 100 | 5.25 | 0.13 | 7.79 | 1.31 | 1.87 | 0.22 | 14.9 | 135.4 | Clear | None |
| 11:10 | 5 | 10 | 100 | 5.60 | 0.32 | 7.8 | 1.31 | 2.4 | 0.13 | 15 | 106.2 | Clear | None |
| 11:10 | 5 | 10 | 100 | 5.60 | 0.26 | 7.8 | 1.31 | 2.4 | 0.13 | 15 | 106.2 | Clear | None |
| 11:15 | 5 | 15 | 100 | 5.79 | 0.00 | 7.86 | 1.28 | 3.14 | 0.13 | 15 | 78.5 | Clear | None |
| 11:15 | 5 | 15 | 100 | 5.79 | 0.45 | 7.86 | 1.28 | 3.14 | 0.13 | 15 | 78.5 | Clear | None |
| 11:20 | 5 | 20 | 100 | 6.04 | 0.00 | 7.99 | 1.2 | 0.73 | 0.14 | 14.9 | 72.3 | Clear | None |
| 11:20 | 5 | 20 | 100 | 6.04 | 0.58 | 7.99 | 1.2 | 0.73 | 0.14 | 14.9 | 72.3 | Clear | None |
| 11:25 | 5 | 25 | 100 | 6.21 | 0.00 | 7.99 | 1.15 | 1.88 | 0.13 | 14.4 | 59.8 | Clear | None |
| 11:25 | 5 | 25 | 100 | 6.21 | 0.71 | 7.99 | 1.15 | 1.88 | 0.13 | 14.4 | 59.8 | Clear | None |
| 11:30 | 5 | 30 | 100 | 6.39 | 0.00 | 8.01 | 1.13 | 1.53 | 0.16 | 14.7 | 10.1 | Clear | None |
| 11:30 | 5 | 30 | 100 | 6.39 | 0.85 | 8.01 | 1.13 | 1.53 | 0.16 | 14.7 | 10.1 | Clear | None |
| 11:35 | 5 | 35 | 100 | 6.40 | 0.00 | 8.01 | 1.12 | 1.63 | 0.18 | 14.6 | -15.3 | Clear | None |
| 11:35 | 5 | 35 | 100 | 6.40 | 0.98 | 8.01 | 1.12 | 1.63 | 0.18 | 14.6 | -15.3 | Clear | None |
| 11:40 | 5 | 40 | 100 | 6.38 | 0.00 | 8.03 | 1.11 | 0.9 | 0.18 | 15.2 | -54.8 | Clear | None |
| 11:40 | 5 | 40 | 100 | 6.38 | 1.11 | 8.03 | 1.11 | 0.9 | 0.18 | 15.2 | -54.8 | Clear | None |
| 11:45 | 5 | 45 | 100 | 6.38 | 1.24 | 8.06 | 1.09 | 2.51 | 0.15 | 14.7 | -84.9 | Clear | None |
| 11:45 | 5 | 45 | 100 | 6.38 | 1.19 | 8.06 | 1.09 | 2.51 | 0.15 | 14.7 | -84.9 | Clear | None |
| 11:50 | 5 | 50 | 100 | 6.38 | 1.37 | 8.07 | 1.03 | 1.46 | 0.2 | 14.8 | -103.9 | Clear | None |
| 11:50 | 5 | 50 | 100 | 6.38 | 1.32 | 8.07 | 1.03 | 1.46 | 0.2 | 14.8 | -103.9 | Clear | None |
| 11:55 | 5 | 55 | 100 | 6.38 | 1.51 | 8.11 | 1.01 | 0.8 | 0.22 | 14.7 | -118 | Clear | None |
| 11:55 | 5 | 55 | 100 | 6.38 | 1.45 | 8.11 | 1.01 | 0.8 | 0.22 | 14.7 | -118 | Clear | None |
| 12:00 | 5 | 60 | 100 | 6.38 | 1.64 | 8.15 | 0.93 | 1.27 | 0.22 | 14.7 | -127 | Clear | None |
| 12:00 | 5 | 60 | 100 | 6.38 | 1.59 | 8.15 | 0.93 | 1.27 | 0.22 | 14.7 | -127 | Clear | None |
| 12:05 | 5 | 65 | 100 | 6.38 | 1.77 | 8.2 | 0.91 | 1.19 | 0.28 | 14.5 | -132.5 | Clear | None |
| 12:05 | 5 | 65 | 100 | 6.38 | 1.72 | 8.2 | 0.91 | 1.19 | 0.28 | 14.5 | -132.5 | Clear | None |
| 12:10 | 5 | 70 | 100 | 6.38 | 0.00 | 8.25 | 0.9 | 1.09 | 0.27 | 14.9 | -133.5 | Clear | None |
| 12:10 | 5 | 70 | 100 | 6.38 | 1.85 | 8.25 | 0.9 | 1.09 | 0.27 | 14.9 | -133.5 | Clear | None |
| 12:15 | 5 | 75 | 100 | 6.38 | 0.00 | 8.27 | 0.88 | 1.44 | 0.22 | 14.5 | -131.9 | Clear | None |
| 12:15 | 5 | 75 | 100 | 6.38 | 1.98 | 8.27 | 0.88 | 1.44 | 0.22 | 14.5 | -131.9 | Clear | None |
| 12:20 | 5 | 80 | 100 | 6.38 | 0.00 | 8.32 | 0.88 | 1.13 | 0.31 | 14.7 | -132.1 | Clear | None |
| 12:20 | 5 | 80 | 100 | 6.38 | 2.11 | 8.32 | 0.88 | 1.13 | 0.31 | 14.7 | -132.1 | Clear | None |
| 12:25 | 5 | 85 | 100 | 6.38 | 0.00 | 8.33 | 0.88 | 0.59 | 0.33 | 14.4 | -129.3 | Clear | None |

Groundwater Sampling Form



| | | | | | | | | | | | | | |
|-------|---|----|-----|------|------|------|------|------|------|------|--------|-------|------|
| 12:25 | 5 | 85 | 100 | 6.38 | 2.25 | 8.33 | 0.88 | 0.59 | 0.33 | 14.4 | -129.3 | Clear | None |
| 12:30 | 5 | 90 | 100 | 6.38 | 0.00 | 8.44 | 0.89 | 2.95 | 0.33 | 14.7 | -132 | Clear | None |
| 12:30 | 5 | 90 | 100 | 6.38 | 2.38 | 8.44 | 0.89 | 2.95 | 0.33 | 14.7 | -132 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-18-100 | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 55.9 degrees F and Clear. The wind is blowing E at 3.4 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 10.57 | Total Depth (ft-bmp) | 13 | Water Column (ft) | 2.43 |
| | | | | Gallons in Well | 0.39 |
| Purge Start | 09:18 | Pump Intake (ft-bmp) | 11 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 10:10 | Volumes Purged | | Sample ID | MW-18-100_052323 |
| | | | | Sampled by | Kaitlyn Hunt |
| Sample Time | 10:05 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:20 | 0 | 0 | | 10.57 | | 7.21 | 1.32 | 16.1 | 3.26 | 11.9 | 184.4 | Clear | None |
| 09:20 | 0 | 0 | 100 | 10.57 | 0.05 | 7.21 | 1.32 | 16.1 | 3.26 | 11.9 | 184.4 | Clear | None |
| 09:25 | 5 | 5 | 150 | 11.09 | 0.00 | 7.53 | 1.28 | 9.23 | 3.13 | 11.8 | 173.9 | Clear | None |
| 09:25 | 5 | 5 | 150 | 11.09 | 0.25 | 7.53 | 1.28 | 9.23 | 3.13 | 11.8 | 173.9 | Clear | None |
| 09:30 | 5 | 10 | 150 | 11.35 | 0.00 | 7.57 | 1.26 | 2.61 | 3.09 | 11.9 | 164.3 | Clear | None |
| 09:30 | 5 | 10 | 150 | 11.35 | 0.45 | 7.57 | 1.26 | 2.61 | 3.09 | 11.9 | 164.3 | Clear | None |
| 09:35 | 5 | 15 | 100 | 11.50 | 0.00 | 7.56 | 1.21 | 1.26 | 3.93 | 12.3 | 156.7 | Clear | None |
| 09:35 | 5 | 15 | 100 | 11.50 | 0.58 | 7.56 | 1.21 | 1.26 | 3.93 | 12.3 | 156.7 | Clear | None |
| 09:40 | 5 | 20 | 100 | 11.66 | 0.00 | 7.56 | 1.17 | 1.27 | 3.88 | 12.3 | 151.7 | Clear | None |
| 09:40 | 5 | 20 | 100 | 11.66 | 0.71 | 7.56 | 1.17 | 1.27 | 3.88 | 12.3 | 151.7 | Clear | None |
| 09:45 | 5 | 25 | 100 | 11.86 | 0.00 | 7.56 | 1.14 | 0.24 | 3.78 | 12.3 | 147.3 | Clear | None |
| 09:45 | 5 | 25 | 100 | 11.86 | 0.85 | 7.56 | 1.14 | 0.24 | 3.78 | 12.3 | 147.3 | Clear | None |
| 09:50 | 5 | 30 | 100 | 11.98 | 0.00 | 7.56 | 1.11 | 0.27 | 3.83 | 12.3 | 143.4 | Clear | None |
| 09:50 | 5 | 30 | 100 | 11.98 | 0.98 | 7.56 | 1.11 | 0.27 | 3.83 | 12.3 | 143.4 | Clear | None |
| 09:55 | 5 | 35 | 100 | 12.17 | 0.00 | 7.55 | 1.09 | 0.32 | 3.72 | 12.4 | 135.8 | Clear | None |
| 09:55 | 5 | 35 | 100 | 12.17 | 1.11 | 7.55 | 1.09 | 0.32 | 3.72 | 12.4 | 135.8 | Clear | None |
| 10:00 | 5 | 40 | 100 | 12.27 | 0.00 | 7.54 | 1.08 | 0.72 | 3.59 | 12.4 | 131.5 | Clear | None |
| 10:00 | 5 | 40 | 100 | 12.27 | 1.24 | 7.54 | 1.08 | 0.72 | 3.59 | 12.4 | 131.5 | Clear | None |
| 10:05 | 5 | 45 | 100 | 12.33 | 0.00 | 7.54 | 1.07 | 0.43 | 3.62 | 12.4 | 128.3 | Clear | None |
| 10:05 | 5 | 45 | 100 | 12.33 | 1.37 | 7.54 | 1.07 | 0.43 | 3.62 | 12.4 | 128.3 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments: Specific conductivity measured

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------|----------------|
| Project Number | 30171056 | Well ID | MW-18-101 | Date | 5/23/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 76 °F, Sunny, winds at mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 62.26 | Total Depth (ft-bmp) | 86.6 | Water Column (ft) | 24.34 | Gallons in Well | 3.96 |
| Purge Start | 13:20 | Pump Intake (ft-bmp) | 82 | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 13:45 | Volumes Purged | 0.25 | Sample ID | MW-18-101_052323 | Sampled by | Anyssa Mandich |
| Sample Time | 13:45 | Gallons Purged | 1 | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|--------|
| | | | | | | | | | | | | Color | Odor |
| 13:25 | 0 | 0 | 125 | 62.74 | 0.00 | 7.1 | 1.38 | 13.4 | 0.52 | 15.3 | -187.1 | Clear | Medium |
| 13:30 | 5 | 5 | 125 | 62.78 | 0.00 | 7.06 | 1.52 | 37 | 0.22 | 15.1 | -229.9 | Clear | Medium |
| 13:35 | 5 | 10 | 125 | 62.78 | 0.00 | 7.05 | 1.71 | 39.8 | 0.15 | 15.1 | -248.6 | Clear | Medium |
| 13:40 | 5 | 15 | 125 | 62.82 | 0.00 | 6.96 | 1.75 | 40.3 | 0.15 | 15.1 | -249.9 | Clear | Medium |
| 13:45 | 5 | 20 | 125 | 62.82 | 0.00 | 6.95 | 1.75 | 41 | 0.15 | 15.1 | -245.1 | Clear | Medium |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-18-103 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 19.9 degrees F and Light Snow. The wind is blowing N/NW at 8.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 2.08 | Total Depth (ft-bmp) | 10.73 | Water Column (ft) | 8.65 |
| | | | | Gallons in Well | 1.41 |
| Purge Start | 12:10 | Pump Intake (ft-bmp) | 8.23 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 12:50 | Volumes Purged | 1.50 | Sample ID | MW-18-103_021723 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 12:45 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:15 | 0 | 0 | 200 | 2.08 | 0.26 | 6.9 | 0.92 | 5.38 | 0.55 | 6.9 | -99.3 | Clear | None |
| 12:20 | 5 | 5 | 200 | 2.08 | 0.53 | 6.84 | 0.923 | 2.19 | 0.32 | 6.8 | -122.2 | Clear | None |
| 12:25 | 5 | 10 | 200 | 2.08 | 0.79 | 6.86 | 0.922 | 1.89 | 0.3 | 6.7 | -132.1 | Clear | None |
| 12:30 | 5 | 15 | 200 | 2.08 | 1.06 | 6.87 | 0.918 | 1.65 | 0.32 | 6.8 | -139.5 | Clear | None |
| 12:35 | 5 | 20 | 200 | 2.08 | 1.32 | 6.89 | 0.911 | 1.34 | 0.36 | 6.7 | -147.1 | Clear | None |
| 12:40 | 5 | 25 | 200 | 2.08 | 1.59 | 6.9 | 0.903 | 1.24 | 0.38 | 6.6 | -152 | Clear | None |
| 12:45 | 5 | 30 | 200 | 2.08 | 1.85 | 6.9 | 0.894 | 1.11 | 0.39 | 6.6 | -155.2 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>10G200</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-18-105 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 21.0 degrees F and Mostly Cloudy. The wind is blowing NW at 11.4 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 1.95 | Total Depth (ft-bmp) | 11.2 | Water Column (ft) | 9.25 |
| | | | | Gallons in Well | 1.50 |
| Purge Start | 13:10 | Pump Intake (ft-bmp) | 8.7 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 13:40 | Volumes Purged | 1.06 | Sample ID | MW-18-105_021723 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 13:35 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:15 | 0 | 0 | 200 | 2.24 | 0.26 | 7.11 | 0.533 | 3.37 | 5.13 | 5.7 | -92.4 | Clear | None |
| 13:20 | 5 | 5 | 200 | 2.34 | 0.53 | 7.11 | 0.526 | 1.89 | 5.19 | 5.4 | -112.1 | Clear | None |
| 13:25 | 5 | 10 | 200 | 2.39 | 0.79 | 7.11 | 0.525 | 1.51 | 5.52 | 5.2 | -121.3 | Clear | None |
| 13:30 | 5 | 15 | 200 | 2.41 | 1.06 | 7.11 | 0.521 | 1.43 | 5.51 | 5.2 | -128 | Clear | None |
| 13:35 | 5 | 20 | 200 | 2.42 | 1.32 | 7.11 | 0.522 | 1.29 | 5.48 | 5.2 | -130 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: See figure. | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Flush mount | Key Number To Well: 10G200 |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-18-105 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 63 °, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 1.61 | Total Depth (ft-bmp) | 11.17 | Water Column (ft) | 9.56 |
| | | | | Gallons in Well | 1.55 |
| Purge Start | 17:00 | Pump Intake (ft-bmp) | 10 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 17:35 | Volumes Purged | 1.29 | Sample ID | MW-18-105_052423 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 17:35 | Gallons Purged | 2 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 17:05 | 0 | 0 | 150 | 2.45 | 0.00 | 7.32 | 0.418 | 24.3 | 0.3 | 10.1 | 70.5 | Clear | None |
| 17:10 | 5 | 5 | 150 | 2.68 | 0.00 | 7.32 | 0.416 | 22.3 | 0.25 | 10.1 | 68.5 | Clear | None |
| 17:15 | 5 | 10 | 150 | 2.84 | 0.00 | 7.31 | 0.413 | 7.71 | 0.3 | 10 | 66.3 | Clear | None |
| 17:20 | 5 | 15 | 150 | 3.08 | 0.00 | 7.31 | 0.412 | 6.2 | 0.35 | 10.1 | 64 | Clear | None |
| 17:25 | 5 | 20 | 150 | 3.39 | 0.00 | 7.32 | 0.412 | 3.21 | 0.32 | 10.1 | 61.3 | Clear | None |
| 17:30 | 5 | 25 | 150 | 3.65 | 0.00 | 7.31 | 0.412 | 4.02 | 0.3 | 10 | 59.8 | Clear | None |
| 17:35 | 5 | 30 | 150 | 3.86 | 0.00 | 7.31 | 0.412 | 3.87 | 0.32 | 9.9 | 56 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Off site P3 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-19-107 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 63 °, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 18.10 | Total Depth (ft-bmp) | 29.82 | Water Column (ft) | 11.72 |
| | | | | Gallons in Well | 1.90 |
| Purge Start | 15:50 | Pump Intake (ft-bmp) | 28 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 16:35 | Volumes Purged | 1.32 | Sample ID | MW-19-107_052423 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 16:35 | Gallons Purged | 2.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:55 | 0 | 0 | 150 | 18.58 | 0.00 | 6.85 | 0.79 | 633 | 0.54 | 11.8 | 77 | Clear | None |
| 16:00 | 5 | 5 | 150 | 18.73 | 0.00 | 6.84 | 0.78 | 417 | 0.43 | 11.8 | 63.5 | Clear | None |
| 16:05 | 5 | 10 | 150 | 18.88 | 0.00 | 6.84 | 0.77 | 325 | 0.44 | 11.7 | 49.6 | Clear | None |
| 16:10 | 5 | 15 | 150 | 18.97 | 0.00 | 6.84 | 0.78 | 270 | 0.42 | 11.9 | 32.5 | Clear | None |
| 16:15 | 5 | 20 | 150 | 19.03 | 0.00 | 6.84 | 0.78 | 224 | 0.43 | 11.9 | 21.5 | Clear | None |
| 16:20 | 5 | 25 | 150 | 19.10 | 0.00 | 6.84 | 0.78 | 187 | 0.41 | 11.9 | 13 | Clear | None |
| 16:25 | 5 | 30 | 150 | 19.16 | 0.00 | 6.84 | 0.77 | 150 | 0.4 | 11.6 | -3.4 | Clear | None |
| 16:30 | 5 | 35 | 150 | 19.22 | 0.00 | 6.84 | 0.77 | 137 | 0.37 | 11.6 | -6.5 | Clear | None |
| 16:35 | 5 | 40 | 150 | 19.22 | 0.00 | 6.84 | 0.77 | 140 | 0.37 | 11.7 | -10.4 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments: Berm is overgrown with grass/tripping hazards

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-19-108 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 63 °, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 16.07 | Total Depth (ft-bmp) | 30 | Water Column (ft) | 13.93 |
| | | | | Gallons in Well | 2.26 |
| Purge Start | 14:45 | Pump Intake (ft-bmp) | 25.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:30 | Volumes Purged | 1.11 | Sample ID | MW-19-108_052423 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 15:30 | Gallons Purged | 2.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:50 | 0 | 0 | 150 | 16.18 | 0.00 | 6.76 | 1.22 | 186 | 0.92 | 11.3 | 101 | Clear | None |
| 14:55 | 5 | 5 | 150 | 16.18 | 0.00 | 6.75 | 1.21 | 174 | 0.85 | 11.2 | 82.7 | Clear | None |
| 15:00 | 5 | 10 | 150 | 16.22 | 0.00 | 6.75 | 1.21 | 187 | 0.98 | 11.2 | 66.4 | Clear | None |
| 15:05 | 5 | 15 | 150 | 16.23 | 0.00 | 6.75 | 1.21 | 155 | 0.97 | 11.2 | 52.9 | Clear | None |
| 15:10 | 5 | 20 | 150 | 16.23 | 0.00 | 6.75 | 1.21 | 149 | 1 | 11.2 | 45.2 | Clear | None |
| 15:15 | 5 | 25 | 150 | 16.23 | 0.00 | 6.75 | 1.2 | 121 | 0.98 | 11.1 | 36 | Clear | None |
| 15:20 | 5 | 30 | 150 | 16.23 | 0.00 | 6.75 | 1.2 | 36.5 | 0.91 | 11.1 | 30.5 | Clear | None |
| 15:25 | 5 | 35 | 150 | 16.23 | 0.00 | 6.75 | 1.2 | 34.6 | 0.9 | 11.1 | 26.7 | Clear | None |
| 15:30 | 5 | 40 | 150 | 16.23 | 0.00 | 6.75 | 1.2 | 33.8 | 0.88 | 11.1 | 20.7 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments: Tripping hazards due to tall grass and holes in berm

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-19-111 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 63 °, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 22.88 | Total Depth (ft-bmp) | 27.36 | Water Column (ft) | 4.48 |
| | | | | Gallons in Well | 0.73 |
| Purge Start | 13:50 | Pump Intake (ft-bmp) | 26 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 14:20 | Volumes Purged | 1.37 | Sample ID | MW-19-111_052423 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 14:20 | Gallons Purged | 1 | Replicate/ Code No. | MW-19-111_052423 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:55 | 0 | 0 | 125 | 23.01 | 0.00 | 6.8 | 1.27 | 2.33 | 2.23 | 13.2 | 46.3 | Clear | None |
| 14:00 | 5 | 5 | 125 | 23.03 | 0.00 | 6.77 | 1.25 | | 1.83 | 12.4 | 51.4 | Clear | None |
| 14:05 | 5 | 10 | 125 | 23.03 | 0.00 | 6.78 | 1.24 | 2.68 | 1.81 | 12.2 | 55.2 | Clear | None |
| 14:10 | 5 | 15 | 125 | 23.03 | 0.00 | 6.78 | 1.23 | 2.96 | 1.72 | 11.9 | 58.9 | Clear | None |
| 14:15 | 5 | 20 | 125 | 23.03 | 0.00 | 6.78 | 1.22 | 2.6 | 1.71 | 11.8 | 60.4 | Clear | None |
| 14:20 | 5 | 25 | 125 | 23.03 | 0.00 | 6.78 | 1.22 | 2.02 | 1.66 | 11.8 | 62.4 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 6 | None |

Comments: Tall grass/tripping hazards on berm

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-19-115 | Date | 5/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 55.0 degrees F and Clear. The wind is blowing E at 6.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 59.62 | Total Depth (ft-bmp) | 81.5 | Water Column (ft) | 21.88 |
| | | | | Gallons in Well | 3.56 |
| Purge Start | 13:30 | Pump Intake (ft-bmp) | 79 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 14:10 | Volumes Purged | 0.59 | Sample ID | MW-19-115_051723 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 14:10 | Gallons Purged | 2.11 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:35 | 0 | 0 | 200 | 60.88 | 0.26 | 7.74 | 2.38 | 239 | 10.23 | 14.1 | 29.9 | Clear | None |
| 13:40 | 5 | 5 | 200 | 60.92 | 0.53 | 7.35 | 2.39 | 188 | 8.45 | 14.1 | 35 | Clear | None |
| 13:45 | 5 | 10 | 200 | 60.98 | 0.79 | 7.23 | 2.4 | 132 | 6.12 | 14.1 | 30.1 | Clear | None |
| 13:50 | 5 | 15 | 200 | 60.99 | 1.06 | 7.12 | 2.41 | 109 | 5.8 | 14.2 | 27.2 | Clear | None |
| 13:55 | 5 | 20 | 200 | 60.99 | 1.32 | 7.09 | 2.43 | 96.4 | 5.65 | 14.1 | 22.4 | Clear | None |
| 14:00 | 5 | 25 | 200 | 60.99 | 1.59 | 7.08 | 2.42 | 91.6 | 5.59 | 14.1 | 21.1 | Clear | None |
| 14:05 | 5 | 30 | 200 | 60.99 | 1.85 | 7.06 | 2.46 | 88.4 | 5.57 | 14.1 | 19.4 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|------------------------|-------------|--------|--------------|
| 1,4-Dioxane 8260B-SIMS | 40 mL Glass | 3 | HCL |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-19-116 | Date | 5/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 55.9 degrees F and Clear. The wind is blowing NE at 11.4 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 56.13 | Total Depth (ft-bmp) | 74.2 | Water Column (ft) | 18.07 |
| | | | | Gallons in Well | 2.94 |
| Purge Start | 14:55 | Pump Intake (ft-bmp) | 71.7 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:30 | Volumes Purged | 0.63 | Sample ID | MW-19-116_051723 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 15:25 | Gallons Purged | 1.85 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:00 | 0 | 0 | 200 | 56.70 | 0.26 | 7.05 | 1.13 | 143 | 5.27 | 14.4 | -31.5 | Clear | None |
| 15:05 | 5 | 5 | 200 | 56.75 | 0.53 | 6.98 | 1.14 | 44.1 | 4.41 | 14.4 | -33.8 | Clear | None |
| 15:10 | 5 | 10 | 200 | 56.75 | 0.79 | 6.94 | 1.14 | 11.2 | 3.28 | 14.4 | -40.7 | Clear | None |
| 15:15 | 5 | 15 | 200 | 56.75 | 1.06 | 6.92 | 1.14 | 4.21 | 2.06 | 14.4 | -46 | Clear | None |
| 15:20 | 5 | 20 | 200 | 56.75 | 1.32 | 6.93 | 1.13 | 3.98 | 2.01 | 14.5 | -48.5 | Clear | None |
| 15:25 | 5 | 25 | 200 | 56.77 | 1.59 | 6.93 | 1.15 | 3.69 | 1.91 | 14.5 | -50.7 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|------------------------|-------------|--------|--------------|
| 1,4-Dioxane 8260B-SIMS | 40 mL Glass | 3 | HCL |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|--|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-19-117 | Date | 5/18/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 59.0 degrees F and Clear. The wind is blowing S/SE at 8.1 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 58.92 | Total Depth (ft-bmp) | 62.8 | Water Column (ft) | 3.88 | Gallons in Well | 0.63 |
| Purge Start | 13:10 | Pump Intake (ft-bmp) | 62.5 | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 13:55 | Volumes Purged | 1.89 | Sample ID | MW-19-117_051823 | Sampled by | Billy Cobern |
| Sample Time | 13:55 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:15 | 0 | 0 | 100 | 59.00 | 0.13 | 6.99 | 1.17 | 595 | 2.09 | 17.1 | -53.8 | Clear | None |
| 13:20 | 5 | 5 | 100 | 59.15 | 0.26 | 6.98 | 1.16 | 124 | 1.43 | 16.9 | -64.8 | Clear | None |
| 13:25 | 5 | 10 | 100 | 59.32 | 0.40 | 6.99 | 1.16 | 136 | 0.88 | 17.2 | -70.7 | Clear | None |
| 13:30 | 5 | 15 | 100 | 59.47 | 0.53 | 6.96 | 1.15 | 64.3 | 0.48 | 16.8 | -74.5 | Clear | None |
| 13:35 | 5 | 20 | 100 | 59.55 | 0.66 | 6.95 | 1.15 | 58.3 | 0.39 | 16.9 | -76.9 | Clear | None |
| 13:40 | 5 | 25 | 100 | 59.61 | 0.79 | 6.94 | 1.15 | 52.1 | 0.36 | 17.1 | -78.5 | Clear | None |
| 13:45 | 5 | 30 | 100 | 59.69 | 0.66 | 6.94 | 1.15 | 59.2 | 0.37 | 17 | -79.3 | Clear | None |
| 13:50 | 5 | 35 | 100 | 59.75 | 1.06 | 6.94 | 1.15 | 61.3 | 0.35 | 17 | -79.3 | Clear | None |
| 13:55 | 5 | 40 | 100 | 59.75 | 1.19 | 6.94 | 1.15 | 60.6 | 0.36 | 17 | -79.4 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-19-120 | Date | 5/18/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 55.0 degrees F and Clear. The wind is blowing SE at 5.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 65.60 | Total Depth (ft-bmp) | 74 | Water Column (ft) | 8.40 |
| | | | | Gallons in Well | 1.36 |
| Purge Start | 12:00 | Pump Intake (ft-bmp) | 72 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 12:40 | Volumes Purged | 0.78 | Sample ID | MW-19-120_051823 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 12:40 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:05 | 0 | 0 | 100 | 65.80 | 0.13 | 7.01 | 2.83 | 112 | 1.17 | 17.8 | 4 | Orange | None |
| 12:10 | 5 | 5 | 100 | 65.93 | 0.26 | 7.03 | 2.92 | 302 | 0.48 | 17.2 | -19.9 | Orange | None |
| 12:15 | 5 | 10 | 100 | 66.03 | 0.40 | 7.03 | 2.88 | 356 | 0.4 | 18.6 | -26.1 | Orange | None |
| 12:20 | 5 | 15 | 100 | 66.13 | 0.53 | 7.03 | 2.89 | 394 | 0.53 | 17.5 | -23.2 | Orange | None |
| 12:25 | 5 | 20 | 100 | 66.23 | 0.66 | 7.03 | 2.89 | 305 | 0.53 | 17.2 | -18.6 | Orange | None |
| 12:30 | 5 | 25 | 100 | 66.32 | 0.79 | 7.03 | 2.89 | 222 | 0.49 | 17.2 | -12 | Orange | None |
| 12:35 | 5 | 30 | 100 | 66.37 | 0.92 | 7.03 | 2.89 | 204 | 0.49 | 17.3 | -7.5 | Orange | None |
| 12:40 | 5 | 35 | 100 | 66.40 | 1.06 | 7.03 | 2.89 | 201 | 0.5 | 17.2 | -5.1 | Orange | None |

| | | | |
|---|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM,VOCs SW-846 8260B | 40 mL Glass | 3 | HCL |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-19-121 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 34.0 degrees F and Cloudy. The wind is blowing NE at 10.3 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 65.12 | Total Depth (ft-bmp) | 71.15 | Water Column (ft) | 6.03 |
| | | | | Gallons in Well | 0.98 |
| Purge Start | 08:40 | Pump Intake (ft-bmp) | 69 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 09:35 | Volumes Purged | 1.48 | Sample ID | MW-19-121_021623 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 09:35 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 08:40 | 0 | 0 | 100 | 65.12 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Gray | None |
| 08:45 | 5 | 5 | 100 | 65.43 | 0.13 | 7.3 | 2.19 | 811 | 12.52 | 6 | 87.6 | Gray | None |
| 08:50 | 5 | 10 | 100 | 65.43 | 0.26 | 7.37 | 2.2 | 761 | 12.02 | 6.1 | 81.6 | Gray | None |
| 08:55 | 5 | 15 | 100 | 65.43 | 0.40 | 7.42 | 2.2 | 541 | 11.58 | 6.3 | 77.9 | Gray | None |
| 09:00 | 5 | 20 | 100 | 65.43 | 0.53 | 7.44 | 2.2 | 498 | 11.24 | 6.5 | 76.9 | Gray | None |
| 09:05 | 5 | 25 | 100 | 65.43 | 0.66 | 7.46 | 2.2 | 456 | 10.82 | 6.4 | 76.1 | Gray | None |
| 09:10 | 5 | 30 | 100 | 65.43 | 0.79 | 7.47 | 2.2 | 402 | 10.7 | 6.6 | 76 | Gray | None |
| 09:15 | 5 | 35 | 100 | 65.43 | 0.92 | 7.49 | 2.22 | 354 | 10.96 | 6 | 76.1 | Gray | None |
| 09:20 | 5 | 40 | 100 | 65.43 | 1.06 | 7.5 | 2.17 | 310 | 10.42 | 6.6 | 75.6 | Gray | None |
| 09:25 | 5 | 45 | 100 | 65.43 | 1.19 | 7.49 | 2.21 | 285 | 10.47 | 6.6 | 75.9 | Gray | None |
| 09:30 | 5 | 50 | 100 | 65.43 | 1.32 | 7.49 | 2.21 | 270 | 10.48 | 6.5 | 75.9 | Gray | None |
| 09:35 | 5 | 55 | 100 | 65.43 | 1.45 | 7.49 | 2.21 | 266 | 10.5 | 6.4 | 75.8 | Gray | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| 1,4-Dioxane 522 | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-19-121 | Date | 5/17/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 48.9 degrees F and Clear. The wind is blowing NE at 12.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 64.64 | Total Depth (ft-bmp) | 71.15 | Water Column (ft) | 6.51 |
| | | | | Gallons in Well | 1.06 |
| Purge Start | 10:15 | Pump Intake (ft-bmp) | 69 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 10:50 | Volumes Purged | 0.87 | Sample ID | MW-19-121_051723 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 10:50 | Gallons Purged | | Replicate/ Code No. | DUP-02_051723 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:20 | 0 | 0 | 100 | 64.95 | 0.13 | 6.98 | 2.26 | 21.1 | 4.43 | 13.2 | 226 | Clear | None |
| 10:25 | 5 | 5 | 100 | 64.95 | 0.26 | 6.98 | 2.26 | 16.6 | 4.44 | 13.3 | 227.4 | Clear | None |
| 10:30 | 5 | 10 | 100 | 64.95 | 0.40 | 6.97 | 2.27 | 19.2 | 4.1 | 13.4 | 236.7 | Clear | None |
| 10:35 | 5 | 15 | 100 | 64.95 | 0.53 | 6.97 | 2.27 | 24.3 | 4.11 | 13.6 | 240.2 | Clear | None |
| 10:40 | 5 | 20 | 100 | 64.95 | 0.66 | 6.97 | 2.27 | 28.7 | 4.32 | 13.4 | 243.8 | Clear | None |
| 10:45 | 5 | 25 | 100 | 64.95 | 0.79 | 6.97 | 2.26 | 29.8 | 4.26 | 13.5 | 245.9 | Clear | None |
| 10:50 | 5 | 30 | 100 | 64.95 | 0.92 | 6.97 | 2.26 | 30.2 | 4.29 | 13.6 | 246.2 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|----------------|--------|--------------|
| Total Phosphorus/TKN | 250 mL Plastic | 2 | H2SO4 |
| Nitrate | 125 mL Plastic | 2 | None |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 6 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-19-122 | Date | 2/16/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 62.41 | Total Depth (ft-bmp) | 66.85 | Water Column (ft) | 4.44 | Gallons in Well | 0.72 |
| Purge Start | 10:05 | Pump Intake (ft-bmp) | 65.5 | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 11:05 | Volumes Purged | 2.20 | Sample ID | MW-19-122_021623 | Sampled by | Billy Cobern |
| Sample Time | 11:05 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:05 | 0 | 0 | 100 | 62.41 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Gray | None |
| 10:10 | 5 | 5 | 100 | 62.73 | 0.13 | 7.27 | 2.57 | 961 | 9.7 | 7.2 | 91.7 | Gray | None |
| 10:15 | 5 | 10 | 100 | 62.73 | 0.26 | 7.23 | 3.42 | 878 | 8.71 | 8.6 | 88.1 | Gray | None |
| 10:20 | 5 | 15 | 100 | 62.73 | 0.40 | 7.2 | 3.39 | 749 | 9.4 | 10.6 | 87 | Gray | None |
| 10:25 | 5 | 20 | 100 | 62.73 | 0.53 | 7.21 | 3.5 | 703 | 11.06 | 7.5 | 87.3 | Gray | None |
| 10:30 | 5 | 25 | 100 | 62.73 | 0.66 | 7.25 | 3.45 | 634 | 11.03 | 5.2 | 85.7 | Gray | None |
| 10:35 | 5 | 30 | 100 | 62.73 | 0.79 | 7.26 | 3.44 | 572 | 10.9 | 5 | 85 | Gray | None |
| 10:40 | 5 | 35 | 100 | 62.73 | 0.92 | 7.24 | 3.35 | 471 | 9.42 | 8.1 | 83.6 | Gray | None |
| 10:45 | 5 | 40 | 100 | 62.73 | 1.06 | 7.23 | 3.39 | 426 | 9.59 | 8.5 | 83.1 | Gray | None |
| 10:50 | 5 | 45 | 100 | 62.73 | 1.19 | 7.24 | 3.41 | 397 | 9.48 | 8.9 | 81.9 | Gray | None |
| 10:55 | 5 | 50 | 100 | 62.73 | 1.32 | 7.23 | 3.4 | 345 | 9.4 | 8.9 | 80.5 | Gray | None |
| 11:00 | 5 | 55 | 100 | 62.73 | 1.45 | 7.22 | 3.42 | 266 | 9.44 | 9 | 80.3 | Gray | None |
| 11:05 | 5 | 60 | 100 | 62.73 | 1.59 | 7.22 | 3.42 | 294 | 9.46 | 8.9 | 80.2 | Gray | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 522 | 40 mL Glass | 3 | HCL |

Comments: Turbidity didn't stabilize

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-19-122 | Date | 5/18/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 46.9 degrees F and Clear. The wind is blowing S/SE at 5.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 63.29 | Total Depth (ft-bmp) | 66.85 | Water Column (ft) | 3.56 |
| | | | | Gallons in Well | 0.58 |
| Purge Start | 09:45 | Pump Intake (ft-bmp) | 66 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 10:15 | Volumes Purged | 1.37 | Sample ID | MW-19-122_051823 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 10:15 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:50 | 0 | 0 | 100 | 63.35 | 0.13 | 7.22 | 4.11 | 873 | 8.19 | 14 | 163 | Brown | None |
| 09:55 | 5 | 5 | 100 | 63.40 | 0.26 | 7.19 | 4.15 | 684 | 7.75 | 14.1 | 162.7 | Brown | None |
| 10:00 | 5 | 10 | 100 | 63.45 | 0.40 | 7.17 | 4.17 | 549 | 7.31 | 14.1 | 162.3 | Brown | None |
| 10:05 | 5 | 15 | 100 | 63.45 | 0.53 | 7.15 | 4.17 | 616 | 6.89 | 14 | 164 | Brown | None |
| 10:10 | 5 | 20 | 100 | 63.45 | 0.66 | 7.14 | 4.17 | 591 | 7.05 | 13.9 | 166.7 | Brown | None |
| 10:15 | 5 | 25 | 100 | 63.45 | 0.79 | 7.15 | 4.17 | 588 | 6.57 | 13.9 | 169 | Brown | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|-------------|--------|--------------|
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-19-123 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 32.0 degrees F and Cloudy. The wind is blowing N/NE at 11.4 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 64.05 | Total Depth (ft-bmp) | 73.82 | Water Column (ft) | 9.77 |
| | | | | Gallons in Well | 1.59 |
| Purge Start | 12:25 | Pump Intake (ft-bmp) | 71.32 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 13:00 | Volumes Purged | 1.16 | Sample ID | MW-19-123_021623 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 12:55 | Gallons Purged | | Replicate/Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:30 | 0 | 0 | 200 | 64.05 | 0.26 | 6.92 | 2.391 | 26.7 | 6.89 | 12 | -12.4 | Clear | None |
| 12:35 | 5 | 5 | 200 | 64.38 | 0.53 | 6.96 | 2.373 | 11.2 | 6.96 | 12.1 | -22 | Clear | None |
| 12:40 | 5 | 10 | 200 | 67.70 | 0.79 | 6.95 | 2.392 | 5.08 | 7.01 | 11.9 | -30.5 | Clear | None |
| 12:45 | 5 | 15 | 200 | 68.58 | 1.06 | 6.94 | 2.404 | 3.41 | 6.49 | 11.4 | -38.8 | Clear | None |
| 12:50 | 5 | 20 | 200 | 69.02 | 1.32 | 6.94 | 2.401 | 3.02 | 6.44 | 11.5 | -39.6 | Clear | None |
| 12:55 | 5 | 25 | 200 | 69.22 | 1.59 | 6.93 | 2.421 | 2.83 | 6.54 | 11.5 | -42.7 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|--|
| Location ID: | MW-19-123 | Date(s): | 2023-05-17 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 2 |
| Weather(°F): | CLEAR, T:45.03 °F, rH:72%, Clouds: 0%, Wind:6.91mph NE | | | Field Technician: | Billy Cobern | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 62.58 | Total Depth (ft-bmp): | 73.8 | Water Column(ft): | 11.22 | Liters in Well: 1.82 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | 71 | Purge Method: | Low Flow | Purging Equipment: Disposable bladder |
| Purge Start Time: | 08:55 | Total Volume Purged (liters): | 3 | Sample ID: | MW-19-123_MMDDYY | Sample Time: 09:25 |
| Purge End Time: | 09:25 | Well Volumes Purged (total): | 1.65 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: YSI ProPlus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 09:00 | 0 | 100 | mL/min | 62.58 | 7.77 | 1.16 | 36.3 | 9.7 | 12.7 | 245.1 | Clear | No Odor |
| 09:05 | 5 | 100 | mL/min | 62.88 | 7.51 | 2.27 | 26.3 | 10.8 | 12.5 | 253.5 | Clear | No Odor |
| 09:10 | 10 | 100 | mL/min | 62.88 | 7.47 | 2.23 | 21.2 | 10.88 | 12.4 | 254.4 | Clear | No Odor |
| 09:15 | 15 | 100 | mL/min | 62.88 | 7.27 | 2.27 | 16.7 | 10.63 | 12.2 | 260.1 | Clear | No Odor |
| 09:20 | 20 | 100 | mL/min | 62.88 | 7.23 | 2.27 | 15.4 | 9.97 | 12 | 262.1 | Clear | No Odor |
| 09:25 | 25 | 100 | mL/min | 62.88 | 7.22 | 2.27 | 15.4 | 10.19 | 12 | 262.4 | Clear | No Odor |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|----------------|--------|--------------|
| Nitrate | 125 mL Plastic | 1 | None |
| TKN/Phosphorus | 250 mL Plastic | 1 | H2SO4 |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-19-124 | Date | 5/18/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 51.1 degrees F and Clear. The wind is blowing S/SE at 10.3 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 64.67 | Total Depth (ft-bmp) | 72.3 | Water Column (ft) | 7.63 |
| | | | | Gallons in Well | 1.24 |
| Purge Start | 10:45 | Pump Intake (ft-bmp) | 70 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 11:30 | Volumes Purged | 0.96 | Sample ID | MW-19-125_051823 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 11:30 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:50 | 0 | 0 | 100 | 64.74 | 0.13 | 6.73 | 3.5 | 39.6 | 1.5 | 14.6 | -42.7 | Clear | None |
| 10:55 | 5 | 5 | 100 | 64.74 | 0.26 | 6.69 | 3.51 | 346 | 0.45 | 14.9 | -59.5 | Clear | None |
| 11:00 | 5 | 10 | 100 | 64.74 | 0.40 | 6.69 | 3.51 | 306 | 0.31 | 14.9 | -65.1 | Clear | None |
| 11:05 | 5 | 15 | 100 | 64.74 | 0.53 | 6.68 | 3.52 | 268 | 0.26 | 15 | -80.3 | Clear | None |
| 11:10 | 5 | 20 | 100 | 64.74 | 0.66 | 6.68 | 3.51 | 187 | 0.26 | 15 | -70.6 | Clear | None |
| 11:15 | 5 | 25 | 100 | 64.74 | 0.79 | 6.68 | 3.52 | 95.6 | 0.25 | 15 | -73.7 | Clear | None |
| 11:20 | 5 | 30 | 100 | 64.74 | 0.92 | 6.67 | 3.52 | 60.1 | 0.25 | 15.1 | -75.6 | Clear | None |
| 11:25 | 5 | 35 | 100 | 64.74 | 1.06 | 6.67 | 3.52 | 58.1 | 0.24 | 15.1 | -76.4 | Clear | None |
| 11:30 | 5 | 40 | 100 | 64.74 | 1.19 | 6.67 | 3.52 | 54.6 | 0.24 | 15.2 | -76.5 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-20-126 | Date | 2/16/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 63.76 | Total Depth (ft-bmp) | 76.41 | Water Column (ft) | 12.65 | Gallons in Well | 2.06 |
| Purge Start | 10:20 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 11:20 | Volumes Purged | | Sample ID | MW-20-126_021623 | Sampled by | Donald Richmond |
| Sample Time | 11:20 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:40 | 0 | 0 | 200 | 63.76 | 0.00 | 6.86 | 2.69 | 143 | 11.03 | 7.8 | 134 | Clear | None |
| 10:45 | 5 | 5 | 200 | 63.76 | 0.00 | 6.87 | 2.62 | 97.1 | 11 | 7.4 | 124.8 | Clear | None |
| 10:50 | 5 | 10 | 200 | 63.76 | 0.00 | 6.87 | 2.66 | 81.3 | 10.9 | 7.4 | 121.4 | Clear | None |
| 10:55 | 5 | 15 | 200 | 63.76 | 0.00 | 6.88 | 2.61 | | 11.18 | 6.8 | 117.6 | Clear | None |
| 11:00 | 5 | 20 | 200 | 63.76 | 0.00 | 6.89 | 2.6 | 49.1 | 10.89 | 7.4 | 114.2 | Clear | None |
| 11:05 | 5 | 25 | 200 | 63.76 | 0.00 | 6.89 | 2.4 | 46.2 | 10.94 | 7 | 111.5 | Clear | None |
| 11:10 | 5 | 30 | 200 | 63.76 | 0.00 | 6.89 | 2.26 | 36.2 | 11.13 | 6.6 | 109.9 | Clear | None |
| 11:15 | 5 | 35 | 200 | 63.76 | 0.00 | 6.9 | 2.6 | 30.8 | 10.89 | 6.9 | 107.9 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|-------------|--------|--------------|
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: _____ | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-20-126 | Date | 5/18/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 64.9 degrees F and Clear. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 59.02 | Total Depth (ft-bmp) | 74.45 | Water Column (ft) | 15.43 | Gallons in Well | 2.51 |
| Purge Start | 15:30 | Pump Intake (ft-bmp) | 72 | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 16:10 | Volumes Purged | 0.42 | Sample ID | MW-20-126 | Sampled by | Billy Cobern |
| Sample Time | 16:10 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:35 | 0 | 0 | 100 | 59.32 | 0.13 | 7 | 4.14 | 54 | 6.5 | 15.2 | 145.2 | Clear | None |
| 15:40 | 5 | 5 | 100 | 59.32 | 0.26 | 6.98 | 4.17 | 45.3 | 5.53 | 14.9 | 137.4 | Clear | None |
| 15:45 | 5 | 10 | 100 | 59.32 | 0.40 | 6.98 | 4.18 | 40.2 | 4.93 | 14.7 | 130.4 | Clear | None |
| 15:50 | 5 | 15 | 100 | 59.32 | 0.53 | 6.97 | 4.17 | 34.1 | 4.63 | 14.5 | 124.7 | Clear | None |
| 15:55 | 5 | 20 | 100 | 59.32 | 0.66 | 6.97 | 4.18 | 31.7 | 4.5 | 14.5 | 120 | Clear | None |
| 16:00 | 5 | 25 | 100 | 59.32 | 0.79 | 6.96 | 4.19 | 27.8 | 4.37 | 14.5 | 115.3 | Clear | None |
| 16:05 | 5 | 30 | 100 | 59.32 | 0.92 | 6.97 | 4.19 | 26.8 | 3.99 | 14.5 | 112.8 | Clear | None |
| 16:10 | 5 | 35 | 100 | 59.32 | 1.06 | 6.97 | 4.19 | 25.4 | 4.06 | 14.8 | 109.8 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments: Well is bubbling

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-20-127 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 64.95 | Total Depth (ft-bmp) | 78.67 | Water Column (ft) | 13.72 |
| | | | | Gallons in Well | 2.23 |
| Purge Start | 14:55 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 15:40 | Volumes Purged | | Sample ID | MW-20-127_021623 |
| | | | | Sampled by | Donald Richmond |
| Sample Time | 15:40 | Gallons Purged | | Replicate/Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:05 | 0 | 0 | 200 | 64.95 | 0.00 | 7.03 | 2.25 | 1.93 | 2.01 | 9.7 | 86.3 | Clear | None |
| 15:10 | 5 | 5 | 200 | 64.95 | 0.00 | 6.85 | 2.27 | 2.89 | 0.94 | 9 | 59.7 | Clear | None |
| 15:15 | 5 | 10 | 200 | 64.95 | 0.00 | 6.86 | 2.26 | 2.58 | 0.74 | 8.3 | 50.8 | Clear | None |
| 15:20 | 5 | 15 | 200 | 64.95 | 0.00 | 6.83 | 2.26 | 2.58 | 0.61 | 8.4 | 46.5 | Clear | None |
| 15:25 | 5 | 20 | 200 | 64.95 | 0.00 | 6.83 | 2.27 | 0.02 | 0.43 | 8.5 | 34.9 | Clear | None |
| 15:30 | 5 | 25 | 200 | 64.95 | 0.00 | 6.83 | 2.29 | 0.02 | 0.39 | 8.7 | 30.2 | Clear | None |
| 15:35 | 5 | 30 | 200 | 64.95 | 0.00 | 6.83 | 2.27 | 0.02 | 0.4 | 8.5 | 27 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|-------------|--------|--------------|
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: _____ | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-20-127 | Date | 5/17/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 55.0 degrees F and Clear. The wind is blowing E at 6.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 65.01 | Total Depth (ft-bmp) | 78.65 | Water Column (ft) | 13.64 |
| | | | | Gallons in Well | 2.22 |
| Purge Start | 14:00 | Pump Intake (ft-bmp) | 76 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 14:40 | Volumes Purged | 0.48 | Sample ID | MW-20-127_051723 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 14:40 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:05 | 0 | 0 | 100 | 65.05 | 0.13 | 7.15 | 1.67 | 146 | 7.01 | 17.5 | 169.8 | Clear | None |
| 14:10 | 5 | 5 | 100 | 65.21 | 0.26 | 6.81 | 3.35 | 123 | 3.6 | 16.6 | 67.1 | Clear | None |
| 14:15 | 5 | 10 | 100 | 65.29 | 0.40 | 6.73 | 3.39 | 104 | 1.27 | 15 | 29.7 | Clear | None |
| 14:20 | 5 | 15 | 100 | 65.29 | 0.53 | 6.73 | 3.38 | 34.1 | 0.89 | 14.8 | 13.1 | Clear | None |
| 14:25 | 5 | 20 | 100 | 65.29 | 0.66 | 6.72 | 3.38 | 19.2 | 0.81 | 15.1 | 8.4 | Clear | None |
| 14:30 | 5 | 25 | 100 | 65.29 | 0.79 | 6.72 | 3.38 | 9.71 | 0.7 | 14.8 | 3.8 | Clear | None |
| 14:35 | 5 | 30 | 100 | 65.29 | 0.92 | 6.72 | 3.38 | 9.23 | 0.66 | 14.8 | 3 | Clear | None |
| 14:40 | 5 | 35 | 100 | 65.29 | 1.06 | 6.72 | 3.38 | 9.07 | 0.72 | 14.9 | 3.2 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|----------------|--------|--------------|
| Nitrate | 125 mL Plastic | 1 | None |
| TKN/Phosphorus | 250 mL Plastic | 1 | H2SO4 |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-20-128 | Date | 5/17/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 52.0 degrees F and Clear. The wind is blowing E/NE at 9.2 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 67.78 | Total Depth (ft-bmp) | 70.15 | Water Column (ft) | 2.37 |
| | | | | Gallons in Well | 0.39 |
| Purge Start | 12:50 | Pump Intake (ft-bmp) | 69.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 13:30 | Volumes Purged | 2.71 | Sample ID | MW-20-128_051723 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 13:30 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:55 | 0 | 0 | 100 | 67.85 | 0.13 | 7.78 | 3.36 | 1000 | 9.01 | 18.6 | 220.5 | Brown | None |
| 13:00 | 5 | 5 | 100 | 67.85 | 0.26 | 7.77 | 3.37 | 1000 | 8.61 | 18.1 | 224.3 | Brown | None |
| 13:05 | 5 | 10 | 100 | 67.85 | 0.40 | 7.78 | 3.4 | 1000 | 7.94 | 16.8 | 231.9 | Brown | None |
| 13:10 | 5 | 15 | 100 | 67.85 | 0.53 | 7.67 | 3.42 | 642 | 7.32 | 16.3 | 233.7 | Brown | None |
| 13:15 | 5 | 20 | 100 | 67.85 | 0.66 | 7.64 | 3.41 | 456 | 7.45 | 16.4 | 237 | Brown | None |
| 13:20 | 5 | 25 | 100 | 67.85 | 0.79 | 7.59 | 3.42 | 423 | 7.49 | 16.4 | 242.7 | Brown | None |
| 13:25 | 5 | 30 | 100 | 67.85 | 0.92 | 7.6 | 3.41 | 409 | 7.96 | 16.2 | 244 | Brown | None |
| 13:30 | 5 | 35 | 100 | 67.85 | 1.06 | 7.62 | 3.41 | 398 | 7.58 | 16.2 | 243.6 | Brown | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|----------------|--------|--------------|
| Nitrate | 125 mL Plastic | 1 | None |
| TKN/Phosphorus | 250 mL Plastic | 1 | H2SO4 |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-20-129 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 32.0 degrees F and Cloudy. The wind is blowing NE at 13.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 60.39 | Total Depth (ft-bmp) | 70.95 | Water Column (ft) | 10.56 |
| | | | | Gallons in Well | 1.72 |
| Purge Start | 11:30 | Pump Intake (ft-bmp) | 68.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 12:10 | Volumes Purged | 0.61 | Sample ID | MW-20-129_021623 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 12:10 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:30 | 0 | 0 | 100 | 60.39 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Gray | None |
| 11:35 | 5 | 5 | 100 | 60.90 | 0.13 | 7.12 | 1.91 | 367 | 8.95 | 6.8 | 61.1 | Gray | None |
| 11:40 | 5 | 10 | 100 | 61.43 | 0.26 | 6.95 | 2.53 | 193 | 1.06 | 7.1 | 13.7 | Gray | None |
| 11:45 | 5 | 15 | 100 | 61.90 | 0.40 | 6.95 | 2.53 | 164 | 0.92 | 7.1 | 11.9 | Gray | None |
| 11:50 | 5 | 20 | 100 | 62.32 | 0.53 | 6.95 | 2.51 | 154 | 1 | 7.3 | 0.9 | Gray | None |
| 11:55 | 5 | 25 | 100 | 62.69 | 0.66 | 6.95 | 2.46 | 146 | 0.77 | 7 | -9.6 | Gray | None |
| 12:00 | 5 | 30 | 100 | 62.99 | 0.08 | 6.96 | 2.42 | 140 | 0.81 | 6.8 | -15.9 | Gray | None |
| 12:05 | 5 | 35 | 100 | 63.25 | 0.92 | 6.96 | 2.41 | 141 | 0.75 | 6.9 | -18.7 | Gray | None |
| 12:10 | 5 | 40 | 100 | 63.53 | 1.06 | 6.96 | 2.4 | 136 | 0.79 | 6.9 | -19.8 | Gray | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| 1,4-Dioxane 522 | 40 mL Glass | 3 | HCL |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|-----------------------------|------------------------|----------------------|----------------------|-------------------|----------------------|-----------------|------|
| Project Number | 30171056 | Well ID | MW-20-129 | Date | 5/18/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 59.88 | Total Depth (ft-bmp) | 70.98 | Water Column (ft) | 11.10 | Gallons in Well | 1.80 |
| Purge Start | 08:35 | Pump Intake (ft-bmp) | Purge Method | Low-Flow | Purge Equipment | Peristaltic | |
| Purge End | 09:35 | Volumes Purged | Sample ID | MW-20-129_051823 | Sampled by | Donald Richmond | |
| Sample Time | 09:35 | Gallons Purged | Replicate/Code No. | NA | Sample Type | Grab | |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 08:45 | 0 | 0 | 200 | 59.88 | 0.00 | 6.72 | 0.92 | 22.5 | 3.8 | 12.6 | 98.6 | Clear | None |
| 08:45 | 0 | 0 | 200 | 59.88 | 0.53 | 6.72 | 0.92 | 22.5 | 3.8 | 12.6 | 98.6 | Clear | None |
| 08:50 | 5 | 5 | 200 | 59.88 | 0.00 | 6.55 | 1.02 | 19 | 1.35 | 12.6 | 95.4 | Clear | None |
| 08:50 | 5 | 5 | 200 | 59.88 | 0.79 | 6.55 | 1.02 | 19 | 1.35 | 12.6 | 95.4 | Clear | None |
| 08:55 | 5 | 10 | 200 | 59.88 | 0.00 | 6.53 | 1.19 | 18.9 | 0.49 | 12.5 | 90.1 | Clear | None |
| 08:55 | 5 | 10 | 200 | 59.88 | 1.06 | 6.53 | 1.19 | 18.9 | 0.49 | 12.5 | 90.1 | Clear | None |
| 09:00 | 5 | 15 | 200 | 59.88 | 0.00 | 6.68 | 1.8 | 39.2 | 0.25 | 12.5 | 83.9 | Clear | None |
| 09:00 | 5 | 15 | 200 | 59.88 | 1.32 | 6.68 | 1.8 | 39.2 | 0.25 | 12.5 | 83.9 | Clear | None |
| 09:05 | 5 | 20 | 200 | 59.88 | 0.00 | 6.75 | 1.91 | 25.4 | 0.2 | 12.4 | 76.8 | Clear | None |
| 09:05 | 5 | 20 | 200 | 59.88 | 1.59 | 6.75 | 1.91 | 25.4 | 0.2 | 12.4 | 76.8 | Clear | None |
| 09:10 | 5 | 25 | 200 | 59.88 | 0.00 | 6.78 | 1.97 | 13 | 0.19 | 12.3 | 70.3 | Clear | None |
| 09:10 | 5 | 25 | 200 | 59.88 | 1.85 | 6.78 | 1.97 | 13 | 0.19 | 12.3 | 70.3 | Clear | None |
| 09:15 | 5 | 30 | 200 | 59.88 | 0.00 | 6.81 | 1.99 | 6.97 | 0.16 | 12.3 | 61.8 | Clear | None |
| 09:15 | 5 | 30 | 200 | 59.88 | 2.11 | 6.81 | 1.99 | 6.97 | 0.16 | 12.3 | 61.8 | Clear | None |
| 09:20 | 5 | 35 | 200 | 59.88 | 0.00 | 6.82 | 1.99 | 3.9 | 0.18 | 12.2 | 58.1 | Clear | None |
| 09:20 | 5 | 35 | 200 | 59.88 | 2.38 | 6.82 | 1.99 | 3.9 | 0.18 | 12.2 | 58.1 | Clear | None |
| 09:25 | 5 | 40 | 200 | 59.88 | 0.00 | 6.82 | 1.97 | 2.8 | 0.23 | 12 | 54 | Clear | None |
| 09:25 | 5 | 40 | 200 | 59.88 | 2.64 | 6.82 | 1.97 | 2.8 | 0.23 | 12 | 54 | Clear | None |
| 09:30 | 5 | 45 | 200 | 59.88 | 0.00 | 6.83 | 1.98 | 3.06 | 0.21 | 12.1 | 48.3 | Clear | None |
| 09:30 | 5 | 45 | 200 | 59.88 | 2.91 | 6.83 | 1.98 | 3.06 | 0.21 | 12.1 | 48.3 | Clear | None |

| | | | |
|-----------------------|-------------|--------|--------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-20-130 | Date | 5/18/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 46.9 degrees F and Clear. The wind is blowing S/SE at 5.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 66.76 | Total Depth (ft-bmp) | 69.75 | Water Column (ft) | 2.99 |
| | | | | Gallons in Well | 0.49 |
| Purge Start | 09:30 | Pump Intake (ft-bmp) | 68.75 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 10:10 | Volumes Purged | 4.31 | Sample ID | MW-20-130_051823 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 10:05 | Gallons Purged | 2.11 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:35 | 0 | 0 | 200 | 66.76 | 0.26 | 6.76 | 1.21 | 212 | 3.29 | 13.4 | -51.5 | Clear | None |
| 09:40 | 5 | 5 | 200 | 66.76 | 0.53 | 6.73 | 1.2 | 101 | 3.31 | 13.5 | -54.5 | Clear | None |
| 09:45 | 5 | 10 | 200 | 66.76 | 0.79 | 6.74 | 1.18 | 22.6 | 1.91 | 13.6 | -57.2 | Clear | None |
| 09:50 | 5 | 15 | 200 | 66.76 | 1.06 | 6.74 | 1.17 | 5.61 | 1.96 | 13.6 | -55.7 | Clear | None |
| 09:55 | 5 | 20 | 200 | 66.76 | 1.32 | 6.75 | 1.16 | 2.22 | 1.91 | 13.6 | -57.9 | Clear | None |
| 10:00 | 5 | 25 | 200 | 66.76 | 1.59 | 6.76 | 1.14 | 1.99 | 1.86 | 13.6 | -51.9 | Clear | None |
| 10:05 | 5 | 30 | 200 | 66.76 | 1.85 | 6.76 | 1.13 | 1.38 | 1.81 | 13.6 | -57.6 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|------------------------|---------------------|--------|--------------|
| 1,4-Dioxane 8260B-SIMS | 40 mL Glass | 3 | HCL |
| PFAS | 125 mL HDPE Plastic | NA | |
| PFAS | 125 mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-20-131 | Date | 2/14/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| Static Water Level (ft-bmp) | 5.12 | Total Depth (ft-bmp) | 8.65 | Water Column (ft) | 3.53 |
| Purge Start | 15:45 | Pump Intake (ft-bmp) | 8 | Purge Method | Low-Flow |
| Purge End | 16:20 | Volumes Purged | 1.62 | Sample ID | MW-20-131_021423 |
| Sample Time | 16:20 | Gallons Purged | | Replicate/Code No. | DUP-06_021423 |
| | | | | Well Casing Material | PVC |
| | | | | Gallons in Well | 0.57 |
| | | | | Purge Equipment | Peristaltic |
| | | | | Sampled by | Billy Cobern |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:45 | 0 | 0 | 100 | 5.12 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 15:50 | 5 | 5 | 100 | 5.41 | 0.13 | 7.13 | 4.8 | 22.2 | 0.93 | 9.2 | -7.6 | Clear | None |
| 15:55 | 5 | 10 | 100 | 5.41 | 0.26 | 7.12 | 4.79 | 17.4 | 0.31 | 9.2 | -6.6 | Clear | None |
| 16:00 | 5 | 15 | 100 | 5.41 | 0.40 | 7.12 | 4.79 | 13.7 | 0.31 | 9.1 | -6.3 | Clear | None |
| 16:05 | 5 | 20 | 100 | 5.41 | 0.53 | 7.12 | 4.8 | 10.2 | 0.23 | 9.1 | -5.8 | Clear | None |
| 16:10 | 5 | 25 | 100 | 5.41 | 0.66 | 7.11 | 4.8 | 9.84 | 0.22 | 9.1 | -5.5 | Clear | None |
| 16:15 | 5 | 30 | 100 | 5.41 | 0.79 | 7.11 | 4.8 | 9.36 | 0.21 | 9.2 | -5.4 | Clear | None |
| 16:20 | 5 | 35 | 100 | 5.41 | 0.92 | 7.11 | 4.8 | 9.14 | 0.22 | 9.3 | -5.2 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| VOCs | 40 mL Glass | 6 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: no |
| Condition of Well: Good condition | Well Locked at Departure: no |
| Well Completion: Flush mount | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-20-131 | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 77.0 degrees F and Clear. The wind is blowing W at 4.7 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 5.18 | Total Depth (ft-bmp) | 10 | Water Column (ft) | 4.82 |
| | | | | Gallons in Well | 0.78 |
| Purge Start | 14:45 | Pump Intake (ft-bmp) | 9 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:40 | Volumes Purged | 1.92 | Sample ID | MW-20-131_052323 |
| | | | | Sampled by | Kaitlyn Hunt |
| Sample Time | 15:35 | Gallons Purged | 1.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:50 | 0 | 0 | 100 | 5.50 | 0.13 | 7.14 | 3.72 | 4.84 | 0.22 | 14.3 | 82.4 | Clear | None |
| 14:55 | 5 | 5 | 100 | 5.50 | 0.26 | 7.16 | 3.75 | 3.38 | 0.15 | 14.2 | 43.9 | Clear | None |
| 15:00 | 5 | 10 | 100 | 5.55 | 0.40 | 7.16 | 3.74 | 3.66 | 0.17 | 14.2 | 27.8 | Clear | None |
| 15:05 | 5 | 15 | 100 | 5.60 | 0.53 | 7.16 | 3.74 | 2.86 | 0.22 | 14.2 | 21.5 | Clear | None |
| 15:10 | 5 | 20 | 100 | 5.61 | 0.66 | 7.16 | 3.76 | 2.63 | 0.34 | 14.3 | 15.2 | Clear | None |
| 15:15 | 5 | 25 | 100 | 5.61 | 0.79 | 7.16 | 3.74 | 2.74 | 0.36 | 14.3 | 11.4 | Clear | None |
| 15:20 | 5 | 30 | 100 | 5.61 | 0.92 | 7.16 | 3.74 | 3.12 | 0.38 | 14.3 | 9.2 | Clear | None |
| 15:25 | 5 | 35 | 100 | 5.61 | 1.06 | 7.17 | 3.71 | 1.4 | 0.4 | 14.1 | 7.9 | Clear | None |
| 15:30 | 5 | 40 | 100 | 5.61 | 1.19 | 7.17 | 3.68 | 2.06 | 0.41 | 13.9 | 6.5 | Clear | None |
| 15:35 | 5 | 45 | 100 | 5.61 | 1.32 | 7.17 | 3.66 | 1.84 | 0.4 | 13.9 | 4.5 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|-------------------------------------|
| Well Location: <u>Plant 6</u> | Well Locked at Arrival: <u>no</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>no</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-20-132 | Date | 2/14/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 57.0 degrees F and Clear. The wind is blowing S at 11.4 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 5.17 | Total Depth (ft-bmp) | 10.7 | Water Column (ft) | 5.53 |
| | | | | Gallons in Well | 0.90 |
| Purge Start | 14:40 | Pump Intake (ft-bmp) | 8.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:20 | Volumes Purged | 1.17 | Sample ID | MW-20-132_021423 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 15:20 | Gallons Purged | | Replicate/Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:40 | 0 | 0 | 100 | 5.17 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 14:45 | 5 | 5 | 100 | 5.47 | 0.13 | 7.03 | 5.84 | 60.7 | 1.39 | 10.6 | 14.8 | Clear | None |
| 14:50 | 5 | 10 | 100 | 5.44 | 0.26 | 7.07 | 5.85 | 53.8 | 0.92 | 10.3 | -1.2 | Clear | None |
| 14:55 | 5 | 15 | 100 | 5.44 | 0.40 | 7.08 | 5.85 | 47.7 | 0.57 | 10.3 | -15 | Clear | None |
| 15:00 | 5 | 20 | 100 | 5.44 | 0.53 | 7.1 | 5.86 | 36.2 | 0.3 | 10.1 | -22.9 | Clear | None |
| 15:05 | 5 | 25 | 100 | 5.44 | 0.66 | 7.1 | 5.86 | 20.5 | 0.25 | 10 | -28.3 | Clear | None |
| 15:10 | 5 | 30 | 100 | 5.44 | 0.79 | 7.1 | 5.87 | 16.7 | 0.23 | 10 | -33.5 | Clear | None |
| 15:15 | 5 | 35 | 100 | 5.44 | 0.92 | 7.1 | 5.87 | 15.9 | 0.24 | 10 | -35.2 | Clear | None |
| 15:20 | 5 | 40 | 100 | 5.44 | 1.06 | 7.1 | 5.87 | 15.8 | 0.24 | 10 | -36.9 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| VOCs | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Flush mount | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-20-132 | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 81.0 degrees F and Clear. The wind is blowing undefined at 0.0 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 5.35 | Total Depth (ft-bmp) | 11 | Water Column (ft) | 5.65 |
| | | | | Gallons in Well | 0.92 |
| Purge Start | 16:08 | Pump Intake (ft-bmp) | 10 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 17:15 | Volumes Purged | 1.63 | Sample ID | MW-20-131_052323 |
| | | | | Sampled by | Kaitlyn Hunt |
| Sample Time | 15:35 | Gallons Purged | 1.5 | Replicate/ Code No. | DUP-07_052323 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 16:10 | 0 | 0 | 100 | 5.50 | 0.05 | 7.22 | 2.23 | 39.6 | 0.69 | 13.2 | -10.3 | Clear | None |
| 16:15 | 5 | 5 | 100 | 5.52 | 0.18 | 7.25 | 2.14 | 15.5 | 0.37 | 13.2 | -31.4 | Clear | None |
| 16:20 | 5 | 10 | 100 | 5.55 | 0.00 | 7.27 | 1.94 | 12.3 | 0.33 | 13.1 | -45.3 | Clear | None |
| 16:25 | 5 | 15 | 100 | 5.57 | 0.45 | 7.28 | 1.74 | 10.9 | 0.29 | 13 | -56.2 | Clear | None |
| 16:30 | 5 | 20 | 100 | 5.60 | 0.58 | 7.27 | 1.64 | 7.09 | 0.3 | 12.9 | -67.7 | Clear | None |
| 16:35 | 5 | 25 | 100 | 5.60 | 0.00 | 7.26 | 1.58 | 5.01 | 0.3 | 12.7 | -76.2 | Clear | None |
| 16:40 | 5 | 30 | 100 | 5.60 | 0.85 | 7.26 | 1.56 | 3.66 | 0.3 | 12.5 | -83.9 | Clear | None |
| 16:45 | 5 | 35 | 100 | 5.60 | 0.98 | 7.26 | 1.63 | 3.63 | 0.31 | 12.4 | -90.6 | Clear | None |
| 16:50 | 5 | 40 | 100 | 5.60 | 1.11 | 7.25 | 1.64 | 1.96 | 0.3 | 12.5 | -94.9 | Clear | None |
| 16:55 | 5 | 45 | 100 | 5.60 | 1.24 | 7.25 | 1.69 | 2.11 | 0.31 | 12.6 | -98 | Clear | None |
| 17:00 | 5 | 50 | 100 | 5.60 | 1.37 | 7.25 | 1.72 | 1.68 | 0.31 | 12.2 | -100.4 | Clear | None |
| 17:05 | 5 | 55 | 100 | 5.60 | 1.51 | 7.25 | 1.76 | 1.64 | 0.3 | 12.4 | -102.3 | Clear | None |
| 17:10 | 5 | 60 | 100 | 5.60 | 1.64 | 7.25 | 1.81 | 1.91 | 0.3 | 12.4 | -104.1 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 4 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|---|--|
| Well Location: Plant 6 | Well Locked at Arrival: <input type="checkbox"/> yes |
| Condition of Well: Good condition, Cracked well pad | Well Locked at Departure: <input type="checkbox"/> yes |
| Well Completion: Flush mount | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-21-133 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 60.1 degrees F and Mostly Cloudy. The wind is blowing NE at 17.2 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 9.18 | Total Depth (ft-bmp) | 15 | Water Column (ft) | 5.82 |
| | | | | Gallons in Well | 0.95 |
| Purge Start | 10:40 | Pump Intake (ft-bmp) | 14 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 11:30 | Volumes Purged | 1.58 | Sample ID | MW-21-133_052423 |
| | | | | Sampled by | Kaitlyn Hunt |
| Sample Time | 11:25 | Gallons Purged | 1.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:00 | 0 | 0 | 100 | 11.05 | 0.00 | 7.09 | 0.65 | 2.67 | 0.38 | 11.4 | 101.8 | Clear | None |
| 11:05 | 5 | 5 | 100 | 11.09 | 0.92 | 7.09 | 0.66 | 2.08 | 0.32 | 11.4 | 99.2 | Clear | None |
| 11:10 | 5 | 10 | 100 | 11.13 | 1.06 | 7.08 | 0.66 | 1.64 | 0.43 | 11.3 | 97.5 | Clear | None |
| 11:15 | 5 | 15 | 100 | 11.20 | 1.19 | 7.08 | 0.65 | 1.36 | 0.38 | 11.3 | 94.1 | Clear | None |
| 11:20 | 5 | 20 | 100 | 11.27 | 1.32 | 7.08 | 0.65 | 1.55 | 0.39 | 11.3 | 92.4 | Clear | None |
| 11:25 | 5 | 25 | 100 | 11.27 | 1.45 | 7.08 | 0.65 | 0.88 | 0.37 | 11.2 | 90.3 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 125 mL Plastic | 2 | None |

Comments: Tablet deleted readings before 1100

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 6</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|------------------|-----------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-21-134 | Date | 5/24/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | It is Clear. The wind is blowing N/NE at 8.1 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 9.28 | Total Depth (ft-bmp) | 16 | Water Column (ft) | 6.72 | Gallons in Well | 1.09 |
| Purge Start | 09:13 | Pump Intake (ft-bmp) | 15 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 10:10 | Volumes Purged | 1.38 | Sample ID | MW-21-134_052423 | Sampled by | Kaitlyn Hunt |
| Sample Time | 10:05 | Gallons Purged | 1.5 | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:15 | 0 | 0 | 100 | 9.95 | 0.00 | 7.11 | 0.61 | 5.2 | 2.02 | 11.6 | 40.7 | Clear | None |
| 09:20 | 5 | 5 | 100 | 10.42 | 0.18 | 7.12 | 0.61 | 5.37 | 1.78 | 11.5 | 45.6 | Clear | None |
| 09:25 | 5 | 10 | 100 | 10.88 | 0.32 | 7.14 | 0.61 | 6 | 1.56 | 11.4 | 53.8 | Clear | None |
| 09:30 | 5 | 15 | 100 | 10.98 | 0.45 | 7.14 | 0.61 | 3.15 | 1.48 | 11.4 | 55.3 | Clear | None |
| 09:35 | 5 | 20 | 100 | 11.22 | 0.00 | 7.15 | 0.6 | 3.72 | 1.62 | 11.5 | 60.6 | Clear | None |
| 09:40 | 5 | 25 | 100 | 11.42 | 0.71 | 7.16 | 0.59 | 3.11 | 2.05 | 11.4 | 67.3 | Clear | None |
| 09:45 | 5 | 30 | 100 | 11.57 | 0.85 | 7.17 | 0.56 | 3.3 | 2.34 | 11.2 | 75.2 | Clear | None |
| 09:50 | 5 | 35 | 100 | 11.70 | 0.98 | 7.18 | 0.55 | 3.1 | 2.67 | 11.1 | 81.8 | Clear | None |
| 09:55 | 5 | 40 | 100 | 11.85 | 1.11 | 7.16 | 0.55 | 0.82 | 2.64 | 11 | 86.2 | Clear | None |
| 10:00 | 5 | 45 | 100 | 11.85 | 1.24 | 7.17 | 0.55 | 0.29 | 2.5 | 11 | 88.4 | Clear | None |
| 10:05 | 5 | 50 | 100 | 11.85 | 1.37 | 7.17 | 0.56 | 1.24 | 2.6 | 11 | 89.6 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|--|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-21-135 | Date | 5/24/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 53.1 degrees F and Fog/Mist. The wind is blowing N at 3.4 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 25.11 | Total Depth (ft-bmp) | 27 | Water Column (ft) | 1.89 | Gallons in Well | 0.31 |
| Purge Start | 08:05 | Pump Intake (ft-bmp) | 26 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 09:02 | Volumes Purged | 4.84 | Sample ID | MW-21-135_052423 | Sampled by | Kaitlyn Hunt |
| Sample Time | 08:50 | Gallons Purged | 1.5 | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 08:10 | 0 | 0 | 100 | 26.11 | 0.13 | 7.66 | 0.74 | 17 | 2.15 | 12 | 185.3 | Clear | None |
| 08:15 | 5 | 5 | 100 | 26.53 | 0.26 | 7.71 | 0.71 | 9.03 | 2.13 | 12.4 | 159.3 | Clear | None |
| 08:20 | 5 | 10 | 100 | 26.53 | 0.40 | 7.67 | 0.7 | 8.13 | 2.04 | 12.4 | 132.7 | Clear | None |
| 08:25 | 5 | 15 | 100 | 26.80 | 0.53 | 7.64 | 0.7 | 7.13 | 1.99 | 12.5 | 50 | Clear | None |
| 08:30 | 5 | 20 | 100 | 26.90 | 0.66 | 7.58 | 0.7 | 6.29 | 1.98 | 12.7 | -17.7 | Clear | None |
| 08:35 | 5 | 25 | 100 | 26.94 | 0.79 | 7.58 | 0.7 | 4.75 | 1.97 | 12.6 | -40.3 | Clear | None |
| 08:40 | 5 | 30 | 100 | 26.97 | 0.92 | 7.53 | 0.7 | 3.6 | 1.84 | 12.6 | -46.9 | Clear | None |
| 08:45 | 5 | 35 | 100 | 26.99 | 1.06 | 7.49 | 0.7 | 3.46 | 1.73 | 12.6 | -52.9 | Clear | None |
| 08:50 | 5 | 40 | 100 | 27.04 | 1.19 | 7.44 | 0.7 | 2.92 | 1.69 | 12.6 | -55.7 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 6</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-21-139 | Date | 2/15/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 46.0 degrees F and Cloudy. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 2.39 | Total Depth (ft-bmp) | 15.35 | Water Column (ft) | 12.96 |
| | | | | Gallons in Well | 2.11 |
| Purge Start | 15:20 | Pump Intake (ft-bmp) | 12.85 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 16:00 | Volumes Purged | 1.00 | Sample ID | MW-21-139_021523 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 15:55 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:25 | 0 | 0 | 200 | 2.39 | 0.26 | 7.91 | 1.715 | 3.68 | 0.17 | 7.9 | -98.7 | Clear | None |
| 15:30 | 5 | 5 | 200 | 2.39 | 0.53 | 7.86 | 1.689 | 2.75 | 0.09 | 7.7 | -129.9 | Clear | None |
| 15:35 | 5 | 10 | 200 | 2.39 | 0.79 | 7.86 | 1.647 | 2.11 | 0.07 | 7.9 | -148.6 | Clear | None |
| 15:40 | 5 | 15 | 200 | 2.39 | 1.06 | 7.76 | 1.598 | 1.91 | 0.07 | 7.7 | -151.7 | Clear | None |
| 15:45 | 5 | 20 | 200 | 2.39 | 1.32 | 7.69 | 1.55 | 1.6 | 0.07 | 7.7 | -158.5 | Clear | None |
| 15:50 | 5 | 25 | 200 | 2.39 | 1.59 | 7.63 | 1.542 | 1.43 | 0.07 | 7.7 | -166.8 | Clear | None |
| 15:55 | 5 | 30 | 200 | 2.39 | 1.85 | 7.63 | 1.536 | 1.22 | 0.07 | 7.7 | -168 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|------------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |
| 1,4-Dioxane 8260B-SIMS | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: See figure. | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: 2035 |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---|----------------------------------|---|
| Location ID: | MW-21-139 | Date(s): | 2023-05-16 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 2 |
| Weather(°F): | CLEAR, T:74.34 °F, rH:36%, Clouds: 0%, Wind:13.8mph W-SW | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 3.07 | Total Depth (ft-bmp): | 15.35 | Water Column(ft): | 12.28 | Liters in Well: 2.00 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 5 | Sample ID: | MW-21-139_051623 | Sample Time: 14:20 |
| Purge End Time: | 14:15 | Well Volumes Purged (total): | 2.50 | Replicate Type / Duplicate / Replicate ID: | 7 DUP-01_051623 | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 13:55 | 0 | 200 | mL/min | 3.07 | 7.74 | 1.48 | 2.55 | 0.25 | 13.8 | 159.3 | Clear | No Odor |
| 14:00 | 5 | 200 | mL/min | 4.65 | 7.7 | 1.43 | 0.86 | 0.19 | 13.6 | 147 | Clear | No Odor |
| 14:05 | 10 | 200 | mL/min | 4.84 | 7.67 | 1.4 | 1.53 | 0.14 | 13.6 | 137.5 | Clear | No Odor |
| 14:10 | 15 | 200 | mL/min | 4.95 | 7.67 | 1.41 | 1.39 | 0.12 | 13.5 | 133.7 | Clear | No Odor |
| 14:15 | 20 | 200 | mL/min | 5.03 | 7.66 | 1.41 | 1.18 | 0.13 | 13.4 | 130.1 | Clear | No Odor |

| | | | |
|----------------------------|--------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-21-140 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 34.0 degrees F and Cloudy. The wind is blowing NE at 10.3 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 68.45 | Total Depth (ft-bmp) | 75.97 | Water Column (ft) | 7.52 |
| | | | | Gallons in Well | 1.22 |
| Purge Start | 08:40 | Pump Intake (ft-bmp) | 73.47 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 10:00 | Volumes Purged | 3.03 | Sample ID | MW-21-140_021623 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 09:20 | Gallons Purged | | Replicate/ Code No. | MS/MSD |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 08:45 | 0 | 0 | 200 | 68.62 | 0.26 | 6.85 | 0.817 | 225 | 0.46 | 11.9 | -45.8 | Clear | None |
| 08:50 | 5 | 5 | 200 | 68.65 | 0.53 | 6.91 | 0.82 | 106 | 0.34 | 12.1 | -71 | Clear | None |
| 08:55 | 5 | 10 | 200 | 68.65 | 0.79 | 6.93 | 0.817 | 44.6 | 0.3 | 12.1 | -89.4 | Clear | None |
| 09:00 | 5 | 15 | 200 | 68.65 | 1.06 | 6.94 | 0.818 | 21.5 | 0.28 | 11.7 | -103.3 | Clear | None |
| 09:05 | 5 | 20 | 200 | 68.65 | 1.32 | 6.94 | 0.816 | 11.4 | 0.26 | 11.9 | -111.9 | Clear | None |
| 09:10 | 5 | 25 | 200 | 68.65 | 1.59 | 6.95 | 0.816 | 7.31 | 0.25 | 12 | -117.3 | Clear | None |
| 09:15 | 5 | 30 | 200 | 68.65 | 1.85 | 6.95 | 0.82 | 6.95 | 0.26 | 12 | -121.1 | Clear | None |
| 09:20 | 5 | 35 | 200 | 68.65 | 2.11 | 6.95 | 0.815 | 6.41 | 0.25 | 12 | -127.8 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 6 | None |
| SVOCs | 1L Amber | 6 | None |
| VOCs | 40 mL Glass | 9 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>10G200</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-21-140 | Date | 5/18/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 44.1 degrees F and Clear. The wind is blowing S/SE at 6.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 68.25 | Total Depth (ft-bmp) | 76 | Water Column (ft) | 7.75 |
| | | | | Gallons in Well | 1.26 |
| Purge Start | 08:30 | Pump Intake (ft-bmp) | 74 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 09:15 | Volumes Purged | 0.94 | Sample ID | MW-21-140_051823 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 09:15 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 08:35 | 0 | 0 | 100 | 68.32 | 0.13 | 7.18 | 0.84 | 194 | 9.88 | 12.4 | 42.7 | Clear | None |
| 08:40 | 5 | 5 | 100 | 68.32 | 0.26 | 7.16 | 0.84 | 127 | 9.8 | 12.2 | 41.5 | Clear | None |
| 08:45 | 5 | 10 | 100 | 68.32 | 0.40 | 7.15 | 0.84 | 96.3 | 9.76 | 12 | 40.4 | Clear | None |
| 08:50 | 5 | 15 | 100 | 68.32 | 0.53 | 7.14 | 0.84 | 76.8 | 9.61 | 11.9 | 34.3 | Clear | None |
| 08:55 | 5 | 20 | 100 | 68.32 | 0.66 | 7.14 | 0.84 | 53.6 | 9.42 | 11.8 | 25.2 | Clear | None |
| 09:00 | 5 | 25 | 100 | 68.32 | 0.79 | 7.14 | 0.83 | 26.7 | 9.19 | 11.8 | 16.8 | Clear | None |
| 09:05 | 5 | 30 | 100 | 68.32 | 0.92 | 7.14 | 0.83 | 19.8 | 9.03 | 11.6 | 8.4 | Clear | None |
| 09:10 | 5 | 35 | 100 | 68.32 | 1.06 | 7.13 | 0.83 | 19.1 | 9.01 | 11.6 | 8 | Clear | None |
| 09:15 | 5 | 40 | 100 | 68.32 | 1.19 | 7.14 | 0.83 | 18.8 | 8.95 | 11.6 | 7.4 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-21-141 | Date | 5/18/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 55.0 degrees F and Clear. The wind is blowing SE at 5.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 76.20 | Total Depth (ft-bmp) | 79.7 | Water Column (ft) | 3.50 |
| | | | | Gallons in Well | 0.57 |
| Purge Start | 11:50 | Pump Intake (ft-bmp) | 78.7 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 12:30 | Volumes Purged | 3.71 | Sample ID | MW-21-141_051823 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 12:25 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:55 | 0 | 0 | 200 | 76.20 | 0.26 | 6.56 | 0.77 | 36.8 | 0.78 | 13.5 | -17.4 | Clear | None |
| 12:00 | 5 | 5 | 200 | 76.20 | 0.53 | 6.61 | 0.78 | 15.6 | 0.78 | 13.7 | -26.6 | Clear | None |
| 12:05 | 5 | 10 | 200 | 76.20 | 0.79 | 6.61 | 0.77 | 3.44 | 0.45 | 13.6 | -57.2 | Clear | None |
| 12:10 | 5 | 15 | 200 | 76.20 | 1.06 | 6.65 | 0.76 | 3.02 | 0.37 | 13.6 | -90.4 | Clear | None |
| 12:15 | 5 | 20 | 200 | 76.20 | 1.32 | 6.66 | 0.76 | 2.53 | 0.34 | 13.7 | -86.6 | Clear | None |
| 12:20 | 5 | 25 | 200 | 76.20 | 1.59 | 6.67 | 0.74 | 2.09 | 0.33 | 13.6 | -85.1 | Clear | None |
| 12:25 | 5 | 30 | 200 | 76.20 | 1.85 | 6.67 | 0.74 | 1.79 | 0.31 | 13.5 | -81.5 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|------------------------|-------------|--------|--------------|
| 1,4-Dioxane 8260B-SIMS | 40 mL Glass | 3 | HCL |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 9 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-21-142 | Date | 5/18/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 65.09 | Total Depth (ft-bmp) | 79.16 | Water Column (ft) | 14.07 |
| | | | | Gallons in Well | 2.29 |
| Purge Start | 11:10 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 12:10 | Volumes Purged | | Sample ID | MW-21-142_051823 |
| | | | | Sampled by | Donald Richmond |
| Sample Time | 12:10 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:30 | 0 | 0 | 200 | 65.09 | 0.00 | 6.61 | 2.37 | 313 | 1.51 | 15 | 84.5 | Orange | None |
| 11:30 | 0 | 0 | 200 | 65.09 | 1.06 | 6.61 | 2.37 | 313 | 1.51 | 15 | 84.5 | Orange | None |
| 11:35 | 5 | 5 | 200 | 65.09 | 0.00 | 6.62 | 2.37 | 257 | 1.39 | 15 | 84.9 | Orange | None |
| 11:35 | 5 | 5 | 200 | 65.09 | 1.32 | 6.62 | 2.37 | 257 | 1.39 | 15 | 84.9 | Orange | None |
| 11:40 | 5 | 10 | 200 | 65.09 | 0.00 | 6.63 | 2.34 | 163 | 1.12 | 15.2 | 85.1 | Orange | None |
| 11:40 | 5 | 10 | 200 | 65.09 | 1.59 | 6.63 | 2.34 | 163 | 1.12 | 15.2 | 85.1 | Orange | None |
| 11:45 | 5 | 15 | 200 | 65.09 | 0.00 | 6.63 | 2.31 | 126 | 1.07 | 15.2 | 85.1 | Orange | None |
| 11:45 | 5 | 15 | 200 | 65.09 | 1.85 | 6.63 | 2.31 | 126 | 1.07 | 15.2 | 85.1 | Orange | None |
| 11:50 | 5 | 20 | 200 | 65.09 | 0.00 | 6.64 | 2.29 | 124 | 0.79 | 15.2 | 84.5 | Orange | None |
| 11:50 | 5 | 20 | 200 | 65.09 | 2.11 | 6.64 | 2.29 | 124 | 0.79 | 15.2 | 84.5 | Orange | None |
| 11:55 | 5 | 25 | 200 | 65.09 | 0.00 | 6.64 | 2.26 | 87.7 | 0.69 | 15.4 | 83.4 | Orange | None |
| 11:55 | 5 | 25 | 200 | 65.09 | 2.38 | 6.64 | 2.26 | 87.7 | 0.69 | 15.4 | 83.4 | Orange | None |
| 12:00 | 5 | 30 | 200 | 65.09 | 0.00 | 6.64 | 2.21 | 57.6 | 0.56 | 15.3 | 81.1 | Orange | None |
| 12:00 | 5 | 30 | 200 | 65.09 | 2.64 | 6.64 | 2.21 | 57.6 | 0.56 | 15.3 | 81.1 | Orange | None |
| 12:05 | 5 | 35 | 200 | 65.09 | 0.00 | 6.65 | 2.2 | 57 | 0.48 | 15.4 | 79.7 | Orange | None |
| 12:05 | 5 | 35 | 200 | 65.09 | 2.91 | 6.65 | 2.2 | 57 | 0.48 | 15.4 | 79.7 | Orange | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-22-143 | Date | 2/13/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 44.1 degrees F and Clear. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 18.02 | Total Depth (ft-bmp) | 31.02 | Water Column (ft) | 13.00 |
| | | | | Gallons in Well | 2.11 |
| Purge Start | 12:30 | Pump Intake (ft-bmp) | 29.02 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 13:10 | Volumes Purged | 1.00 | Sample ID | MW-22-143_021323 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 13:05 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:35 | 0 | 0 | 200 | 18.07 | 0.26 | 6.87 | 3.176 | 13.3 | 0.27 | 12.4 | 8.2 | Clear | None |
| 12:40 | 5 | 5 | 200 | 18.07 | 0.53 | 6.89 | 3.176 | 6.31 | 0.24 | 12.2 | -26.4 | Clear | None |
| 12:45 | 5 | 10 | 200 | 18.07 | 0.79 | 6.92 | 3.16 | 4.11 | 0.26 | 12.4 | -63.9 | Clear | None |
| 12:50 | 5 | 15 | 200 | 18.07 | 1.06 | 6.95 | 3.171 | 3.81 | 0.35 | 12.5 | -81.1 | Clear | None |
| 12:55 | 5 | 20 | 200 | 18.07 | 1.32 | 6.95 | 3.17 | 3.64 | 0.32 | 12.6 | -90.3 | Clear | None |
| 13:00 | 5 | 25 | 200 | 18.07 | 1.59 | 6.96 | 3.178 | 3.46 | 0.31 | 12.4 | -95.9 | Clear | None |
| 13:05 | 5 | 30 | 200 | 18.07 | 1.85 | 6.97 | 3.191 | 3.22 | 0.3 | 12.6 | -98.6 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: Well locked with Arcadis 2035 Master Lock.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>2035</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|---------------------------------|------------------------------|
| Location ID: | MW-22-143 | Date(s): | 2023-05-19 | Work Order(s): | Q2 2023 GWS (Q, SA event) | | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: | 6 |
| Weather(°F): | CLOUDS, T:57.16 °F, rH:66%, Clouds: 100%, Wind:12.44mph S-SW | | | Field Technician: | Jackie Schulte | | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: | PVC |
| Static Water Level (ft-bmp): | 16.67 | Total Depth (ft-bmp): | NA | Water Column(ft): | -16.67 | Liters in Well: | NA |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: | Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 11 | Sample ID: | MW-22-139_051923 | Sample Time: | 09:30 |
| Purge End Time: | 09:25 | Well Volumes Purged (total): | NA | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: | Hach 2100Q,YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^c) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 08:40 | 0 | 200 | mL/min | 16.92 | 6.87 | 3.089 | 40.8 | 0.68 | 12.4 | 48.3 | Clear | No Odor |
| 08:45 | 5 | 200 | mL/min | 16.96 | 6.9 | 3.097 | 32.5 | 0.52 | 12.5 | -18.9 | Clear | No Odor |
| 08:50 | 10 | 200 | mL/min | 16.98 | 6.92 | 3.105 | 31.1 | 0.44 | 12.4 | -29.6 | Clear | No Odor |
| 08:55 | 15 | 200 | mL/min | 17 | 6.94 | 3.137 | 19.8 | 0.37 | 12.5 | -39.1 | Clear | No Odor |
| 09:00 | 20 | 200 | mL/min | 17.01 | 6.94 | 3.212 | 8.2 | 0.34 | 12.6 | -52.3 | Clear | No Odor |
| 09:05 | 25 | 200 | mL/min | 17.02 | 6.94 | 3.28 | 7.19 | 0.3 | 12.6 | -56.2 | Clear | No Odor |
| 09:10 | 30 | 200 | mL/min | 17.04 | 6.94 | 3.334 | 5.48 | 0.29 | 12.6 | -59.5 | Clear | No Odor |
| 09:15 | 35 | 200 | mL/min | 17.04 | 6.95 | 3.382 | 4.3 | 0.29 | 12.6 | -62 | Clear | No Odor |
| 09:20 | 40 | 200 | mL/min | 17.07 | 6.94 | 3.421 | 4.54 | 0.27 | 12.7 | -63.1 | Clear | No Odor |
| 09:25 | 45 | 200 | mL/min | 17.07 | 6.95 | 3.435 | 3.12 | 0.24 | 12.7 | -63.9 | Clear | No Odor |

| | | | |
|----------------------------|--------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: Retrieved old tubing when removing equipment from well.

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-22-144 | Date | 2/13/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 46.0 degrees F and Mostly Clear. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 13.72 | Total Depth (ft-bmp) | 24.08 | Water Column (ft) | 10.36 | Gallons in Well | 1.68 |
| Purge Start | 13:45 | Pump Intake (ft-bmp) | 22.08 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 14:15 | Volumes Purged | 0.94 | Sample ID | MW-22-144_021323 | Sampled by | Austin Westhuis |
| Sample Time | 14:10 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:50 | 0 | 0 | 200 | 13.92 | 0.26 | 6.92 | 1.25 | 14.6 | 0.49 | 11.9 | -110.7 | Clear | None |
| 13:55 | 5 | 5 | 200 | 13.94 | 0.53 | 6.92 | 1.264 | 4.81 | 0.47 | 11.7 | -115.1 | Clear | None |
| 14:00 | 5 | 10 | 200 | 13.94 | 0.79 | 6.93 | 1.27 | 3.27 | 0.48 | 11.7 | -122.8 | Clear | None |
| 14:05 | 5 | 15 | 200 | 13.94 | 1.06 | 6.94 | 1.272 | 3.12 | 0.47 | 11.6 | -129.3 | Clear | None |
| 14:10 | 5 | 20 | 200 | 13.94 | 1.32 | 6.94 | 1.274 | 2.95 | 0.48 | 11.7 | -132.8 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: Well locked with Arcadis 2035 Master Lock.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|------------------------------|
| Well Location: See figure. | Well Locked at Arrival: no |
| Condition of Well: Good condition | Well Locked at Departure: no |
| Well Completion: Flush mount | Key Number To Well: 2035 |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|---|
| Location ID: | MW-22-144 | Date(s): | 2023-05-18 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 6 |
| Weather(°F): | CLEAR, T:45.93 °F, rH:66%, Clouds: 0%, Wind:5.75mph SE | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 11.47 | Total Depth (ft-bmp): | 24.08 | Water Column(ft): | 12.61 | Liters in Well: 2.05 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 6 | Sample ID: | MW-22-144 | Sample Time: 09:45 |
| Purge End Time: | 09:40 | Well Volumes Purged (total): | 2.93 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 09:20 | 0 | 200 | mL/min | 12.21 | 6.98 | 1.195 | 2.37 | 1.18 | 10.9 | 69.3 | Clear | No Odor |
| 09:25 | 5 | 200 | mL/min | 12.27 | 6.99 | 1.204 | 1.8 | 1.1 | 11 | 71.7 | Clear | No Odor |
| 09:30 | 10 | 200 | mL/min | 12.34 | 7 | 1.21 | 1.57 | 1.07 | 11 | 76.5 | Clear | No Odor |
| 09:35 | 15 | 200 | mL/min | 12.38 | 7.01 | 1.216 | 1.49 | 1 | 11 | 78.7 | Clear | No Odor |
| 09:40 | 20 | 200 | mL/min | 12.41 | 7.01 | 1.216 | 0.05 | 0.99 | 11.1 | 84 | Clear | No Odor |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFASs (E537) | HDPE Plastic | 2 | None |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-22-145 | Date | 2/13/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 46.0 degrees F and Clear. The wind is blowing W/NW at 18.3 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 13.75 | Total Depth (ft-bmp) | 14.95 | Water Column (ft) | 1.20 |
| | | | | Gallons in Well | 0.19 |
| Purge Start | 14:25 | Pump Intake (ft-bmp) | 13.95 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 14:55 | Volumes Purged | 8.34 | Sample ID | MW-22-145_021323 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 14:50 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:30 | 0 | 0 | 200 | 13.77 | 0.26 | 6.98 | 1.052 | 7.43 | 3.76 | 10.5 | -103.9 | Clear | None |
| 14:35 | 5 | 5 | 200 | 13.77 | 0.53 | 6.98 | 1.073 | 3.05 | 3.5 | 10.5 | -106 | Clear | None |
| 14:40 | 5 | 10 | 200 | 13.77 | 0.79 | 6.98 | 1.102 | 2.58 | 3.31 | 10.5 | -108.6 | Clear | None |
| 14:45 | 5 | 15 | 200 | 13.77 | 1.06 | 6.97 | 1.119 | 2.19 | 3.28 | 10.5 | -110.7 | Clear | None |
| 14:50 | 5 | 20 | 200 | 13.77 | 1.32 | 6.98 | 1.128 | 1.89 | 3.22 | 10.6 | -110.7 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: Well locked with Arcadis 2035 Master Lock.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|------------------------------|
| Well Location: See figure. | Well Locked at Arrival: no |
| Condition of Well: Good condition | Well Locked at Departure: no |
| Well Completion: Flush mount | Key Number To Well: 2035 |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|---------------------------------|-------------------------------|
| Location ID: | MW-22-145 | Date(s): | 2023-05-18 | Work Order(s): | Q2 2023 GWS (Q, SA event) | | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: | 6 |
| Weather(°F): | CLOUDS, T:49.75 °F, rH:62%, Clouds: 12%, Wind:6.91mph SE | | | Field Technician: | NA | | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: | PVC |
| Static Water Level (ft-bmp): | 12.78 | Total Depth (ft-bmp): | NA | Water Column(ft): | -12.78 | Liters in Well: | NA |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: | Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 11 | Sample ID: | NA | Sample Time: | NA |
| Purge End Time: | 10:55 | Well Volumes Purged (total): | NA | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: | Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^c) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 10:10 | 0 | 200 | mL/min | 12.78 | 7.08 | 1.045 | 28.8 | 2.67 | 10.9 | 147.9 | Clear | No Odor |
| 10:15 | 5 | 200 | mL/min | 12.78 | 7.06 | 1.039 | 22.6 | 2.61 | 10.9 | 148.9 | Clear | No Odor |
| 10:20 | 10 | 200 | mL/min | 12.78 | 7.09 | 1.036 | 17.7 | 2.67 | 10.9 | 107.5 | Clear | No Odor |
| 10:25 | 15 | 200 | mL/min | 12.78 | 7.04 | 1.035 | 14.8 | 2.47 | 10.9 | 142.8 | Clear | No Odor |
| 10:30 | 20 | 200 | mL/min | 12.78 | 7.04 | 1.044 | 11.5 | 2.4 | 10.9 | 150 | Clear | No Odor |
| 10:35 | 25 | 200 | mL/min | 12.78 | 7.03 | 1.047 | 8.8 | 2.43 | 10.9 | 153.3 | Clear | No Odor |
| 10:40 | 30 | 200 | mL/min | 12.78 | 7.03 | 1.057 | 6.52 | 2.32 | 10.9 | 155.9 | Clear | No Odor |
| 10:45 | 35 | 200 | mL/min | 12.78 | 7.02 | 1.067 | 2.39 | 2.29 | 11 | 158.3 | Clear | No Odor |
| 10:50 | 40 | 200 | mL/min | 12.78 | 7.02 | 1.07 | 4.13 | 2.22 | 11 | 159.7 | Clear | No Odor |
| 10:55 | 45 | 200 | mL/min | 12.78 | 7.02 | 1.074 | 3.2 | 2.2 | 11 | 161.1 | Clear | No Odor |

| | | | |
|----------------------------|--------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-22-146 | Date | 2/13/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 46.0 degrees F and Clear. The wind is blowing W/NW at 18.3 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 6.05 | Total Depth (ft-bmp) | 9.89 | Water Column (ft) | 3.84 |
| | | | | Gallons in Well | 0.62 |
| Purge Start | 15:10 | Pump Intake (ft-bmp) | 8.39 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:45 | Volumes Purged | 2.98 | Sample ID | MW-22-146_021323 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 15:40 | Gallons Purged | | Replicate/ Code No. | Dup-07_021323 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:15 | 0 | 0 | 200 | 6.08 | 0.26 | 7.18 | 1.014 | 21.6 | 4.85 | 8.5 | -72.9 | Clear | None |
| 15:20 | 5 | 5 | 200 | 6.08 | 0.53 | 7.19 | 1.013 | 11.2 | 5.45 | 8.4 | -72 | Clear | None |
| 15:25 | 5 | 10 | 200 | 6.08 | 0.79 | 7.2 | 1 | 5.68 | 6.32 | 8.4 | -72.9 | Clear | None |
| 15:30 | 5 | 15 | 200 | 6.08 | 1.06 | 7.21 | 0.995 | 3.13 | 6.45 | 8.4 | -71 | Clear | None |
| 15:35 | 5 | 20 | 200 | 6.08 | 1.32 | 7.21 | 0.991 | 2.65 | 6.79 | 8.4 | -68.8 | Clear | None |
| 15:40 | 5 | 25 | 200 | 6.08 | 1.59 | 7.2 | 0.993 | 2.14 | 6.93 | 8.4 | -66.2 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 4 | None |

Comments: Well locked with Arcadis 2035 Master Lock.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|------------------------------|
| Well Location: See figure. | Well Locked at Arrival: no |
| Condition of Well: Good condition | Well Locked at Departure: no |
| Well Completion: Flush mount | Key Number To Well: 2035 |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|---|
| Location ID: | MW-22-146 | Date(s): | 2023-05-18 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 6 |
| Weather(°F): | CLEAR, T:63.79 °F, rH:30%, Clouds: 0%, Wind:8.05mph E-SE | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 4.81 | Total Depth (ft-bmp): | NA | Water Column(ft): | -4.81 | Liters in Well: NA |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 3 | Sample ID: | MW-22-146_051823 | Sample Time: 14:15 |
| Purge End Time: | 14:10 | Well Volumes Purged (total): | NA | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 14:00 | 0 | 200 | mL/min | 5.51 | 7.52 | 0.793 | 3.28 | 6.31 | 10.4 | 197.4 | Clear | No Odor |
| 14:05 | 5 | 200 | mL/min | 5.79 | 7.48 | 0.793 | 3.99 | 6.43 | 10.5 | 195 | Clear | No Odor |
| 14:10 | 10 | 200 | mL/min | 5.99 | 7.44 | 0.792 | 4.25 | 6.74 | 10.4 | 197.2 | Clear | No Odor |

| | | | |
|----------------------------|--------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-22-147 | Date | 2/14/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 54.0 degrees F and Clear. The wind is blowing S/SE at 13.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 9.38 | Total Depth (ft-bmp) | 12.2 | Water Column (ft) | 2.82 |
| | | | | Gallons in Well | 0.46 |
| Purge Start | 13:30 | Pump Intake (ft-bmp) | 11.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 14:15 | Volumes Purged | 2.58 | Sample ID | MW-22-147_021424 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 14:15 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:30 | 0 | 0 | 100 | 9.38 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 13:35 | 5 | 5 | 100 | 9.62 | 0.13 | 7.33 | 1.65 | 43.9 | 1.07 | 10.6 | 9.7 | Clear | None |
| 13:40 | 5 | 10 | 100 | 9.68 | 0.26 | 7.34 | 1.65 | 78.3 | 10.4 | 10.4 | 5.5 | Clear | None |
| 13:45 | 5 | 15 | 100 | 9.69 | 0.40 | 7.35 | 1.65 | 101 | 0.89 | 10.4 | 3.8 | Clear | None |
| 13:50 | 5 | 20 | 100 | 9.69 | 0.53 | 7.35 | 1.65 | 68.9 | 0.83 | 10.4 | 2.1 | Clear | None |
| 13:55 | 5 | 25 | 100 | 9.69 | 0.66 | 7.34 | 1.65 | 44.3 | 1.26 | 10.3 | 0.1 | Clear | None |
| 14:00 | 5 | 30 | 100 | 9.69 | 0.79 | 7.33 | 1.66 | 38.3 | 1.56 | 10.3 | -0.4 | Clear | None |
| 14:05 | 5 | 35 | 100 | 9.69 | 0.92 | 7.31 | 1.66 | 33.8 | 1.65 | 10.2 | -0.9 | Clear | None |
| 14:10 | 5 | 40 | 100 | 9.69 | 1.06 | 7.29 | 1.66 | 31.3 | 1.67 | 10.3 | -1.9 | Clear | None |
| 14:15 | 5 | 45 | 100 | 9.69 | 1.19 | 7.28 | 1.66 | 32 | 1.65 | 10.3 | -2.2 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 3 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|---|--------------------------------------|------------|---------------------------------------|----------------------------------|---|
| Location ID: | MW-22-147 | Date(s): | 2023-05-19 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 6 |
| Weather(°F): | CLOUDS, T:65.05 °F, rH:37%, Clouds: 35%, Wind:1.99mph W | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 9.02 | Total Depth (ft-bmp): | NA | Water Column(ft): | -9.02 | Liters in Well: NA |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 6 | Sample ID: | MW-22-147_051923 | Sample Time: 14:20 |
| Purge End Time: | 14:15 | Well Volumes Purged (total): | NA | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 13:50 | 0 | 200 | mL/min | 9.42 | 7.16 | 1.326 | 3.77 | 6.08 | 10.7 | 129.7 | Clear | No Odor |
| 13:55 | 5 | 200 | mL/min | 9.58 | 7.17 | 1.344 | 1.43 | 5.7 | 10.6 | 112.3 | Clear | No Odor |
| 14:00 | 10 | 200 | mL/min | 9.72 | 7.18 | 1.357 | 0.73 | 5.26 | 10.6 | 102.1 | Clear | No Odor |
| 14:05 | 15 | 200 | mL/min | 9.83 | 7.18 | 1.367 | 1.23 | 5.21 | 10.6 | 92.2 | Clear | No Odor |
| 14:10 | 20 | 200 | mL/min | 9.93 | 7.18 | 1.377 | 1.91 | 5.18 | 10.6 | 86.8 | Clear | No Odor |
| 14:15 | 25 | 200 | mL/min | 10.01 | 7.19 | 1.389 | 0.41 | 5.07 | 10.6 | 85.9 | Clear | No Odor |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|--------------|
| Project Number | 30171056 | Well ID | MW-22-148 | Date | 2/14/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | It is Clear. The wind is blowing S at 15.0 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 25.42 | Total Depth (ft-bmp) | 29.3 | Water Column (ft) | 3.88 |
| | | | | Gallons in Well | 0.63 |
| Purge Start | 12:00 | Pump Intake (ft-bmp) | 28 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 12:55 | Volumes Purged | 2.31 | Sample ID | MW-22-148 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 12:55 | Gallons Purged | | Replicate/ Code No. | . |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:00 | 0 | 0 | 100 | 25.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 12:05 | 5 | 5 | 100 | 25.85 | 0.13 | 7.14 | 0.92 | 358 | 0.7 | 12.6 | 14.7 | Clear | None |
| 12:10 | 5 | 10 | 100 | 26.00 | 0.26 | 7.18 | 0.91 | 156 | 0.61 | 12.7 | 7 | Clear | None |
| 12:15 | 5 | 15 | 100 | 26.11 | 0.40 | 7.22 | 0.89 | 85.4 | 0.47 | 12.5 | 3.1 | Clear | None |
| 12:20 | 5 | 20 | 100 | 26.22 | 0.53 | 7.24 | 0.89 | 77.3 | 0.43 | 12 | 3 | Clear | None |
| 12:25 | 5 | 25 | 100 | 26.31 | 0.66 | 7.26 | 0.89 | 68.4 | 0.56 | 11.9 | 4.2 | Clear | None |
| 12:30 | 5 | 30 | 100 | 26.41 | 0.79 | 7.25 | 0.89 | 41.7 | 0.49 | 12.1 | 4.8 | Clear | None |
| 12:35 | 5 | 35 | 100 | 26.51 | 0.92 | 7.25 | 0.89 | 20.7 | 0.51 | 11.9 | 5.5 | Clear | None |
| 12:40 | 5 | 40 | 100 | 26.60 | 1.06 | 7.25 | 0.89 | 14.8 | 0.44 | 12 | 5.9 | Clear | None |
| 12:45 | 5 | 45 | 100 | 26.69 | 1.19 | 7.25 | 0.89 | 11.4 | 0.38 | 12.1 | 6.1 | Clear | None |
| 12:50 | 5 | 50 | 100 | 26.78 | 1.32 | 7.25 | 0.89 | 11.1 | 0.39 | 12.1 | 6.2 | Clear | None |
| 12:55 | 5 | 55 | 100 | 26.86 | 1.45 | 7.25 | 0.89 | 11 | 0.4 | 12.2 | 6.4 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 6 | None |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 6</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-22-148 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 56 °F, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 24.57 | Total Depth (ft-bmp) | 29.28 | Water Column (ft) | 4.71 |
| | | | | Gallons in Well | 0.77 |
| Purge Start | 08:20 | Pump Intake (ft-bmp) | 28.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 08:45 | Volumes Purged | 1.95 | Sample ID | MW-22-148_052423 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 08:45 | Gallons Purged | 1.5 | Replicate/ Code No. | MW-22-148_052423 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 08:25 | 0 | 0 | 150 | 25.23 | 0.00 | 7.22 | 0.74 | 9.99 | 1.95 | 12.4 | 107.8 | Clear | None |
| 08:30 | 5 | 5 | 150 | 25.48 | 0.00 | 7.3 | 0.72 | 5.13 | 1.83 | 12.4 | 99.3 | Clear | None |
| 08:35 | 5 | 10 | 150 | 26.00 | 0.00 | 7.32 | 0.71 | 3.92 | 2.43 | 12.4 | 97.1 | Clear | None |
| 08:40 | 5 | 15 | 150 | 26.29 | 0.00 | 7.32 | 0.71 | 3.61 | 2.35 | 12.4 | 97.4 | Clear | None |
| 08:45 | 5 | 20 | 150 | 26.29 | 0.00 | 7.32 | 0.71 | 3.12 | 2.43 | 12.5 | 99.1 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 125 mL Plastic | 6 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Off site P6</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-22-149 | Date | 2/13/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 45.0 degrees F and Clear. The wind is blowing W at 17.2 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 4.85 | Total Depth (ft-bmp) | 9.9 | Water Column (ft) | 5.05 |
| | | | | Gallons in Well | 0.82 |
| Purge Start | 16:20 | Pump Intake (ft-bmp) | 7.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 16:55 | Volumes Purged | 1.13 | Sample ID | MW-22-149_021323 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 16:55 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 16:20 | 0 | 0 | 100 | 4.85 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 16:25 | 5 | 5 | 100 | 5.33 | 0.13 | 7.5 | 0.582 | 16.1 | 6.21 | 8.2 | -34.1 | Clear | None |
| 16:30 | 5 | 10 | 100 | 5.29 | 0.26 | 7.47 | 0.571 | 10 | 6.51 | 7.9 | -24.1 | Clear | None |
| 16:35 | 5 | 15 | 100 | 5.23 | 0.40 | 7.46 | 0.57 | 9.93 | 6.59 | 7.8 | -16.2 | Clear | None |
| 16:40 | 5 | 20 | 100 | 5.13 | 0.53 | 7.45 | 0.57 | 8.96 | 6.73 | 7.7 | -6.8 | Clear | None |
| 16:45 | 5 | 25 | 100 | 5.13 | 0.66 | 7.45 | 0.569 | 7.93 | 6.91 | 7.6 | -0.8 | Clear | None |
| 16:50 | 5 | 30 | 100 | 5.13 | 0.79 | 7.46 | 0.569 | 8.05 | 6.86 | 7.6 | -0.1 | Clear | None |
| 16:55 | 5 | 35 | 100 | 5.13 | 0.92 | 7.45 | 0.569 | 7.84 | 6.87 | 7.6 | 0.9 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|---|--------------------------------------|------------|---------------------------------------|----------------------------------|---|
| Location ID: | MW-22-149 | Date(s): | 2023-05-19 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 6 |
| Weather(°F): | CLOUDS, T:65.05 °F, rH:37%, Clouds: 35%, Wind:1.99mph W | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 5.85 | Total Depth (ft-bmp): | NA | Water Column(ft): | -5.85 | Liters in Well: NA |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 5 | Sample ID: | MW-22-149 | Sample Time: 11:10 |
| Purge End Time: | 11:05 | Well Volumes Purged (total): | NA | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 10:45 | 0 | 200 | mL/min | 6.27 | 7.45 | 0.552 | 0.02 | 6.76 | 12 | 139.3 | Clear | No Odor |
| 10:50 | 5 | 200 | mL/min | 6.49 | 7.42 | 0.556 | 0.69 | 6.76 | 12 | 146.2 | Clear | No Odor |
| 10:55 | 10 | 200 | mL/min | 6.7 | 7.39 | 0.568 | 0.57 | 6.82 | 12 | 152.5 | Clear | No Odor |
| 11:00 | 15 | 200 | mL/min | 6.95 | 7.37 | 0.575 | 0.02 | 6.76 | 11.9 | 157.7 | Clear | No Odor |
| 11:05 | 20 | 200 | mL/min | 7.18 | 7.34 | 0.567 | 1.19 | 6.53 | 11.8 | 162.1 | Clear | No Odor |

| | | | |
|----------------------------|--------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-22-150 | Date | 2/13/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 46.0 degrees F and Clear. The wind is blowing W at 18.3 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 5.39 | Total Depth (ft-bmp) | 17.95 | Water Column (ft) | 12.56 |
| | | | | Gallons in Well | 2.04 |
| Purge Start | 15:25 | Pump Intake (ft-bmp) | 15.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:55 | Volumes Purged | 0.39 | Sample ID | MW-22-150_021323 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 15:55 | Gallons Purged | | Replicate/Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:25 | 0 | 0 | 100 | 5.39 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 15:30 | 5 | 5 | 100 | 5.73 | 0.13 | 7.37 | 4.76 | 14.2 | 0.56 | 9.7 | 32.8 | Clear | None |
| 15:35 | 5 | 10 | 100 | 5.95 | 0.26 | 7.37 | 4.79 | 9.32 | 0.49 | 9.5 | 32.5 | Clear | None |
| 15:40 | 5 | 15 | 100 | 6.17 | 0.40 | 7.37 | 4.78 | 9.45 | 0.34 | 9.6 | 32.2 | Clear | None |
| 15:45 | 5 | 20 | 100 | 6.34 | 0.53 | 7.37 | 4.79 | 9.59 | 0.34 | 9.2 | 32.2 | Clear | None |
| 15:50 | 5 | 25 | 100 | 6.49 | 0.66 | 7.37 | 4.79 | 9.42 | 0.36 | 9.3 | 32.1 | Clear | None |
| 15:55 | 5 | 30 | 100 | 6.64 | 0.79 | 7.37 | 4.79 | 9.23 | 0.36 | 9.3 | 32 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 250 mL Plastic | 2 | None |

Comments: Didn't meet drawdown requirements

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Flush mount | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-22-150 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 59 °F, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 5.70 | Total Depth (ft-bmp) | 17.96 | Water Column (ft) | 12.26 |
| | | | | Gallons in Well | 1.99 |
| Purge Start | 09:25 | Pump Intake (ft-bmp) | 16.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 10:05 | Volumes Purged | 1.26 | Sample ID | MW-22-150_052423 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 10:05 | Gallons Purged | 2.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:30 | 0 | 0 | 200 | 6.44 | 0.00 | 7.26 | 3.43 | 3.06 | 0.48 | 12 | 85.2 | Clear | None |
| 09:35 | 5 | 5 | 200 | 6.89 | 0.00 | 7.28 | 3.43 | 2.9 | 0.25 | 12 | 5 | Clear | None |
| 09:40 | 5 | 10 | 200 | 7.23 | 0.00 | 7.29 | 3.42 | 2.69 | 0.18 | 12 | -20.9 | Clear | None |
| 09:45 | 5 | 15 | 200 | 7.87 | 0.00 | 7.3 | 3.4 | 3.45 | 0.18 | 11.7 | -47.7 | Clear | None |
| 09:50 | 5 | 20 | 200 | 8.21 | 0.00 | 7.3 | 3.39 | 2.59 | 0.17 | 11.6 | -56.9 | Clear | None |
| 09:55 | 5 | 25 | 200 | 8.54 | 0.00 | 7.31 | 3.39 | 2.32 | 0.17 | 11.6 | -63.2 | Clear | None |
| 10:00 | 5 | 30 | 200 | 8.78 | 0.00 | 7.3 | 3.38 | 2.21 | 0.17 | 11.6 | -69.7 | Clear | None |
| 10:05 | 5 | 35 | 200 | 9.02 | 0.00 | 7.31 | 3.38 | 2.1 | 0.17 | 11.5 | -72.9 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Off site Plant 6</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-22-151 | Date | 2/13/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 46.0 degrees F and Clear. The wind is blowing W/NW at 18.3 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 5.98 | Total Depth (ft-bmp) | 14.95 | Water Column (ft) | 8.97 |
| | | | | Gallons in Well | 1.46 |
| Purge Start | 14:20 | Pump Intake (ft-bmp) | 12.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 15:05 | Volumes Purged | 0.81 | Sample ID | MW-22-151_021323 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 15:05 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:20 | 0 | 0 | 100 | 5.98 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 14:25 | 5 | 5 | 100 | 6.23 | 0.13 | 6.86 | 2.66 | 67.7 | 0.56 | 11.4 | 14.8 | Clear | None |
| 14:30 | 5 | 10 | 100 | 6.29 | 0.26 | 6.88 | 2.66 | 54.8 | 0.42 | 11.1 | 7.3 | Clear | None |
| 14:35 | 5 | 15 | 100 | 6.29 | 0.40 | 6.89 | 2.67 | 50.3 | 0.32 | 10.9 | -1.5 | Clear | None |
| 14:40 | 5 | 20 | 100 | 6.29 | 0.53 | 6.88 | 2.67 | 47.7 | 0.32 | 10.9 | -5.3 | Clear | None |
| 14:45 | 5 | 25 | 100 | 6.29 | 0.66 | 6.89 | 2.67 | 42 | 0.35 | 10.9 | -10.5 | Clear | None |
| 14:50 | 5 | 30 | 100 | 6.29 | 0.79 | 6.89 | 2.67 | 40.2 | 0.33 | 10.9 | -13.3 | Clear | None |
| 14:55 | 5 | 35 | 100 | 6.29 | 0.92 | 6.89 | 2.67 | 37.9 | 0.42 | 11 | -18.6 | Clear | None |
| 15:00 | 5 | 40 | 100 | 6.29 | 1.06 | 6.89 | 2.67 | 38.3 | 0.41 | 11 | -20.9 | Clear | None |
| 15:05 | 5 | 45 | 100 | 6.29 | 1.19 | 6.89 | 2.67 | 35.8 | 0.4 | 11 | -21.5 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-22-151 | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 80 °F, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 6.36 | Total Depth (ft-bmp) | 14.91 | Water Column (ft) | 8.55 |
| | | | | Gallons in Well | 1.39 |
| Purge Start | 17:15 | Pump Intake (ft-bmp) | 13.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 18:10 | Volumes Purged | 1.80 | Sample ID | MW-22-151_052323 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 18:10 | Gallons Purged | 2.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 17:20 | 0 | 0 | 150 | 7.10 | 0.00 | 6.9 | 1.86 | 710 | 0.29 | 13.6 | -23.3 | Clear | None |
| 17:25 | 5 | 5 | 150 | 7.21 | 0.00 | 6.91 | 1.85 | 573 | 0.22 | 13.5 | -35 | Clear | None |
| 17:30 | 5 | 10 | 150 | 7.34 | 0.00 | 6.93 | 1.85 | 344 | 0.16 | 13.6 | -56 | Clear | None |
| 17:35 | 5 | 15 | 150 | 7.36 | 0.00 | 6.93 | 1.85 | 271 | 0.14 | 13.6 | -59.3 | Clear | None |
| 17:40 | 5 | 20 | 150 | 7.36 | 0.00 | 6.92 | 1.84 | 113 | 0.12 | 13.5 | -66.7 | Clear | None |
| 17:45 | 5 | 25 | 150 | 7.36 | 0.00 | 6.92 | 1.84 | 37.3 | 0.12 | 13.5 | -70.5 | Clear | None |
| 17:50 | 5 | 30 | 150 | 7.41 | 0.00 | 6.92 | 1.83 | 24.1 | 0.1 | 13.3 | -74.7 | Clear | None |
| 17:55 | 5 | 35 | 150 | 7.41 | 0.00 | 6.92 | 1.84 | 16.1 | 0.1 | 13.3 | -75.9 | Clear | None |
| 18:00 | 5 | 40 | 150 | 7.41 | 0.00 | 6.92 | 1.85 | 15.8 | 0.1 | 13.6 | -77.8 | Clear | None |
| 18:05 | 5 | 45 | 150 | 7.41 | 0.00 | 6.92 | 1.84 | 14.3 | 0.1 | 13.5 | -78.7 | Clear | None |
| 18:10 | 5 | 50 | 150 | 7.41 | 0.00 | 6.92 | 1.84 | 14.9 | 0.1 | 13.5 | -79.1 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Off site Plant 6 | Well Locked at Arrival: yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|----------------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-22-152 | Date | 2/13/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 46.0 degrees F and Mostly Clear. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 7.21 | Total Depth (ft-bmp) | 14.9 | Water Column (ft) | 7.69 |
| | | | | Gallons in Well | 1.25 |
| Purge Start | 13:15 | Pump Intake (ft-bmp) | 12.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 13:55 | Volumes Purged | 0.85 | Sample ID | MW-22-152_021323 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 13:55 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:15 | 0 | 0 | 100 | 7.21 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 13:20 | 5 | 5 | 100 | 7.29 | 0.13 | 7.05 | 1.25 | 18.6 | 0.27 | 10.9 | -20.5 | Clear | None |
| 13:25 | 5 | 10 | 100 | 7.29 | 0.26 | 7.03 | 1.24 | 15.7 | 0.19 | 11 | -18.2 | Clear | None |
| 13:30 | 5 | 15 | 100 | 7.29 | 0.40 | 7.03 | 1.24 | 12.4 | 0.18 | 11 | -17.6 | Clear | None |
| 13:35 | 5 | 20 | 100 | 7.29 | 0.53 | 7.02 | 1.24 | 9.78 | 0.15 | 11.1 | -11.1 | Clear | None |
| 13:40 | 5 | 25 | 100 | 7.29 | 0.66 | 7.02 | 1.25 | 8.86 | 0.14 | 11.2 | -15.7 | Clear | None |
| 13:45 | 5 | 30 | 100 | 7.29 | 0.79 | 7.02 | 1.25 | 7.67 | 0.14 | 11.1 | -15.2 | Clear | None |
| 13:50 | 5 | 35 | 100 | 7.29 | 0.92 | 7.01 | 1.25 | 7.52 | 0.15 | 11.2 | -14.5 | Clear | None |
| 13:55 | 5 | 40 | 100 | 7.29 | 1.06 | 7.01 | 1.25 | 7.34 | 0.15 | 11.2 | -13.9 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Flush mount | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-22-152 | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 80 °F, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| Static Water Level (ft-bmp) | 7.42 | Total Depth (ft-bmp) | 14.91 | Water Column (ft) | 7.49 |
| Purge Start | 16:05 | Pump Intake (ft-bmp) | 13.5 | Purge Method | Low-Flow |
| Purge End | 16:40 | Volumes Purged | 1.64 | Sample ID | MW-22-152_052323 |
| Sample Time | 16:40 | Gallons Purged | 2 | Replicate/ Code No. | DUP-08_052323 |
| | | | | Sampled by | Anyssa Mandich |
| | | | | Purge Equipment | Peristaltic |
| | | | | Well Casing Material | PVC |
| | | | | Gallons in Well | 1.22 |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 16:10 | 0 | 0 | 150 | 7.42 | 0.00 | 6.98 | 0.9 | 19.4 | 0.26 | 12.6 | 6.2 | Clear | None |
| 16:15 | 5 | 5 | 150 | 7.83 | 0.00 | 7.01 | 0.85 | 3.89 | 0.19 | 12.6 | -6.2 | Clear | None |
| 16:20 | 5 | 10 | 150 | 7.83 | 0.00 | 7.03 | 0.87 | 3.15 | 0.16 | 12.6 | -19.7 | Clear | None |
| 16:25 | 5 | 15 | 150 | 7.86 | 0.00 | 7.02 | 0.85 | 2.12 | 0.14 | 12.7 | -23.1 | Clear | None |
| 16:30 | 5 | 20 | 150 | 7.86 | 0.00 | 7.03 | 0.86 | 1.64 | 0.14 | 12.7 | -27.7 | Clear | None |
| 16:35 | 5 | 25 | 150 | 7.86 | 0.00 | 7.02 | 0.85 | 1.09 | 0.14 | 12.8 | -28.2 | Clear | None |
| 16:40 | 5 | 30 | 150 | 7.86 | 0.00 | 7.02 | 0.85 | 0.97 | 0.14 | 12.8 | -30.8 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 125 mL Plastic | 2 | None |
| VOCs SW-846 8260B | 40 mL Glass | 6 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Off site P6 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-22-153 | Date | 2/15/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 52.0 degrees F and Cloudy. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 10.61 | Total Depth (ft-bmp) | 31.18 | Water Column (ft) | 20.57 |
| | | | | Gallons in Well | 3.34 |
| Purge Start | 10:30 | Pump Intake (ft-bmp) | 28.68 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 11:15 | Volumes Purged | 0.71 | Sample ID | MW-22-153_021523 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 11:10 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:35 | 0 | 0 | 200 | 10.61 | 0.26 | 6.83 | 2.735 | 15.4 | 0.35 | 12.6 | -118 | Clear | None |
| 10:40 | 5 | 5 | 200 | 10.61 | 0.53 | 6.88 | 2.621 | 8.83 | 0.17 | 12.7 | -133.3 | Clear | None |
| 10:45 | 5 | 10 | 200 | 10.61 | 0.79 | 6.93 | 2.417 | 3.35 | 0.12 | 12.7 | -149.4 | Clear | None |
| 10:50 | 5 | 15 | 200 | 10.61 | 1.06 | 6.94 | 2.383 | 3.02 | 0.11 | 12.7 | -158.6 | Clear | None |
| 10:55 | 5 | 20 | 200 | 10.61 | 1.32 | 6.95 | 2.353 | 1.81 | 0.1 | 12.8 | -167.3 | Clear | None |
| 11:00 | 5 | 25 | 200 | 10.61 | 1.59 | 6.96 | 2.33 | 1.5 | 0.11 | 12.8 | -173.9 | Clear | None |
| 11:05 | 5 | 30 | 200 | 10.61 | 1.85 | 6.96 | 2.308 | 1.23 | 0.12 | 12.8 | -175.9 | Clear | None |
| 11:10 | 5 | 35 | 200 | 10.61 | 2.11 | 6.98 | 2.264 | 1.09 | 0.12 | 12.9 | -181.6 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| VOCs | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>2035</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|---|--------------------------------------|------------|---------------------------------------|----------------------------------|--|
| Location ID: | MW-22-153 | Date(s): | 2023-05-17 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 2 |
| Weather(°F): | CLEAR, T:48.81 °F, rH:62%, Clouds: 0%, Wind:12.66mph NE | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 10.52 | Total Depth (ft-bmp): | 31.18 | Water Column(ft): | 20.66 | Liters in Well: 3.36 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 8 | Sample ID: | MW-22-153_051723 | Sample Time: 11:00 |
| Purge End Time: | 10:55 | Well Volumes Purged (total): | 2.38 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q,YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^c) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 10:25 | 0 | 200 | mL/min | 10.55 | 7.48 | 1.34 | 4.33 | 1.23 | 12.4 | 116 | Clear | No Odor |
| 10:30 | 5 | 200 | mL/min | 10.55 | 7.48 | 1.34 | 4.55 | 1.08 | 12.4 | 111.7 | Clear | No Odor |
| 10:35 | 10 | 200 | mL/min | 10.55 | 7.11 | 2.04 | 1.88 | 0.35 | 12.6 | 117 | Clear | No Odor |
| 10:40 | 15 | 200 | mL/min | 10.55 | 7.1 | 2.17 | 1.85 | 0.1 | 12.6 | 114.7 | Clear | No Odor |
| 10:45 | 20 | 200 | mL/min | 10.55 | 7.09 | 2.23 | 1.75 | 0.09 | 12.7 | 113.4 | Clear | No Odor |
| 10:51 | 26 | 200 | mL/min | 10.55 | 7.09 | 2.25 | 0.89 | 0.06 | 12.6 | 111 | Clear | No Odor |
| 10:55 | 30 | 200 | mL/min | 10.55 | 7.09 | 2.25 | 0.02 | 0.06 | 12.7 | 109.7 | Clear | No Odor |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| VOCs (SW8260) | Clear Glass | 3 | HCl |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | MW-22-154 | Date | 2/13/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 44.1 degrees F and Clear. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 5.26 | Total Depth (ft-bmp) | 10.55 | Water Column (ft) | 5.29 | Gallons in Well | 0.86 |
| Purge Start | 12:30 | Pump Intake (ft-bmp) | 8.5 | Purge Method | Low-Flow | Purge Equipment | Bailer |
| Purge End | 12:55 | Volumes Purged | 0.77 | Sample ID | MW-22-154_021323 | Sampled by | Billy Cobern |
| Sample Time | 12:55 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:30 | 0 | 0 | 100 | 5.26 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 12:35 | 5 | 5 | 100 | 5.39 | 0.13 | 6.92 | 5.34 | 10.8 | 0.54 | 9.9 | 3.1 | Clear | None |
| 12:40 | 5 | 10 | 100 | 5.41 | 0.26 | 6.94 | 5.32 | 8.97 | 0.52 | 9.8 | -0.2 | Clear | None |
| 12:45 | 5 | 15 | 100 | 5.41 | 0.40 | 6.95 | 5.34 | 8.23 | 0.46 | 9.8 | -1.7 | Clear | None |
| 12:50 | 5 | 20 | 100 | 5.41 | 0.53 | 6.95 | 5.37 | 8.05 | 0.45 | 9.8 | -3.4 | Clear | None |
| 12:55 | 5 | 25 | 100 | 5.41 | 0.66 | 6.95 | 5.37 | 7.88 | 0.44 | 9.8 | -3.7 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| VOCs | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|-------------------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-22-154 | Date | 5/1/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 40 °F, Overcast, W winds at 10 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 4.72 | Total Depth (ft-bmp) | 10.56 | Water Column (ft) | 5.84 | Gallons in Well | 0.95 |
| Purge Start | 11:55 | Pump Intake (ft-bmp) | 8.56 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 12:25 | Volumes Purged | 1.67 | Sample ID | MW-22-154_050123 | Sampled by | Austin Westhuis |
| Sample Time | 12:20 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:00 | 0 | 0 | 200 | 5.07 | 0.26 | 7.15 | 2.49 | 7.44 | 0.23 | 9.2 | 58.2 | Clear | None |
| 12:05 | 5 | 5 | 200 | 5.07 | 0.53 | 7.18 | 2.46 | 4.33 | 0.22 | 9.3 | 45 | Clear | None |
| 12:10 | 5 | 10 | 200 | 5.07 | 0.79 | 7.19 | 2.46 | 3.87 | 0.2 | 9.2 | 38.7 | Clear | None |
| 12:15 | 5 | 15 | 200 | 5.07 | 1.06 | 7.2 | 2.46 | 3.43 | 0.2 | 9.2 | 34.4 | Clear | None |
| 12:20 | 5 | 20 | 200 | 5.07 | 1.32 | 7.21 | 2.47 | 3.01 | 0.2 | 9.3 | 32 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| VOCs | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: See figure. | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Flush mount | Key Number To Well: 2035 |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-22-155 | Date | 2/15/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 52.0 degrees F and Cloudy. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 11.89 | Total Depth (ft-bmp) | 31.43 | Water Column (ft) | 19.54 |
| | | | | Gallons in Well | 3.18 |
| Purge Start | 11:35 | Pump Intake (ft-bmp) | 28.93 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 12:25 | Volumes Purged | 0.83 | Sample ID | MW-22-155_021523 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 12:20 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:40 | 0 | 0 | 200 | 11.89 | 0.26 | 6.97 | 1.925 | 576 | 1.38 | 11.8 | -143.5 | Clear | None |
| 11:45 | 5 | 5 | 200 | 11.89 | 0.53 | 6.96 | 1.942 | 223 | 1.26 | 12 | -159.7 | Clear | None |
| 11:50 | 5 | 10 | 200 | 11.89 | 0.79 | 6.98 | 1.968 | 108 | 1.26 | 11.9 | -168.7 | Clear | None |
| 11:55 | 5 | 15 | 200 | 11.89 | 1.06 | 6.98 | 1.972 | 44.8 | 1.25 | 11.8 | -171.9 | Clear | None |
| 12:00 | 5 | 20 | 200 | 11.89 | 1.32 | 6.98 | 1.989 | 19.5 | 1.22 | 12.1 | -173.8 | Clear | None |
| 12:05 | 5 | 25 | 200 | 11.89 | 1.59 | 6.98 | 2.007 | 8.93 | 1.1 | 11.7 | -177.3 | Clear | None |
| 12:10 | 5 | 30 | 200 | 11.89 | 1.85 | 6.98 | 2.001 | 6.55 | 0.94 | 11.8 | -179.3 | Clear | None |
| 12:15 | 5 | 35 | 200 | 11.89 | 2.11 | 6.98 | 2.015 | 6.03 | 0.89 | 12 | -180.5 | Clear | None |
| 12:20 | 5 | 40 | 200 | 11.89 | 2.38 | 6.99 | 2.02 | 5.79 | 0.86 | 12 | -182.6 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| VOCs | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>2035</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|---|--------------------------------------|------------|---------------------------------------|----------------------------------|---|
| Location ID: | MW-22-155 | Date(s): | 2023-05-17 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 2 |
| Weather(°F): | CLEAR, T:68.54 °F, rH:31%, Clouds: 0%, Wind:4.61mph N | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 11.82 | Total Depth (ft-bmp): | 31.5 | Water Column(ft): | 19.68 | Liters in Well: 3.20 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 11000 | Sample ID: | MW-22-155_051723 | Sample Time: 13:06 |
| Purge End Time: | 13:05 | Well Volumes Purged (total): | 3,437.50 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^c) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 12:05 | 0 | 200 | mL/min | 11.9 | 6.21 | 0 | 31.6 | 9.18 | 19.2 | -255.1 | Clear | No Odor |
| 12:10 | 5 | 200 | mL/min | 11.9 | 6.01 | 0 | 37.9 | 9.33 | 18.6 | -240.1 | Clear | No Odor |
| 12:15 | 10 | 200 | mL/min | 11.9 | 5.96 | 0 | 51.2 | 9.2 | 18.5 | -239.5 | Clear | No Odor |
| 12:20 | 15 | 200 | mL/min | 11.9 | 5.8 | 0 | 63 | 8.79 | 18.9 | -245.4 | Clear | No Odor |
| 12:25 | 20 | 200 | mL/min | 11.9 | 5.66 | 0 | 60.2 | 8.58 | 19.2 | -264.5 | Clear | No Odor |
| 12:33 | 28 | 200 | mL/min | 11.9 | 7.14 | 0 | 47.5 | 10.08 | 16.4 | 48.6 | Clear | No Odor |
| 12:38 | 33 | 200 | mL/min | 11.9 | 6.87 | 0 | 50.6 | 8.93 | 18.3 | 28.1 | Clear | No Odor |
| 12:43 | 38 | 200 | mL/min | 11.9 | 6.75 | 0 | 42.6 | 8.49 | 19.2 | 15.1 | Clear | No Odor |
| 12:48 | 43 | 200 | mL/min | 11.9 | 6.58 | 0 | 40.3 | 8.25 | 19.7 | -5 | Clear | No Odor |
| 12:53 | 48 | 200 | mL/min | 11.9 | 6.62 | 0 | 43.5 | 8.1 | 20 | -55.9 | Clear | No Odor |
| 13:01 | 56 | 200 | mL/min | 11.9 | 7.91 | 0 | 39.8 | 7.9 | 20.1 | -64 | Clear | No Odor |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| VOCs (SW8260) | Clear Glass | 3 | HCl |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

- ft-bmp = feet below measuring point
- in = inches
- ft = feet
- mL/min = milliliters per minute
- uS/cm = microSiemens per centimeter
- NTU = Nephelometric Turbidity Unit
- mg/L = milligrams per liter
- S.U = standard units
- mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|-----------------------------|------------------|
| Project Number | 30171056 | Well ID | MW-22-156 | Date | 2/15/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 53.1 degrees F and Cloudy. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 13.06 | Total Depth (ft-bmp) | 31.06 | Water Column (ft) | 18.00 |
| | | | | Gallons in Well | 2.92 |
| Purge Start | 09:35 | Pump Intake (ft-bmp) | 28.56 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 10:20 | Volumes Purged | 0.81 | Sample ID | MW-22-156_021523 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 10:15 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 09:40 | 0 | 0 | 200 | 13.12 | 0.26 | 7.07 | 1.368 | 3.11 | 3.9 | 12.8 | 5.7 | Clear | None |
| 09:45 | 5 | 5 | 200 | 13.12 | 0.53 | 6.89 | 1.772 | 2.71 | 0.64 | 12.9 | -89.9 | Clear | None |
| 09:50 | 5 | 10 | 200 | 13.12 | 0.79 | 6.9 | 1.828 | 2.14 | 0.54 | 13 | -108.9 | Clear | None |
| 09:55 | 5 | 15 | 200 | 13.12 | 1.06 | 6.95 | 1.913 | 1.69 | 0.43 | 13 | -143.7 | Clear | None |
| 10:00 | 5 | 20 | 200 | 13.12 | 1.32 | 6.98 | 1.927 | 1.6 | 0.61 | 13.1 | -154.6 | Clear | None |
| 10:05 | 5 | 25 | 200 | 13.12 | 1.59 | 7 | 1.953 | 1.45 | 0.61 | 13.2 | -164.8 | Clear | None |
| 10:10 | 5 | 30 | 200 | 13.12 | 1.85 | 7.01 | 1.961 | 1.33 | 0.59 | 13.2 | -166.7 | Clear | None |
| 10:15 | 5 | 35 | 200 | 13.12 | 2.11 | 7.02 | 1.968 | 1.12 | 0.57 | 13.1 | -170.5 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| VOCs | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>2035</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|---|
| Location ID: | MW-22-156 | Date(s): | 2023-05-17 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 2 |
| Weather(°F): | CLEAR, T:45.03 °F, rH:72%, Clouds: 0%, Wind:6.91mph NE | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 12.99 | Total Depth (ft-bmp): | 31.6 | Water Column(ft): | 18.61 | Liters in Well: 3.02 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 5 | Sample ID: | MW-22-156_051723 | Sample Time: 09:35 |
| Purge End Time: | 09:35 | Well Volumes Purged (total): | 1.66 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 09:10 | 0 | 200 | mL/min | 12.99 | 7.63 | 1.66 | 0.02 | 4.49 | 12.3 | 140.7 | Clear | No Odor |
| 09:15 | 5 | 200 | mL/min | 12.99 | 7.26 | 1.87 | 0.02 | 0.72 | 12.5 | 135 | Clear | No Odor |
| 09:20 | 10 | 200 | mL/min | 12.99 | 7.21 | 2.03 | 0.02 | 0.47 | 12.7 | 130.6 | Clear | No Odor |
| 09:25 | 15 | 200 | mL/min | 12.99 | 7.19 | 2.08 | 1.09 | 0.23 | 12.7 | 127.2 | Clear | No Odor |
| 09:30 | 20 | 200 | mL/min | 12.99 | 7.19 | 2.08 | 1.13 | 0.24 | 12.7 | 123.6 | Clear | No Odor |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| VOCs (SW8260) | Clear Glass | 3 | HCl |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | MW-22-157 | Date | 2/15/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 48.0 degrees F and Cloudy. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 2.63 | Total Depth (ft-bmp) | 27.61 | Water Column (ft) | 24.98 | Gallons in Well | 4.06 |
| Purge Start | 14:00 | Pump Intake (ft-bmp) | 25.11 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 14:35 | Volumes Purged | 0.46 | Sample ID | MW-22-157_021523 | Sampled by | Austin Westhuis |
| Sample Time | 14:30 | Gallons Purged | | Replicate/Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:05 | 0 | 0 | 200 | 2.63 | 0.26 | 6.95 | 1.948 | 2.96 | 0.19 | 12.7 | -105.5 | Clear | None |
| 14:10 | 5 | 5 | 200 | 2.63 | 0.53 | 6.98 | 1.96 | 2.44 | 0.15 | 12.8 | -126.7 | Clear | None |
| 14:15 | 5 | 10 | 200 | 2.63 | 0.79 | 7 | 1.968 | 2.34 | 0.11 | 12.9 | -140.6 | Clear | None |
| 14:20 | 5 | 15 | 200 | 2.63 | 1.06 | 7.01 | 1.974 | 2.08 | 0.12 | 12.9 | -150.9 | Clear | None |
| 14:25 | 5 | 20 | 200 | 2.63 | 1.32 | 7.01 | 1.977 | 1.68 | 0.11 | 12.9 | -155.6 | Clear | None |
| 14:30 | 5 | 25 | 200 | 2.63 | 1.59 | 7.01 | 1.986 | 1.61 | 0.11 | 13 | -157.7 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>See figure.</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>2035</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|---|--------------------------------------|------------|---------------------------------------|----------------------------------|---|
| Location ID: | MW-22-157 | Date(s): | 2023-05-17 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 2 |
| Weather(°F): | CLEAR, T:56.5 °F, rH:50%, Clouds: 0%, Wind:11.5mph N-NE | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 2.5 | Total Depth (ft-bmp): | 27.63 | Water Column(ft): | 25.13 | Liters in Well: 4.08 |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 10 | Sample ID: | MW-22-157_051723 | Sample Time: 15:10 |
| Purge End Time: | 15:06 | Well Volumes Purged (total): | 2.45 | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^c) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 14:25 | 0 | 200 | mL/min | 2.58 | 7.18 | 1.284 | 0.02 | 4.3 | 14 | 216 | Clear | No Odor |
| 14:30 | 5 | 200 | mL/min | 2.58 | 7.21 | 1.285 | 0.3 | 4.24 | 13.9 | 198.8 | Clear | No Odor |
| 14:35 | 10 | 200 | mL/min | 2.58 | 6.97 | 1.441 | 1.56 | 1.4 | 14.1 | -2 | Clear | No Odor |
| 14:40 | 15 | 200 | mL/min | 2.58 | 6.98 | 1.455 | 1.48 | 0.56 | 14 | -16.1 | Clear | No Odor |
| 14:45 | 20 | 200 | mL/min | 5.58 | 6.99 | 1.452 | 2.27 | 0.58 | 14.1 | -22.9 | Clear | No Odor |
| 14:50 | 25 | 200 | mL/min | 2.58 | 6.99 | 1.477 | 0.02 | 0.37 | 14.1 | -42.1 | Clear | No Odor |
| 14:55 | 30 | 200 | mL/min | 2.58 | 7 | 1.482 | 0.75 | 0.29 | 14.1 | -51 | Clear | No Odor |
| 15:00 | 35 | 200 | mL/min | 2.58 | 7 | 1.482 | 0.18 | 0.27 | 14.1 | -55.5 | Clear | No Odor |
| 15:05 | 40 | 200 | mL/min | 2.58 | 7 | 1.482 | 0.58 | 0.23 | 14.1 | -59.6 | Clear | No Odor |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

- ft-bmp = feet below measuring point
- in = inches
- ft = feet
- mL/min = milliliters per minute
- uS/cm = microSiemens per centimeter
- NTU = Nephelometric Turbidity Unit
- mg/L = milligrams per liter
- S.U = standard units
- mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|------------------|
| Project Number | 30171056 | Well ID | MW-22-158 | Date | 2/13/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 45.0 degrees F and Clear. The wind is blowing W at 17.2 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 15.65 | Total Depth (ft-bmp) | 20.15 | Water Column (ft) | 4.50 |
| | | | | Gallons in Well | 0.73 |
| Purge Start | 16:15 | Pump Intake (ft-bmp) | 17.65 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 16:45 | Volumes Purged | 2.17 | Sample ID | MW-22-158_021323 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 16:40 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 16:20 | 0 | 0 | 200 | 15.65 | 0.26 | 7.06 | 3.467 | 4.38 | 0.33 | 11.6 | -70.1 | Clear | None |
| 16:25 | 5 | 5 | 200 | 15.65 | 0.53 | 7.1 | 3.572 | 2.11 | 0.16 | 11.4 | -92 | Clear | None |
| 16:30 | 5 | 10 | 200 | 15.65 | 0.79 | 7.1 | 3.587 | 1.93 | 0.15 | 11.3 | -94.8 | Clear | None |
| 16:35 | 5 | 15 | 200 | 15.65 | 1.06 | 7.09 | 3.605 | 1.67 | 0.15 | 11.4 | -95.1 | Clear | None |
| 16:40 | 5 | 20 | 200 | 15.65 | 1.32 | 7.09 | 3.614 | 1.6 | 0.16 | 11.4 | -97.8 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure. | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>2035</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|---|
| Location ID: | MW-22-158 | Date(s): | 2023-05-18 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 6 |
| Weather(°F): | CLEAR, T:65.46 °F, rH:36%, Clouds: 0%, Wind:0mph N | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 12.84 | Total Depth (ft-bmp): | NA | Water Column(ft): | -12.84 | Liters in Well: NA |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 5 | Sample ID: | MW-22-158_051823 | Sample Time: 13:00 |
| Purge End Time: | 12:55 | Well Volumes Purged (total): | NA | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q, YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 12:35 | 0 | 200 | mL/min | 13.15 | 7.07 | 3.416 | 5.52 | 0.53 | 11.2 | -3.7 | Clear | No Odor |
| 12:40 | 5 | 200 | mL/min | 13.19 | 7.03 | 3.421 | 3.47 | 0.37 | 11.2 | -7 | Clear | No Odor |
| 12:45 | 10 | 200 | mL/min | 13.24 | 7.02 | 3.434 | 2.74 | 0.3 | 11.3 | -14 | Clear | No Odor |
| 12:50 | 15 | 200 | mL/min | 13.24 | 7.02 | 3.479 | 2.15 | 0.26 | 11.2 | -18.8 | Clear | No Odor |
| 12:55 | 20 | 200 | mL/min | 13.24 | 7.02 | 3.535 | 2.99 | 0.24 | 11.2 | -21.2 | Clear | No Odor |

| | | | |
|----------------------------|--------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|---|------------------|
| Project Number | 30171056 | Well ID | MW-22-160 | Date | 2/14/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 54.0 degrees F and Clear. The wind is blowing S/SE at 13.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 15.19 | Total Depth (ft-bmp) | 18.15 | Water Column (ft) | 2.96 |
| | | | | Gallons in Well | 0.48 |
| Purge Start | 13:25 | Pump Intake (ft-bmp) | 17.15 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 14:05 | Volumes Purged | 4.40 | Sample ID | MW-22-160_021423 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 14:00 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:30 | 0 | 0 | 200 | 15.19 | 0.26 | 6.74 | 1.123 | 109 | 0.47 | 12.3 | -116.6 | Clear | None |
| 13:35 | 5 | 5 | 200 | 15.19 | 0.53 | 6.76 | 1.127 | 41.7 | 0.87 | 12.3 | -148.9 | Clear | None |
| 13:40 | 5 | 10 | 200 | 15.19 | 0.79 | 6.78 | 1.127 | 11.65 | 0.84 | 12.3 | -156.4 | Clear | None |
| 13:45 | 5 | 15 | 200 | 15.19 | 1.06 | 6.81 | 1.125 | 3.88 | 0.79 | 12.3 | -159 | Clear | None |
| 13:50 | 5 | 20 | 200 | 15.19 | 1.32 | 6.81 | 1.125 | 3.08 | 0.78 | 12.2 | -159.9 | Clear | None |
| 13:55 | 5 | 25 | 200 | 15.19 | 1.59 | 6.81 | 1.125 | 2.79 | 0.77 | 12.2 | -161.3 | Clear | None |
| 14:00 | 5 | 30 | 200 | 15.19 | 1.85 | 6.82 | 1.124 | 2.54 | 0.75 | 12.2 | -167.7 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|------------------------------|
| Well Location: See figure. | Well Locked at Arrival: no |
| Condition of Well: Good condition | Well Locked at Departure: no |
| Well Completion: Flush mount | Key Number To Well: 2035 |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | |
|-------------------------------------|--|--------------------------------------|------------|---------------------------------------|----------------------------------|--|
| Location ID: | MW-22-160 | Date(s): | 2023-05-18 | Work Order(s): | Q2 2023 GWS (Q, SA event) | |
| Client: | RACER | Facility: | Lansing | Facility Location: | 2801 W. Saginaw St., Lansing, MI | Area: 6 |
| Weather(°F): | CLEAR, T:65.46 °F, rH:36%, Clouds: 0%, Wind:0mph N | | | Field Technician: | Jackie Schulte | |
| Measuring Pt. Description: | Top of Inner Casing | Screen Setting (ft-bgs): | - | Casing Diameter (in): | 2.00 | Well Casing Material: PVC |
| Static Water Level (ft-bmp): | 13.68 | Total Depth (ft-bmp): | NA | Water Column(ft): | -13.68 | Liters in Well: NA |
| Depth to Product (ft-bmp): | NA | Pump Intake Depth(ft-bmp): | NA | Purge Method: | Low Flow | Purging Equipment: Peristaltic Pump |
| Purge Start Time: | NA | Total Volume Purged (liters): | 5 | Sample ID: | MW-22-160_051823 | Sample Time: 15:30 |
| Purge End Time: | 15:25 | Well Volumes Purged (total): | NA | Replicate Type / Replicate ID: | NA / NA | Water Quality Meter/ ID: Hach 2100Q,YSI Pro Plus / NA |
| Scope of work completed? | Yes | | | | | |

| Time | Total Elapsed (min) | Flow Rate | Flow Rate Unit | Depth to Water (ft) | pH (S.U.) | Specific Conductivity (mS/cm ^e) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temp. (°C) | Redox (mV) | Appearance | |
|-------|---------------------|-----------|----------------|---------------------|-----------|---|-----------------|-------------------------|------------|------------|------------|---------|
| | | | | | | | | | | | Color | Odor |
| 15:10 | 0 | 200 | mL/min | 13.68 | 6.92 | 1.316 | 4.38 | 0.58 | 11.4 | -41.8 | Clear | No Odor |
| 15:15 | 5 | 200 | mL/min | 13.68 | 6.91 | 1.313 | 3.39 | 0.37 | 11.3 | -42.7 | Clear | No Odor |
| 15:20 | 10 | 200 | mL/min | 13.68 | 6.9 | 1.312 | 2.41 | 0.29 | 11.2 | -43 | Clear | No Odor |
| 15:25 | 15 | 200 | mL/min | 13.68 | 6.89 | 1.313 | 2.11 | 0.26 | 11.2 | -42.7 | Clear | No Odor |

| | | | |
|----------------------------|--------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|--------------|
| Project Number | 30171056 | Well ID | P6-SB-07 | Date | 2/15/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 52.0 degrees F and Cloudy. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 5.52 | Total Depth (ft-bmp) | 23.6 | Water Column (ft) | 18.08 | Gallons in Well | 2.94 |
| Purge Start | 10:15 | Pump Intake (ft-bmp) | 21 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 10:55 | Volumes Purged | 0.36 | Sample ID | P6-SB-07_021523 | Sampled by | Billy Cobern |
| Sample Time | 10:55 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:15 | 0 | 0 | 100 | 5.52 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 10:20 | 5 | 5 | 100 | 5.63 | 0.13 | 7.27 | 0.73 | 18.3 | 4.95 | 9.7 | 63.5 | Clear | None |
| 10:25 | 5 | 10 | 100 | 5.63 | 0.26 | 7.51 | 0.689 | 18.1 | 4.24 | 9.6 | 54 | Clear | None |
| 10:30 | 5 | 15 | 100 | 5.63 | 0.40 | 7.67 | 0.618 | 15.4 | 3.69 | 9.5 | 45.5 | Clear | None |
| 10:35 | 5 | 20 | 100 | 5.63 | 0.53 | 7.7 | 0.576 | 13.2 | 3.17 | 9.6 | 40.3 | Clear | None |
| 10:40 | 5 | 25 | 100 | 5.63 | 0.66 | 7.68 | 0.574 | 11.7 | 2.94 | 9.5 | 36.1 | Clear | None |
| 10:45 | 5 | 30 | 100 | 5.63 | 0.79 | 7.68 | 0.567 | 10.1 | 2.39 | 9.5 | 29.4 | Clear | None |
| 10:50 | 5 | 35 | 100 | 5.63 | 0.92 | 7.67 | 0.567 | 9.92 | 2.38 | 9.5 | 26 | Clear | None |
| 10:55 | 5 | 40 | 100 | 5.63 | 1.06 | 7.67 | 0.566 | 9.82 | 2.41 | 9.5 | 23.2 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|----------------|--------|--------------|
| PFAS | 250 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 6 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | PW-14-01 | Date | 5/18/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 6 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 64.96 | Total Depth (ft-bmp) | 86 | Water Column (ft) | 21.04 | Gallons in Well | 30.77 |
| Purge Start | 13:05 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 13:35 | Volumes Purged | | Sample ID | PW-14-01_051823 | Sampled by | Donald Richmond |
| Sample Time | 13:35 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:15 | 0 | 0 | 200 | 64.96 | 0.00 | 7.38 | 3.28 | 12 | 8.98 | 18.7 | 73 | Orange | None |
| 13:15 | 0 | 0 | 200 | 64.96 | 0.00 | 7.38 | 3.28 | 12 | 8.98 | 18.7 | 73 | Clear | None |
| 13:15 | 0 | 0 | 200 | 64.96 | 0.53 | 7.38 | 3.28 | 12 | 8.98 | 18.7 | 73 | Clear | None |
| 13:20 | 5 | 5 | 200 | 64.96 | 0.00 | 7.42 | 3.28 | 5.34 | 8.39 | 19 | 70.3 | Clear | None |
| 13:20 | 5 | 5 | 200 | 64.96 | 0.00 | 7.42 | 3.28 | 5.34 | 8.39 | 19 | 70.3 | Orange | None |
| 13:20 | 5 | 5 | 200 | 64.96 | 0.79 | 7.42 | 3.28 | 5.34 | 8.39 | 19 | 70.3 | Clear | None |
| 13:25 | 5 | 10 | 200 | 64.96 | 0.00 | 7.43 | 3.3 | 5.69 | 8.06 | 18.9 | 68.5 | Clear | None |
| 13:25 | 5 | 10 | 200 | 64.96 | 0.00 | 7.43 | 3.3 | 5.69 | 8.06 | 18.9 | 68.5 | Orange | None |
| 13:25 | 5 | 10 | 200 | 64.96 | 1.06 | 7.43 | 3.3 | 5.69 | 8.06 | 18.9 | 68.5 | Clear | None |
| 13:30 | 5 | 15 | 200 | 64.96 | 0.00 | 7.43 | 3.29 | 4.8 | 8.28 | 19 | 68.1 | Clear | None |
| 13:30 | 5 | 15 | 200 | 64.96 | 0.00 | 7.43 | 3.29 | 4.8 | 8.28 | 19 | 68.1 | Orange | None |
| 13:30 | 5 | 15 | 200 | 64.96 | 1.32 | 7.43 | 3.29 | 4.8 | 8.28 | 19 | 68.1 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | PW-14-02 | Date | 2/16/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 6 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 64.75 | Total Depth (ft-bmp) | 85.2 | Water Column (ft) | 20.45 | Gallons in Well | 29.91 |
| Purge Start | 13:35 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 14:10 | Volumes Purged | | Sample ID | PW-14-02_021623 | Sampled by | Donald Richmond |
| Sample Time | 14:10 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:45 | 0 | 0 | 200 | 64.75 | 0.00 | 7.38 | 1.6 | 20.1 | 8.34 | 8.9 | 99.5 | Clear | None |
| 13:50 | 5 | 5 | 200 | 64.75 | 0.00 | 7.35 | 1.61 | 12.4 | 8.49 | 9.2 | 95.3 | Clear | None |
| 13:55 | 5 | 10 | 200 | 64.75 | 0.00 | 7.38 | 1.59 | 7.94 | 8.88 | 8.6 | 94.3 | Clear | None |
| 14:00 | 5 | 15 | 200 | 64.75 | 0.00 | 7.37 | 1.59 | 6.93 | 9.2 | 8.6 | 95.3 | Clear | None |
| 14:05 | 5 | 20 | 200 | 64.75 | 0.00 | 7.39 | 1.54 | 5.3 | 9.42 | 7.8 | 95.8 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|---|
| Well Location: _____ | Well Locked at Arrival: <input checked="" type="checkbox"/> yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <input checked="" type="checkbox"/> yes |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|--|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | PW-14-02 | Date | 5/18/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 59.0 degrees F and Clear. The wind is blowing S/SE at 8.1 mph. | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 65.00 | Total Depth (ft-bmp) | 88 | Water Column (ft) | 23.00 | Gallons in Well | 3.74 |
| Purge Start | 13:15 | Pump Intake (ft-bmp) | 85.5 | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 13:50 | Volumes Purged | 0.49 | Sample ID | PW-14-02_051823 | Sampled by | Austin Westhuis |
| Sample Time | 13:45 | Gallons Purged | 1.85 | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 13:20 | 0 | 0 | 200 | 65.00 | 0.26 | 7.12 | 1.83 | 22.6 | 9.3 | 14.9 | -25.9 | Clear | None |
| 13:25 | 5 | 5 | 200 | 65.00 | 0.53 | 7.27 | 1.82 | 11.4 | 8.01 | 14.8 | -40.9 | Clear | None |
| 13:30 | 5 | 10 | 200 | 65.00 | 0.79 | 7.32 | 1.82 | 4.41 | 8 | 14.8 | -41.7 | Clear | None |
| 13:35 | 5 | 15 | 200 | 65.00 | 1.06 | 7.36 | 1.82 | 2.08 | 7.62 | 14.8 | -19.9 | Clear | None |
| 13:40 | 5 | 20 | 200 | 65.00 | 1.32 | 7.37 | 1.82 | 1.79 | 7.52 | 14.8 | -19 | Clear | None |
| 13:45 | 5 | 25 | 200 | 65.00 | 1.59 | 7.37 | 1.82 | 1.7 | 7.5 | 14.7 | -15 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---|-------------|--------|--------------|
| 1,4-Dioxane 8260B-SIMS | 40 mL Glass | 3 | HCL |
| VOC 8260B-SIMS | 40 mL Glass | 3 | HCL |
| 1,4-Dioxane 8270D SIM,VOCs SW-846 8260B | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | PW-14-03 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 17.1 degrees F and Clear. The wind is blowing N/NW at 8.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 6 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 73.18 | Total Depth (ft-bmp) | 95.5 | Water Column (ft) | 22.32 |
| | | | | Gallons in Well | 32.64 |
| Purge Start | 08:35 | Pump Intake (ft-bmp) | 93 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 09:20 | Volumes Purged | 0.04 | Sample ID | PW-14-03_021723 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 09:20 | Gallons Purged | | Replicate/Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 08:35 | 0 | 0 | 100 | 73.18 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Clear | None |
| 08:40 | 5 | 5 | 100 | 73.35 | 0.13 | 6.79 | 3.78 | 21.8 | 9.66 | 5.8 | 48.1 | Clear | None |
| 08:45 | 5 | 10 | 100 | 73.35 | 0.26 | 6.79 | 3.72 | 19.6 | 8.41 | 5.8 | 41.4 | Clear | None |
| 08:50 | 5 | 15 | 100 | 73.35 | 0.40 | 6.79 | 3.71 | 16.4 | 7.7 | 5.6 | 37.2 | Clear | None |
| 08:55 | 5 | 20 | 100 | 73.35 | 0.53 | 6.79 | 3.7 | 13.2 | 7.02 | 5.5 | 35.2 | Clear | None |
| 09:00 | 5 | 25 | 100 | 73.35 | 0.66 | 6.79 | 3.67 | 11.3 | 6.49 | 5.5 | 33.9 | Clear | None |
| 09:05 | 5 | 30 | 100 | 73.35 | 0.79 | 6.79 | 3.67 | 9.93 | 6.31 | 5.2 | 33.6 | Clear | None |
| 09:10 | 5 | 35 | 100 | 73.35 | 0.92 | 6.8 | 3.66 | 9.6 | 6.28 | 4.9 | 33.4 | Clear | None |
| 09:15 | 5 | 40 | 100 | 73.35 | 1.06 | 6.8 | 3.66 | 9.31 | 6.25 | 4.8 | 33.4 | Clear | None |
| 09:20 | 5 | 45 | 100 | 73.35 | 1.19 | 6.8 | 3.65 | 9.06 | 6.22 | 4.9 | 33.4 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| 1,4-Dioxane 522 | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|-----------------------------------|-------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: yes |
| Condition of Well: Good condition | Well Locked at Departure: yes |
| Well Completion: Stick-up | Key Number To Well: NA |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | PW-14-03 | Date | 5/20/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 51.1 degrees F and Cloudy. The wind is blowing W/NW at 12.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 6 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 70.07 | Total Depth (ft-bmp) | 95.5 | Water Column (ft) | 25.43 |
| | | | | Gallons in Well | 37.19 |
| Purge Start | 11:40 | Pump Intake (ft-bmp) | 93 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 12:15 | Volumes Purged | 0.02 | Sample ID | PW-14-03_052023 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 12:15 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:45 | 0 | 0 | 100 | 70.25 | 0.13 | 7.05 | 3.57 | 42.6 | 9.96 | 13.5 | 68.4 | Clear | None |
| 11:50 | 5 | 5 | 100 | 70.35 | 0.26 | 6.81 | 3.66 | 32.1 | 9.44 | 14 | 69.6 | Clear | None |
| 11:55 | 5 | 10 | 100 | 70.39 | 0.40 | 6.78 | 3.67 | 28.7 | 8.76 | 13.9 | 71.7 | Clear | None |
| 12:00 | 5 | 15 | 100 | 70.39 | 0.53 | 6.8 | 3.72 | 33.7 | 8.93 | 12.5 | 84.8 | Clear | None |
| 12:05 | 5 | 20 | 100 | 70.39 | 0.66 | 6.8 | 3.7 | 33.1 | 7.61 | 12.2 | 95.6 | Clear | None |
| 12:10 | 5 | 25 | 100 | 70.39 | 0.79 | 6.8 | 3.7 | 36.3 | 7.53 | 12.3 | 99.4 | Clear | None |
| 12:15 | 5 | 30 | 100 | 70.39 | 0.92 | 6.8 | 3.69 | 35.2 | 7.69 | 12.3 | 100.2 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|-------------|--------|--------------|
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | TW-14-02 | Date | 2/16/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 30.9 degrees F and Cloudy. The wind is blowing NE at 13.9 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 60.76 | Total Depth (ft-bmp) | 70.51 | Water Column (ft) | 9.75 |
| | | | | Gallons in Well | 1.58 |
| Purge Start | 12:40 | Pump Intake (ft-bmp) | 68 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 13:35 | Volumes Purged | 0.92 | Sample ID | TW-14-02_021623 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 13:35 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:40 | 0 | 0 | 100 | 60.76 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | Gray | None |
| 12:45 | 5 | 5 | 100 | 61.05 | 0.13 | 7.66 | 2.38 | 45.3 | 13.96 | 2.9 | 18.4 | Gray | None |
| 12:50 | 5 | 10 | 100 | 61.05 | 0.26 | 7.62 | 4.92 | 195 | 13.17 | 2.4 | 23.2 | Gray | None |
| 12:55 | 5 | 15 | 100 | 61.05 | 0.40 | 7.61 | 7.61 | 213 | 12.8 | 2.2 | 23.2 | Gray | None |
| 13:00 | 5 | 20 | 100 | 61.05 | 0.53 | 7.6 | 4.96 | 104 | 12.57 | 2.2 | 22.9 | Gray | None |
| 13:05 | 5 | 25 | 100 | 61.05 | 0.66 | 7.59 | 4.97 | 89.9 | 12.29 | 2.4 | 22.3 | Gray | None |
| 13:10 | 5 | 30 | 100 | 61.05 | 0.79 | 7.58 | 5.01 | 69.7 | 12.51 | 1.9 | 21.6 | Gray | None |
| 13:15 | 5 | 35 | 100 | 61.05 | 0.92 | 7.58 | 4.99 | 61.1 | 12.33 | 1.9 | 20.6 | Gray | None |
| 13:20 | 5 | 40 | 100 | 61.05 | 1.06 | 7.55 | 4.98 | 50.8 | 12.12 | 2.1 | 19.8 | Gray | None |
| 13:25 | 5 | 45 | 100 | 61.05 | 1.19 | 7.52 | 4.98 | 43.7 | 12.09 | 2.3 | 19.8 | Gray | None |
| 13:30 | 5 | 50 | 100 | 61.05 | 1.32 | 7.52 | 4.99 | 40.9 | 12.1 | 2.3 | 19.9 | Gray | None |
| 13:35 | 5 | 55 | 100 | 61.05 | 1.45 | 7.52 | 4.99 | 38.8 | 12.1 | 2.3 | 19.9 | Gray | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|-------------|--------|--------------|
| 1,4-Dioxane 522 | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|---------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | TW-14-02 | Date | 5/18/2023 | | |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 58.07 | Total Depth (ft-bmp) | 71.6 | Water Column (ft) | 13.53 | Gallons in Well | 2.20 |
| Purge Start | 14:05 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow | Purge Equipment | Peristaltic |
| Purge End | 14:30 | Volumes Purged | | Sample ID | TW-14-02_051823 | Sampled by | Donald Richmond |
| Sample Time | 14:30 | Gallons Purged | | Replicate/ Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 14:15 | 0 | 0 | 200 | 58.07 | 0.00 | 7.74 | 4.49 | 52.2 | 8.36 | 21.3 | 81.3 | Clear | None |
| 14:15 | 0 | 0 | 200 | 58.07 | 0.53 | 7.74 | 4.49 | 52.2 | 8.36 | 21.3 | 81.3 | Clear | None |
| 14:20 | 5 | 5 | 200 | 58.07 | 0.00 | 7.71 | 4.51 | 50.5 | 8.42 | 21.5 | 80.7 | Clear | None |
| 14:20 | 5 | 5 | 200 | 58.07 | 0.79 | 7.71 | 4.51 | 50.5 | 8.42 | 21.5 | 80.7 | Clear | None |
| 14:25 | 5 | 10 | 200 | 58.07 | 0.00 | 7.69 | 4.51 | 52.1 | 8.16 | 21.6 | 80.5 | Clear | None |
| 14:25 | 5 | 10 | 200 | 58.07 | 1.06 | 7.69 | 4.51 | 52.1 | 8.16 | 21.6 | 80.5 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---|-------------|--------|--------------|
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |
| 1,4-Dioxane 8270D SIM,VOCs SW-846 8260B | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 2 | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|-----------------------------|-----------------|
| Project Number | 30171056 | Well ID | TW-14-06 | Date | 5/23/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 65 °F, Sunny, winds at mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 83.10 | Total Depth (ft-bmp) | 85.55 | Water Column (ft) | 2.45 |
| | | | | Gallons in Well | 0.40 |
| Purge Start | 10:00 | Pump Intake (ft-bmp) | 84.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 11:00 | Volumes Purged | 2.50 | Sample ID | TW-14-06_052323 |
| | | | | Sampled by | Anyssa Mandich |
| Sample Time | 11:00 | Gallons Purged | 1 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:05 | 0 | 0 | 125 | 78.40 | 0.00 | 7.72 | 0.022 | | 8 | 18.1 | 264.7 | Brown | None |
| 10:10 | 5 | 5 | 125 | 73.50 | 0.00 | 7.6 | 2.47 | 888 | 9.34 | 16.6 | 256.9 | Brown | None |
| 10:15 | 5 | 10 | 125 | 72.84 | 0.00 | 7.54 | 2.89 | | 9.53 | 16.5 | 258.3 | Brown | None |
| 10:20 | 5 | 15 | 125 | 73.87 | 0.00 | 7.58 | 2.85 | | 10.86 | 16.2 | 258.3 | Brown | None |
| 10:25 | 5 | 20 | 125 | 73.87 | 0.00 | 7.61 | 2.81 | | 9.96 | 16.2 | 257.9 | Brown | None |
| 10:30 | 5 | 25 | 125 | 72.12 | 0.00 | 7.49 | 2.75 | | 14.41 | 16.2 | 272.7 | Brown | None |
| 10:35 | 5 | 30 | 125 | 70.57 | 0.00 | 7.5 | 2.82 | | 12.97 | 16.3 | 272.7 | Brown | None |
| 10:40 | 5 | 35 | 125 | 71.20 | 0.00 | 7.59 | 2.72 | | 11.07 | 16.3 | 270.4 | Brown | None |
| 10:45 | 5 | 40 | 125 | 68.70 | 0.00 | 7.6 | 2.81 | | 10.3 | 16.3 | 268.3 | Brown | None |
| 10:50 | 5 | 45 | 125 | 70.23 | 0.00 | 7.5 | 2.95 | | 13.32 | 16.3 | 268.6 | Brown | None |
| 10:55 | 5 | 50 | 125 | 69.87 | 0.00 | 7.49 | 2.89 | | 13.08 | 16.3 | 268.5 | Brown | None |
| 11:00 | 5 | 55 | 125 | 68.69 | 0.00 | 7.5 | 2.92 | | 11.94 | 16.4 | 267.9 | Brown | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------------|----------------|--------|--------------|
| Total P, TKN | 250 mL Plastic | 1 | H2SO4 |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |
| Nitrogen, Nitrate-Nitrite | 125 mL Plastic | 1 | None |

Comments: Well under pressure. Replaced j-plug with bleeder valve j-plug. Water level oscillating due to system running

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|---------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: _____ |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: _____ |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|---------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | TW-15-11 | Date | 2/17/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 2 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 73.62 | Total Depth (ft-bmp) | 87.05 | Water Column (ft) | 13.43 | Gallons in Well | 2.18 |
| Purge Start | 11:25 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 12:30 | Volumes Purged | | Sample ID | TW-15-11_021723 | Sampled by | Donald Richmond |
| Sample Time | 12:30 | Gallons Purged | | Replicate/Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 11:45 | 0 | 0 | 200 | 73.62 | 0.00 | 6.92 | 2.2 | 74.2 | 2.3 | 8.4 | -6.1 | Clear | None |
| 11:50 | 5 | 5 | 200 | 73.62 | 0.00 | 6.88 | 2.19 | 66.8 | 1.73 | 7.9 | -0.7 | Clear | None |
| 11:55 | 5 | 10 | 200 | 73.62 | 0.00 | 6.85 | 2.25 | 64.5 | 1.37 | 8.2 | -1.4 | Clear | None |
| 12:00 | 5 | 15 | 200 | 73.62 | 0.00 | 6.8 | 2.27 | 42.2 | 0.68 | 8.9 | -4.9 | Clear | None |
| 12:05 | 5 | 20 | 200 | 73.62 | 0.00 | 6.77 | 2.25 | 23.8 | 0.34 | 8.2 | -6.1 | Clear | None |
| 12:10 | 5 | 25 | 200 | 73.62 | 0.00 | 6.76 | 2.31 | 15.9 | 0.36 | 8.3 | -8.7 | Clear | None |
| 12:15 | 5 | 30 | 200 | 73.62 | 0.00 | 6.76 | 2.3 | 14.5 | 0.27 | 8.2 | -9.6 | Clear | None |
| 12:20 | 5 | 35 | 200 | 73.62 | 0.00 | 6.76 | 2.32 | 13.4 | 0.29 | 8.4 | -11.4 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 9 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: _____ | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|-----------------|
| Project Number | 30171056 | Well ID | TW-15-11 | Date | 5/20/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 52.0 degrees F and Cloudy. The wind is blowing W at 12.8 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 2 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 64.14 | Total Depth (ft-bmp) | 86.9 | Water Column (ft) | 22.76 |
| | | | | Gallons in Well | 3.70 |
| Purge Start | 12:45 | Pump Intake (ft-bmp) | 84 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 13:10 | Volumes Purged | 0.18 | Sample ID | TW-15-11_052023 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 13:10 | Gallons Purged | | Replicate/ Code No. | DUP-06_052023 |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:50 | 0 | 0 | 100 | 64.45 | 0.13 | 7.27 | 3.52 | 54.5 | 8.69 | 15.1 | 114.7 | Brown | None |
| 12:55 | 5 | 5 | 100 | 64.45 | 0.26 | 7.25 | 3.52 | 50.6 | 8.42 | 15.2 | 115.5 | Brown | None |
| 13:00 | 5 | 10 | 100 | 64.45 | 0.40 | 7.22 | 3.53 | 52.7 | 8.12 | 15.4 | 121.1 | Brown | None |
| 13:05 | 5 | 15 | 100 | 64.45 | 0.53 | 7.22 | 3.53 | 56.7 | 8.36 | 15.3 | 121.7 | Brown | None |
| 13:10 | 5 | 20 | 100 | 64.45 | 0.66 | 7.22 | 3.54 | 53.1 | 8.66 | 15.5 | 123.1 | Brown | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 6 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: <u>Plant 3</u> | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Stick-up</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | | | |
|------------------------------------|------------------------|-----------------------------|-----------------------------|---------------------------|-----------------------------|------------------------|-----------------|
| Project Number | 30171056 | Well ID | TW-15-12 | Date | 2/16/2023 | | |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | | | | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | Casing Diameter (in) | 4 | Well Casing Material | PVC | |
| Static Water Level (ft-bmp) | 62.33 | Total Depth (ft-bmp) | 78.3 | Water Column (ft) | 15.97 | Gallons in Well | 10.38 |
| Purge Start | 12:20 | Pump Intake (ft-bmp) | | Purge Method | Low-Flow | Purge Equipment | Bladder |
| Purge End | 13:05 | Volumes Purged | | Sample ID | TW-15-12_021623 | Sampled by | Donald Richmond |
| Sample Time | 13:05 | Gallons Purged | | Replicate/Code No. | NA | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 12:35 | 0 | 0 | 200 | 62.33 | 0.00 | 7.69 | 1.76 | 394 | 10.76 | 9.6 | 109.5 | Clear | None |
| 12:40 | 5 | 5 | 200 | 62.33 | 0.00 | 7.67 | 1.82 | 138 | 11.18 | 9.9 | 103.8 | Clear | None |
| 12:45 | 5 | 10 | 200 | 62.33 | 0.00 | 7.64 | 1.82 | 87.3 | 10.64 | 9.8 | 105 | Clear | None |
| 12:50 | 5 | 15 | 200 | 62.33 | 0.00 | 7.61 | 1.82 | 77.2 | 11.06 | 9.8 | 106.3 | Clear | None |
| 12:55 | 5 | 20 | 200 | 62.33 | 0.00 | 7.58 | 1.82 | 76.2 | 10.85 | 10.2 | 107.9 | Clear | None |
| 13:00 | 5 | 25 | 200 | 62.33 | 0.00 | 7.59 | 1.82 | 79.7 | 10.73 | 10.1 | 107.8 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|-------------|--------|--------------|
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: _____ | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|--|-----------------|
| Project Number | 30171056 | Well ID | TW-15-12 | Date | 5/17/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 57.0 degrees F and Clear. The wind is blowing E/NE at 8.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 4 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 61.59 | Total Depth (ft-bmp) | 76.8 | Water Column (ft) | 15.21 |
| | | | | Gallons in Well | 9.89 |
| Purge Start | 15:10 | Pump Intake (ft-bmp) | 74 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Bladder |
| Purge End | 15:50 | Volumes Purged | 0.11 | Sample ID | TW-15-12_051724 |
| | | | | Sampled by | Billy Cobern |
| Sample Time | 15:50 | Gallons Purged | | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:15 | 0 | 0 | 100 | 61.91 | 0.13 | 7.86 | 2.34 | 54.9 | 8.29 | 17 | 142.3 | Clear | None |
| 15:20 | 5 | 5 | 100 | 61.91 | 0.26 | 7.73 | 2.47 | 31.5 | 7.99 | 17.1 | 154.8 | Clear | None |
| 15:25 | 5 | 10 | 100 | 61.91 | 0.40 | 7.69 | 2.47 | 28.7 | 8.11 | 17.4 | 166.8 | Clear | None |
| 15:30 | 5 | 15 | 100 | 61.91 | 0.53 | 7.67 | 2.47 | 27.5 | 8.18 | 17.8 | 173.2 | Clear | None |
| 15:35 | 5 | 20 | 100 | 61.91 | 0.66 | 7.65 | 2.47 | 25.1 | 7.73 | 17.4 | 183.3 | Clear | None |
| 15:40 | 5 | 25 | 100 | 61.91 | 0.79 | 7.64 | 2.47 | 23.1 | 7.38 | 17.4 | 187.5 | Clear | None |
| 15:45 | 5 | 30 | 100 | 61.91 | 0.92 | 7.64 | 2.47 | 22.6 | 7.41 | 17.5 | 191.3 | Clear | None |
| 15:50 | 5 | 35 | 100 | 61.91 | 1.06 | 7.64 | 2.47 | 21.8 | 7.35 | 17.5 | 191.9 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|-----------------------|----------------|--------|--------------|
| Nitrate | 125 mL Plastic | 1 | None |
| TKN/Total Phosphorus | 250 mL Plastic | 1 | H2SO4 |
| 1,4-Dioxane 8270D SIM | 40 mL Glass | 3 | HCL |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|-------------------------------------|
| Well Location: <u>Plant 2</u> | Well Locked at Arrival: <u>no</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>no</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form



| | | | | | |
|------------------------------------|------------------------|-----------------------------|--------------------|------------------------------------|-----------------|
| Project Number | 30171056 | Well ID | UNK-15 | Date | 2/17/2023 |
| Project Name/Location | RACER Lansing GWS 2023 | | Weather(°F) | 19 °F, Overcast, W winds at 5 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 4 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 0.36 | Total Depth (ft-bmp) | 16 | Water Column (ft) | 15.64 |
| | | | | Gallons in Well | 10.17 |
| Purge Start | 10:50 | Pump Intake (ft-bmp) | 13.5 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 11:25 | Volumes Purged | 0.18 | Sample ID | UNK-15_021723 |
| | | | | Sampled by | Austin Westhuis |
| Sample Time | 11:20 | Gallons Purged | | Replicate/Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 10:55 | 0 | 0 | 200 | 0.36 | 0.26 | 7.77 | 0.641 | 14.7 | 1.47 | 7.5 | -112.8 | Clear | None |
| 11:00 | 5 | 5 | 200 | 0.36 | 0.53 | 7.78 | 0.643 | 5.09 | 1.38 | 7.6 | -119.7 | Clear | None |
| 11:05 | 5 | 10 | 200 | 0.36 | 0.79 | 7.8 | 0.644 | 3.31 | 1.34 | 7.5 | -133.9 | Clear | None |
| 11:10 | 5 | 15 | 200 | 0.36 | 1.06 | 7.82 | 0.645 | 2.46 | 1.32 | 7.7 | -148.4 | Clear | None |
| 11:15 | 5 | 20 | 200 | 0.36 | 1.32 | 7.83 | 0.643 | 2.16 | 1.31 | 7.6 | -151.1 | Clear | None |
| 11:20 | 5 | 25 | 200 | 0.36 | 1.59 | 7.83 | 0.645 | 1.71 | 1.32 | 7.6 | -145.1 | Clear | None |

| Constituent Sampled | Container | Number | Preservative |
|---------------------|--------------------|--------|--------------|
| PFAS | 250mL HDPE Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: See figure | Well Locked at Arrival: <u>yes</u> |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>6000B</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius

Groundwater Sampling Form



| | | | | | |
|------------------------------------|---------------------|-----------------------------|--------------------|---|---------------|
| Project Number | 30171056 | Well ID | UNK-15 | Date | 5/24/2023 |
| Project Name/Location | RACER Lansing 2023 | | Weather(°F) | 61.0 degrees F and Clear. The wind is blowing NE at 16.1 mph. | |
| Measuring Pt. Description | Top of Inner Casing | MP Elevation | | Casing Diameter (in) | 4 |
| | | | | Well Casing Material | PVC |
| Static Water Level (ft-bmp) | 0.75 | Total Depth (ft-bmp) | 16 | Water Column (ft) | 15.25 |
| | | | | Gallons in Well | 9.91 |
| Purge Start | 15:00 | Pump Intake (ft-bmp) | 15 | Purge Method | Low-Flow |
| | | | | Purge Equipment | Peristaltic |
| Purge End | 16:00 | Volumes Purged | 0.25 | Sample ID | UNK-15_052423 |
| | | | | Sampled by | Kaitlyn Hunt |
| Sample Time | 15:55 | Gallons Purged | 2.5 | Replicate/ Code No. | NA |
| | | | | Sample Type | Grab |

| Time | Minutes Elapsed | Total Elapsed Minutes | Rate mL/min | Depth to Water (ft) | Gallon Purged | pH (standard units) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature °C | Redox (mV) | Appearance | |
|-------|-----------------|-----------------------|-------------|---------------------|---------------|---------------------|----------------------|-----------------|-------------------------|----------------|------------|------------|------|
| | | | | | | | | | | | | Color | Odor |
| 15:05 | 0 | 0 | 200 | 1.15 | 0.26 | 7.91 | 0.52 | 2.02 | 1.01 | 13.9 | 91.5 | Clear | None |
| 15:10 | 5 | 5 | 200 | 1.51 | 0.53 | 7.91 | 0.52 | 2.38 | 0.97 | 13.9 | 89.3 | Clear | None |
| 15:15 | 5 | 10 | 200 | 1.95 | 0.79 | 7.91 | 0.52 | 1.83 | 0.85 | 14.1 | 82 | Clear | None |
| 15:20 | 5 | 15 | 200 | 2.22 | 1.06 | 7.9 | 0.52 | 2.07 | 0.71 | 13.9 | 78.8 | Clear | None |
| 15:25 | 5 | 20 | 200 | 2.50 | 1.32 | 7.91 | 0.52 | 1.69 | 0.66 | 13.9 | 74.9 | Clear | None |
| 15:30 | 5 | 25 | 150 | 2.72 | 1.52 | 7.92 | 0.53 | 1.87 | 0.51 | 14.3 | 70.2 | Clear | None |
| 15:35 | 5 | 30 | 150 | 2.72 | 1.72 | 7.89 | 0.52 | 2.16 | 0.25 | 14.2 | 68.9 | Clear | None |
| 15:40 | 5 | 35 | 150 | 3.09 | 1.92 | 7.91 | 0.52 | 1.53 | 0.39 | 14.4 | 66.1 | Clear | None |
| 15:45 | 5 | 40 | 150 | 3.09 | 2.11 | 7.89 | 0.51 | 1.92 | 0.35 | 14.2 | 64.1 | Clear | None |
| 15:50 | 5 | 45 | 150 | 3.09 | 2.31 | 7.9 | 0.51 | 1.3 | 0.38 | 14.2 | 61.9 | Clear | None |
| 15:55 | 5 | 50 | 150 | 3.09 | 2.51 | 7.89 | 0.51 | 1.3 | 0.36 | 14.3 | 59.9 | Clear | None |

| | | | |
|----------------------------|------------------|---------------|---------------------|
| Constituent Sampled | Container | Number | Preservative |
| PFAS | 125 mL Plastic | 2 | None |

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
 1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

| | |
|--|--------------------------------------|
| Well Location: Plant 3 | Well Locked at Arrival: yes |
| Condition of Well: <u>Good condition</u> | Well Locked at Departure: <u>yes</u> |
| Well Completion: <u>Flush mount</u> | Key Number To Well: <u>NA</u> |

ft-bmp = feet below measuring point
 in = inches
 ft = feet
 mL/min = milliliters per minute
 mS/cm = milliSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter

mV = milliv