



Applied *Eco*Systems, Inc.

Environmental Management, Consulting & Field Services

SEMI-ANNUAL GROUNDWATER MONITORING DATA REPORT

TO: Tyler Jacobs, USEPA

CC: Shaun Shields, EGLE RRD
Brendan Mullen, RACER
Dave Favero, RACER

FROM: Rodney Abke & Mike Smith, Applied EcoSystems, Inc.

DATE: December 18, 2024

SUBJECT: RACER Flint West Industrial Land (#12990)
Semi-Annual Monitoring



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1.0 INTRODUCTION

Since the previous Data Report (dated May 9, 2024), Applied EcoSystems, Inc. (Æ) conducted a routine groundwater monitoring event (gauging and sampling) on the RACER Flint West Industrial Land (Site) and the north-adjointing Genesee County Parks (GCP) property on September 17, 2024. This report provides a summary and the results of that groundwater monitoring event.

A Site Location Map is included as Figure 1; and for reference, Site investigation locations are included in Figure 2. The Site consists of approximately three acres of land located west of Stevens Street and north of Glenwood Avenue in Flint, Genesee County, Michigan. Almost the entire Site consists of concrete pavement remaining after the demolition of a former manufacturing building. The Site is secured with a locked chain-link fence.

The Site is developed with a Consumers Energy electrical substation with an equipment shelter in the central portion of the Site and with a utility conduit shed on the southeast corner of the Site. Per John Ebenhoeh with Consumers Energy, the small building on the southeast corner is a shelter for conduits that run under the road to the GM tool and die facility. This small building is accessed approximately once per year for approximately two hours. The building in the fenced area is a support equipment shelter for the substation. The fenced area is accessed approximately once per month for approximately two hours, and the building itself is accessed less frequently and for shorter durations.

2.0 MONITORING ACTIVITIES COMPLETED

Groundwater Monitoring¹

- o All monitoring wells were gauged for depth to water on September 17, 2024. A Groundwater Contour Map prepared using the September 17, 2024, groundwater elevation data is included as Figure 3 in Appendix A. For reference, previously submitted cross-section diagrams showing soil types and groundwater elevations are included in Appendix B as Attachment 1.
- o A routine groundwater monitoring event was conducted on September 17, 2024.
- o Groundwater samples were collected from monitoring wells MW-103S, MW-108S, MW-110S, MW-112S, and MW-114S¹ to be analyzed for Volatile Organic Compounds (VOCs), dissolved and total metals (arsenic, chromium [total], chromium VI, copper, lead, selenium, and zinc), and per- and polyfluoroalkyl substances (PFAS).

Analytical results are summarized in Appendix B as Attachment 2. Laboratory analytical reports for all monitoring activities are included in Appendix B as Attachment 3.

¹ A reduction in the number of wells sampled during the semi-annual sampling events was requested in the *November 2021 Subsurface Investigation* report dated January 27, 2022, submitted to USEPA. The request was approved by USEPA on March 4, 2022.



3.0 MONITORING RESULTS

Groundwater (Semiannual Sampling)

Comparison of the September 17, 2024, groundwater data to current EGLE Generic Residential Cleanup Criteria (GRCC) and Generic Non-Residential Cleanup Criteria (GNRCC) dated October 12, 2023 and to USEPA Maximum Contaminant Levels (MCLs) for five PFAS compounds including PFOA and PFOS indicates the following:

Metals: Dissolved Arsenic was detected exceeding drinking water (DW) and groundwater to surface water interface (GSI) criteria as shown in the following table. The concentrations are consistent with expected regional conditions, do not appear to represent a plume, and are considered generally to be naturally occurring. Although EGLE has published state-wide and regional “background” concentrations for soils, no such values have been published for groundwater; however, the concentrations generally are consistent with concentrations encountered by Æ at other uncontaminated sites in the Flint area. The dissolved metals concentrations are considered to be more representative of Site conditions than total metal concentrations for the purposes of this assessment.

Table 1.0 – Dissolved Metals Exceedances in Groundwater

Well ID	Metal	Drinking Water Criterion	GSI Criterion	Result
MW-103S	Dissolved Arsenic	10	10	16
MW-112S	Dissolved Arsenic	10	10	27
MW-114S	Dissolved Arsenic	10	10	20

- All results are expressed in µg/L.
- Groundwater Results in **red** indicate a criteria exceedance.

VOCs: Exceedances were present as follow:

Table 2.0 – VOCs Exceedances in Groundwater

Well ID	VOC	Drinking Water Criterion	GSI Criterion	Result
MW-112S	Vinyl Chloride	2	13	7
MW-114S	Trichloroethene	5	200	216
MW-114S	Vinyl Chloride	2	13	4

- All results are expressed in µg/L.
- Groundwater Results in **red** indicate a criteria exceedance.

PFAS: Detected concentrations of PFAS that have EGLE criteria or USPEA MCLs did not exceed criteria in any sample, except Perfluorooctane sulfonic acid (PFOS) concentrations exceeded drinking water criterion (4 ng/L) and/or GSI criteria (12 ng/L) in MW-103S, MW-110S, MW-112S,



and MW-114S. These results are similar to the previous PFAS results for the groundwater samples collected in March 2024.

A table of all groundwater sample analytical results for all groundwater samples collected on behalf of RACER is included in Appendix B as Attachment 2. Sample analytical results for the September 2024 sampling events are included in Appendix B as Attachment 3. Figure 4 illustrates the GSI and drinking water exceedances for VOCs and metals in groundwater identified in groundwater samples collected from 2017 through 2024. For reference, Figure 5 includes data boxes and exceedances identified in soil samples. Figure 6 includes data boxes and exceedances for PFAS results. Low-flow sampling forms for the September 2024 sampling event are included in Appendix D. The Laboratory Data Validation Report is included in Appendix E.

Note that elevated tetrachloroethene levels have been consistently detected in one up-gradient well (MW-105S) since April 2012; and trichloroethene (TCE) also consistently has been detected in the same well, likely as a degradation product of the tetrachloroethene. This well is hydrogeologically downgradient from a former print shop located south of the Site.

The primary Site-specific constituents of concern are TCE and vinyl chloride, which appear to be exhibiting natural attenuation. PFOS concentrations have decreased or remained stable.

4.0 LABORATORY DATA VALIDATION SUMMARY

On September 17, 2024, Æ collected groundwater samples from five monitoring wells at the RACER Flint West Industrial Land Site using USEPA low-stress sampling protocols. One duplicate sample, one field blank, and one matrix spike and duplicate were collected. Samples were collected in appropriate laboratory-provided bottles with laboratory-provided preservatives and were maintained on ice until delivery under complete chain-of-custody protocols to Merit Laboratories within appropriate holding times. No sample condition issues were identified in the field or upon laboratory receipt. Samples were analyzed by specified standard methods for VOCs, EGLE 28 PFAS, six total and dissolved metals, and total and dissolved chromium VI. Filtration and preservation for dissolved metals including dissolved chromium VI were performed immediately upon laboratory receipt instead of during field collection.

Laboratory deliverables include two analytical laboratory reports, two quality control reports, and chains-of-custody for each -- one group of laboratory analytical and quality-control reports each for PFAS and for VOCs and metals. Each laboratory report contained a case narrative, laboratory accreditation/certification information, laboratory contact information, analytical methods, and analyte reporting relative to method detection limits (MDLs) and reporting limits (RLs). Data qualifiers were identified and evaluated in this Laboratory Data Validation report. No samples were extracted or analyzed beyond their holding times, except analyses for dissolved Cr VI in the field blank (FB-1) and in the field duplicate (DUP-1 for MW-114S). Because no Cr VI was detected in MW-114S or its duplicate and because the field blank also was determined to contain no detectable Cr VI (as would be expected), analysis beyond the appropriate holding times for these samples is not considered to have affected interpretations.

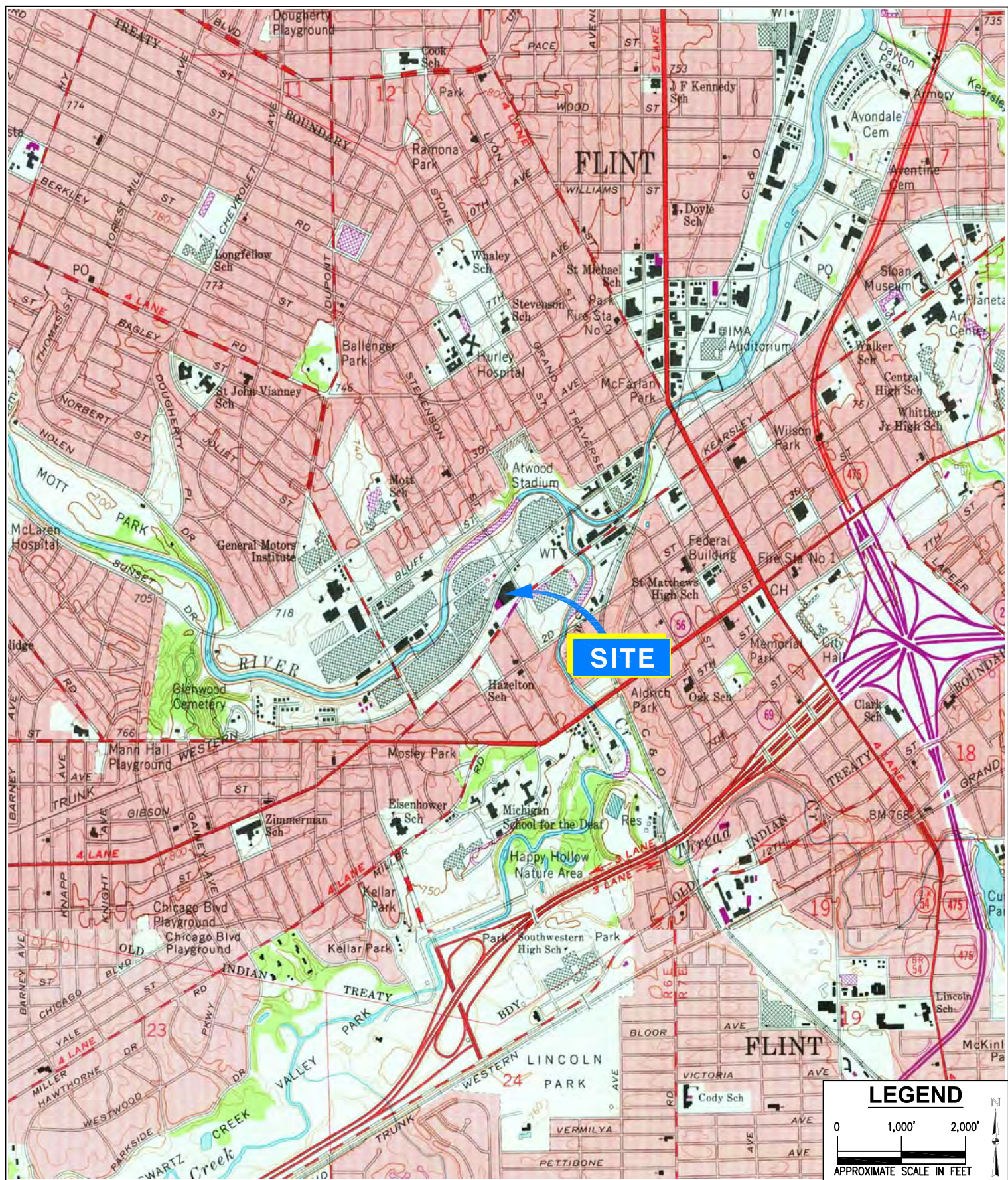


All surrogate recoveries were within their allowable ranges for each surrogate compound, except MeFOSE-M and D9-N-EtFOSE-M (both elevated), neither of which substitutes for PFAS compounds commonly present in groundwater at the Site and neither of which was detected in any of the field samples – indicating satisfactory laboratory performance overall. Analysis of laboratory blank samples identified no indications of significant cross-contamination indicated. The equipment blank identified no detectable analytes greater than RLs. The field blank was determined to contain no detectable analytes except acetone at a concentration less than its RL. The trip blank was identified with no detectable analytes. Accordingly, no significant indications of cross-contamination were identified. Laboratory Control Spike (LCS) and LCS Duplicate analyses indicated the potential for Trichlorofluoromethane to be reported low and for N-MeFOSAA to be reported high; however, because these analytes were not detected contaminants at the Site, these conditions are not considered to have affected report conclusions. Matrix spikes and their duplicates indicated potential for PFAS analytes ADONA, PFePA (5:3 FTCA), PFTrDA, and PFDOS to be variably identified high or low; however, none of these PFAS compounds were identified in groundwater samples collected at the Site. Matrix spikes and their duplicates also indicated potential for VOCs methyl iodide and bromomethane to be underestimated; however, neither is an identified contaminant in groundwater at the Site. No significant data qualifiers were identified in relation to the detected analyte concentrations.

Based on the assessment detailed in the foregoing QA/QC summary, the laboratory data summarized in Table 2 are considered acceptable with the specific qualifications noted herein.

6.0 SCHEDULE

The first 2025 semi-annual monitoring event will be scheduled in March 2025. Per USEPA's prior approval, both semi-annual monitoring events in 2025 will have the same scope as this event and as described in Section 2.0.



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Site Location Map

RACER Flint West #12990

Glenwood Avenue & Stevenson Street
Flint, Michigan

SOURCE: USGS FLINT SOUTH QUADRANGLE
(PROVISIONAL EDITION 1975)

DRAWING DATE:

04/06/2020

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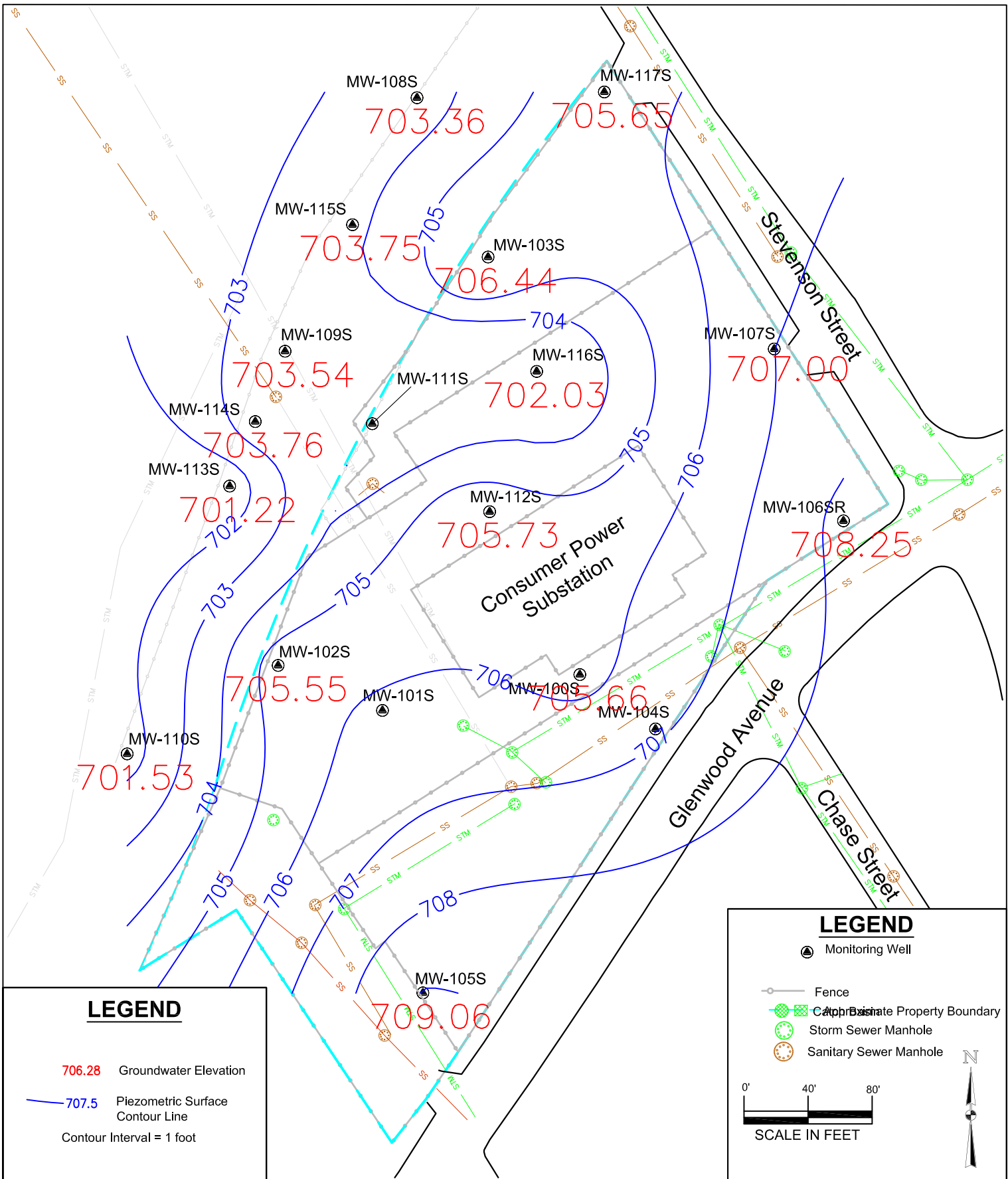
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PROJECT:

11-4317-102

FIGURE:

1



LEGEND

706.28 Groundwater Elevation

707.5 Piezometric Surface Contour Line

Contour Interval = 1 foot

LEGEND

- Monitoring Well
- Fence
- Approximate Property Boundary
- Storm Sewer Manhole
- Sanitary Sewer Manhole

0' 40' 80'

SCALE IN FEET

N

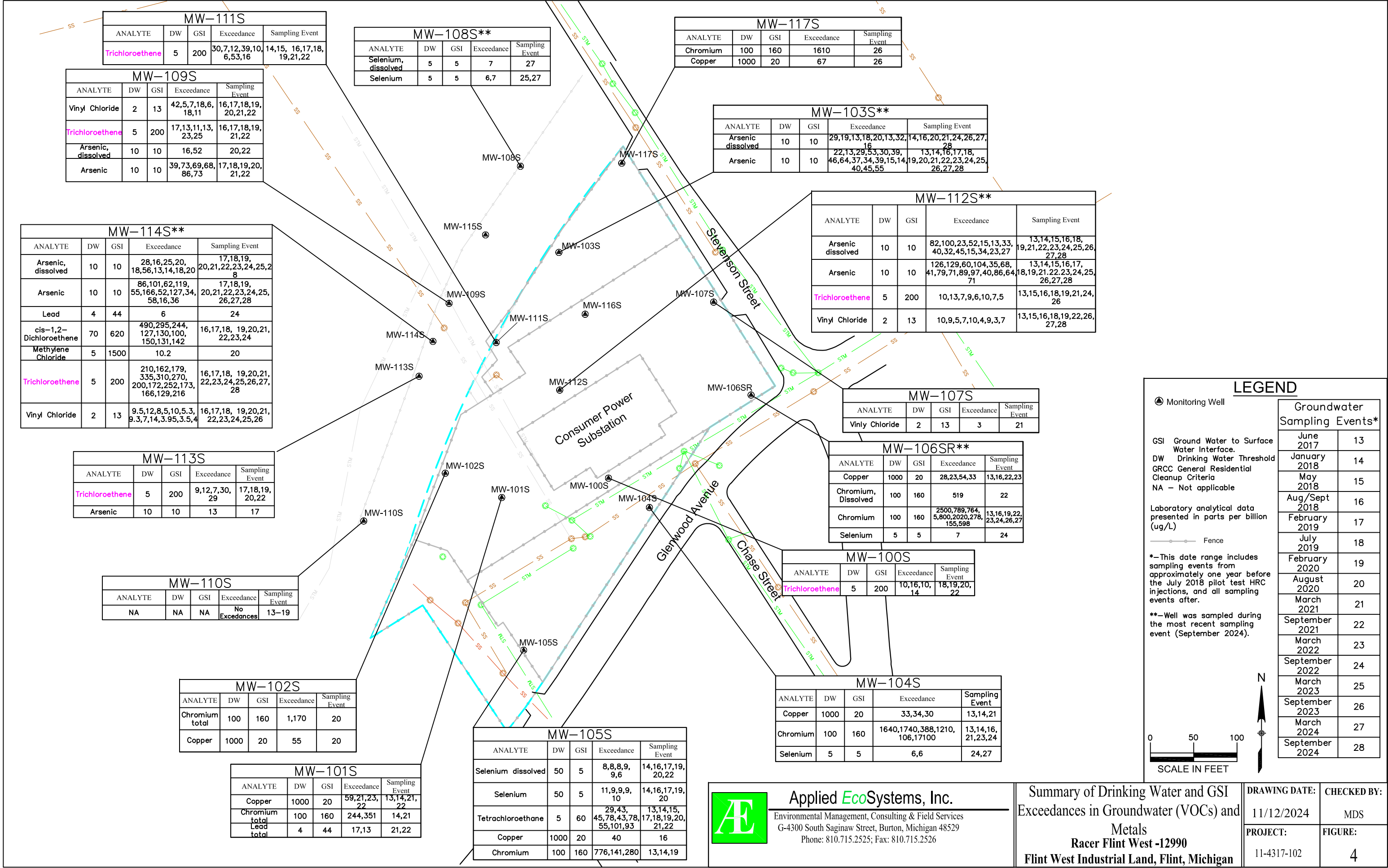
AE Applied *Eco*Systems, Inc.

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Groundwater Contour Map
(March 27, 2024)

Racer Flint West -12990
Flint West Industrial Land, Flint, Michigan

DATE:	11/12/2024	CHECKED BY:	MDS
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LEGEND

Monitoring Well

GSI Ground Water to Surface Water Interface.

DW Drinking Water Threshold

GRCC General Residential Cleanup Criteria

NA - Not applicable

Laboratory analytical data presented in parts per billion (ug/L)

Fence

*-This date range includes sampling events from approximately one year before the July 2018 pilot test HRC injections, and all sampling events after.

**--Well was sampled during the most recent sampling event (September 2024).

Groundwater Sampling Events*

June 2017	13
January 2018	14
May 2018	15
Aug/Sept 2018	16
February 2019	17
July 2019	18
February 2020	19
August 2020	20
March 2021	21
September 2021	22
March 2022	23
September 2022	24
March 2023	25
September 2023	26
March 2024	27
September 2024	28

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SCALE IN FEET

N

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Summary of Drinking Water and GSI Exceedances in Groundwater (VOCs) and Metals

Racer Flint West -12990

Flint West Industrial Land, Flint, Michigan

DRAWING DATE:

11/12/2024

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11-4317-102

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FIGURE:

4

01/16/19 SB-139				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	21,000 / 3,440	16' 18'
Methylene Chloride	5	1,500	230 / 32	16' 18'
Vinyl chloride	40	260	ND / 42	16' 18'
cis-1,2-Dichloroethene	1,400	12,000	1,800 / 3,440	16' 18'

04/22/14 SB-131				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	12,160	18'
Vinyl chloride	40	260	90	18'
cis-1,2-Dichloroethene	1,400	12,000	2,820	18'

12/11/2012 SB-116				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Vinyl Chloride	40	260	260	12-13'
cis-1,2-Dichloroethene	1,400	12,000	2,160	12-13'

7/10/2014 SB-132				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	29,500 / 13,700	11.5-12' 14.5-15'
Vinyl chloride	40	260	180 / 89	11.5-12' 14.5-15'
cis-1,2-Dichloroethene	1,400	12,000	2,200	11.5-12'

12/11/2012 SB-118				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Vinyl Chloride	40	260	250	16-17'
cis-1,2-Dichloroethene	1,400	12,000	11,960	16-17'

03/13/2012 SB-104				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Benzene	100	4,000	210	7-8'

12/10/2012 SB-114				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	1,220	20-21'
Phenanthrene	56,000	2,100	2,700	7-8'

4/30/2013 SB-121				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	400	23-24'
Vinyl Chloride	40	260	110	23-24'
cis-1,2-Dichloroethene	1,400	12,000	2,970	23-24'

12/06/2012 SB-112				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Naphthalene	35,000	730	840	3.5-4.5'
1,2,4-Trimethylbenzene	2,100	570	600	3.5-4.5'
Vinyl Chloride	40	260	80	3.5-4.5'

01/16/19 SB-140				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	13,100 / 2,870	16' 19'
Methylene Chloride	5	1,500	260 / 30	16' 19'
cis-1,2-Dichloroethene	1,400	12,000	3,500 / 2,870	16' 19'

12/22/14 SB-135				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	7890.0	19'
12/22/14 SB-135				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	6540.0	21'

12/11/2012 SB-117				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	5,980	18-19'

01/16/19 SB-141				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	180 / 6,150 / 3,370	16' 18' 19'
Methylene Chloride	5	1,500	25 / 26 / 15	16' 18' 19'
cis-1,2-Dichloroethene	1,400	12,000	2,900 / 860	16' 18' 19'

12/22/14 SB-134				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	2,040	20'

4/30/2013 SB-122				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	14,400	15-16'
cis-1,2-Dichloroethene	1,400	12,000	1,600	15-16'

7/10/2014 SB-133				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4000	11,680 / 10,860 / 7,520	16.5-17' 18-19' 19.5-20'
Vinyl Chloride	40	260	46	16.5-17'
cis-1,2-Dichloroethene	1,400	12,000	1,990	16.5-17'

3/08/2012 SB-102				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	330	6-7'

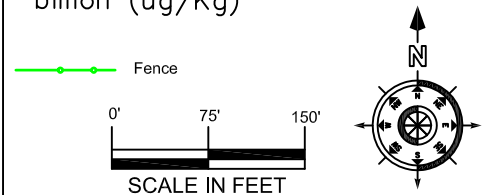
04/21/14 SB-125				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	3,650	19'

04/21/14 SB-124				
ANALYTE	DW	GSI	Exceedance	Sampling Depth
Trichloroethene	100	4,000	1,420	21'

LEGEND

- Monitoring Well
 - Soil boring
 - Multiple soil borings in one location.
 - HRC Injection boring
- Analyte Exceeds GSI and DW criteria
Analyte Exceeds DW criteria only
Analyte Exceeds GSI criteria only

Laboratory analytical data presented in parts per billion (ug/Kg)



Summary of Drinking Water and GSI Exceedances in Soil 2012 - 2019

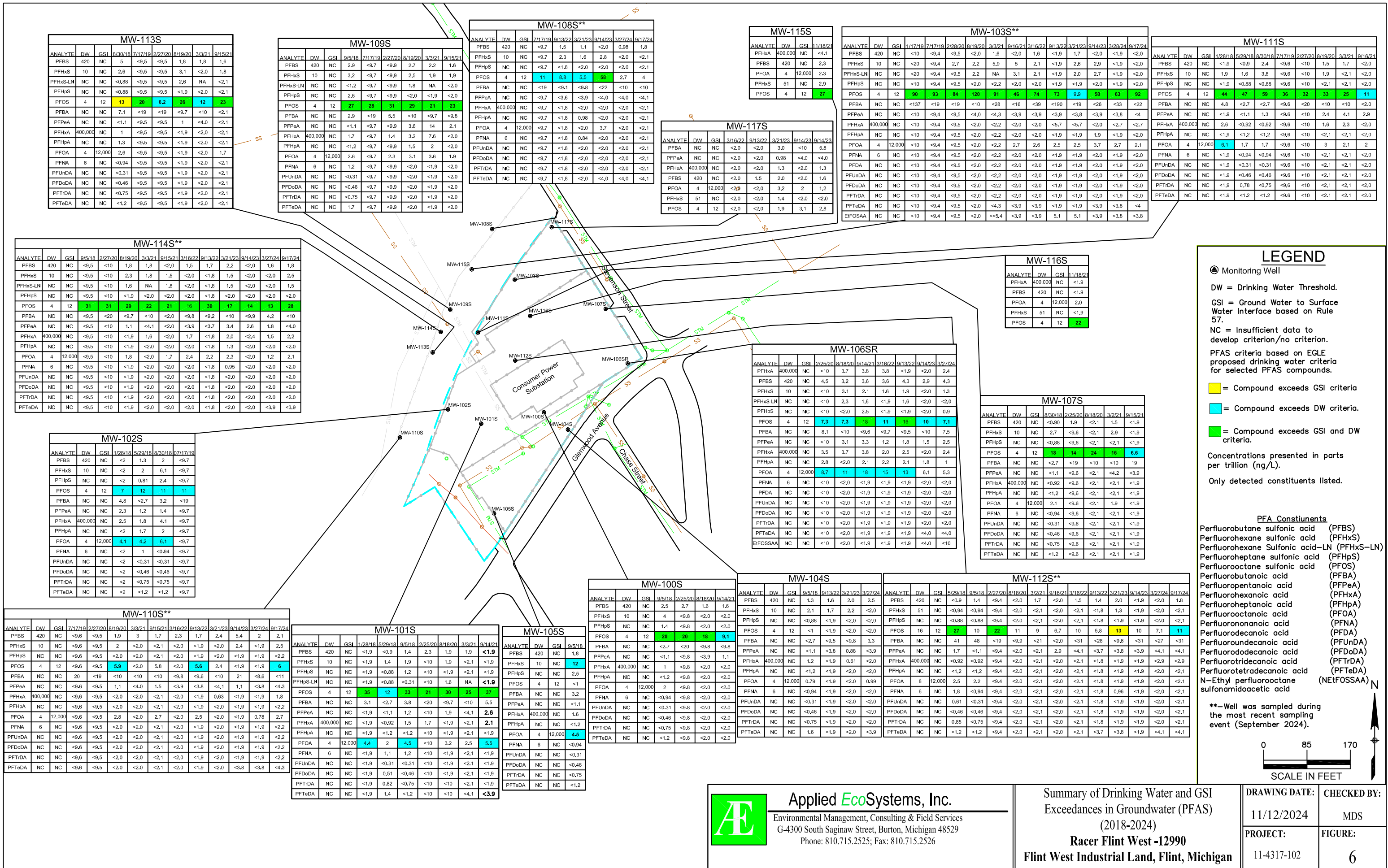
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Flint West Industrial Land, Flint, Michigan

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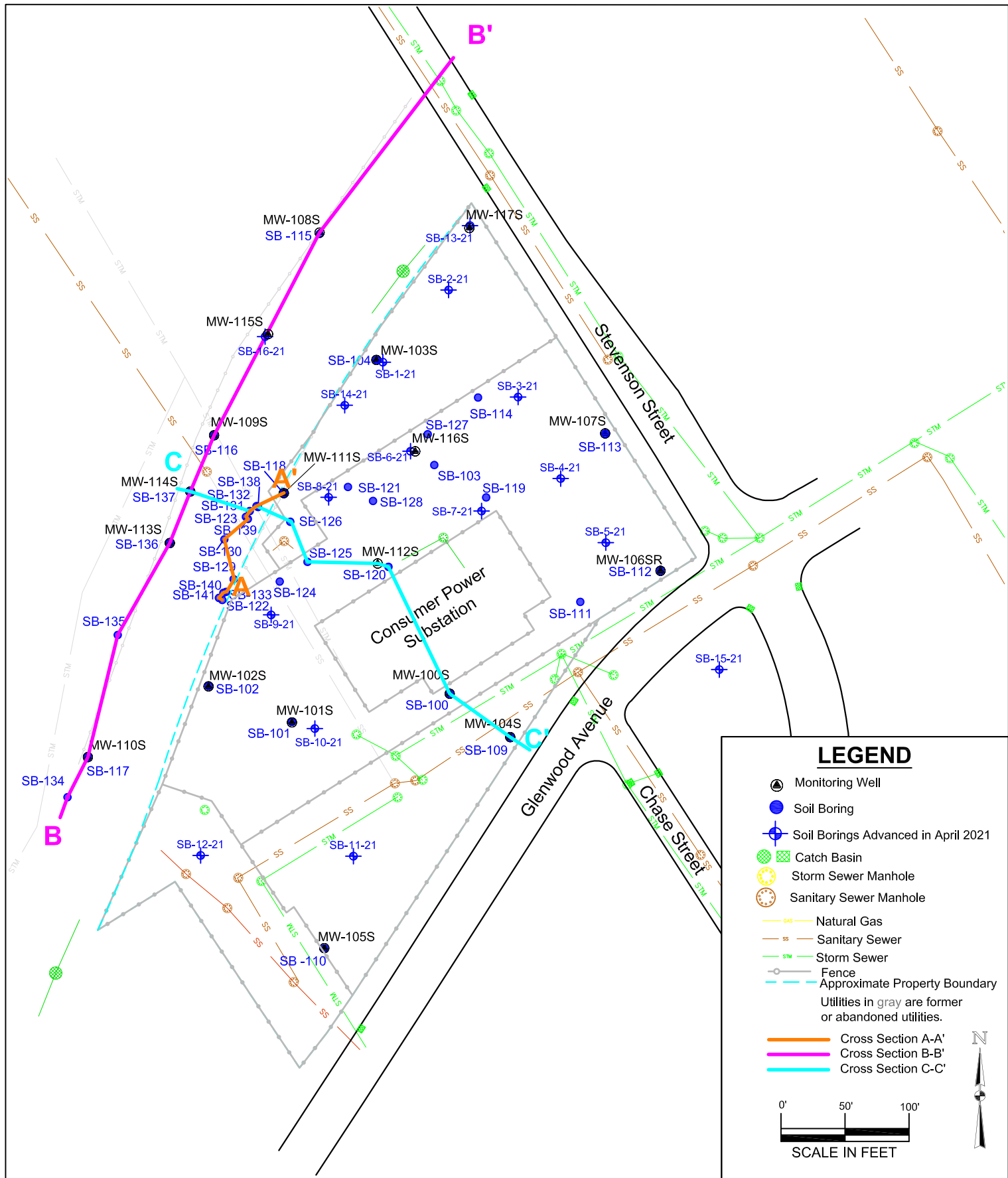
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Cross Section Locations Map

Racer Flint West -12990
Flint West Industrial Land, Flint, Michigan

DATE:

11/30/2022

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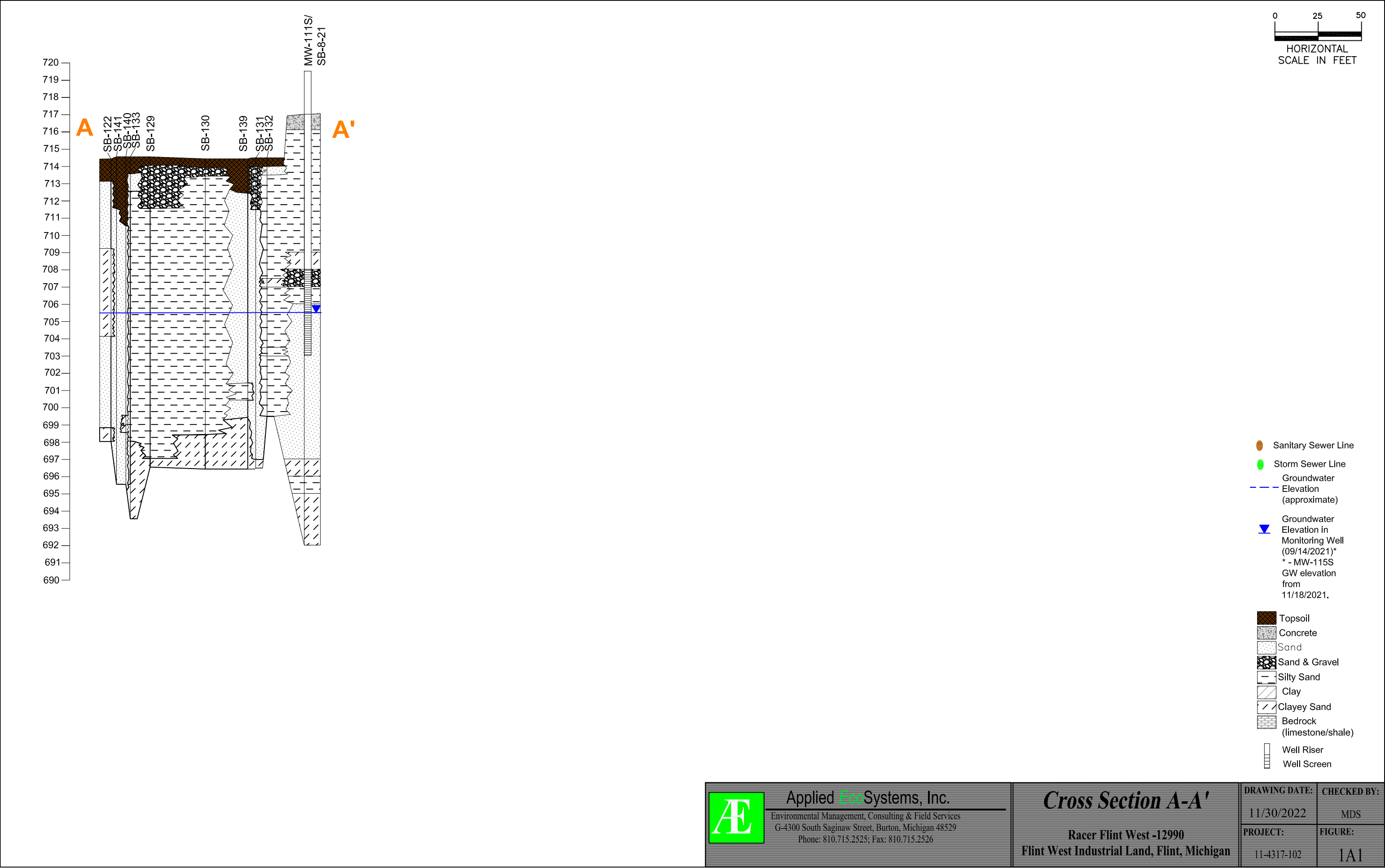
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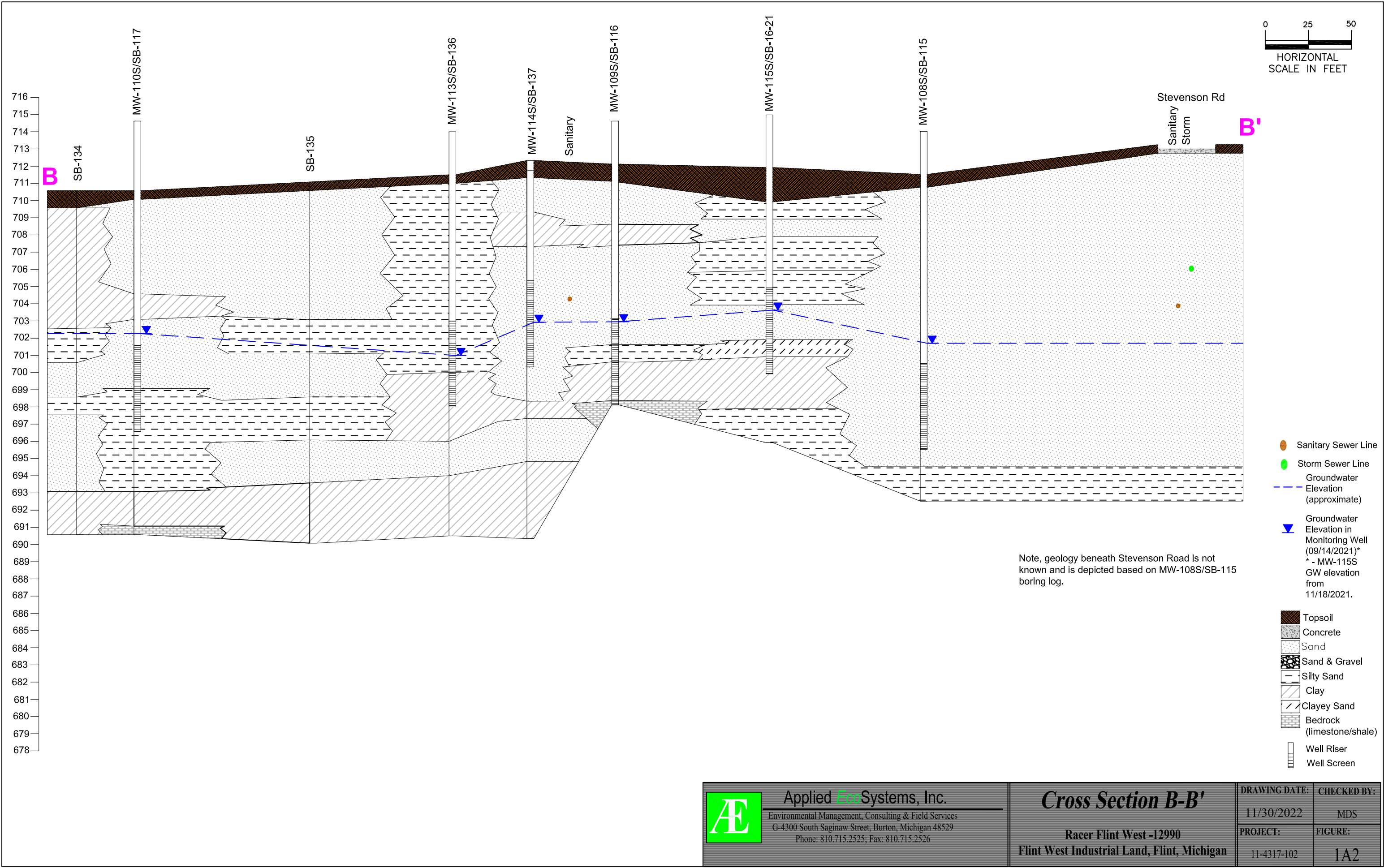
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11-4317-102

FIGURE:

1A0





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Cross Section B-B'

Racer Flint West -12990
Flint West Industrial Land, Flint, Michigan

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11-4317-102	1A2

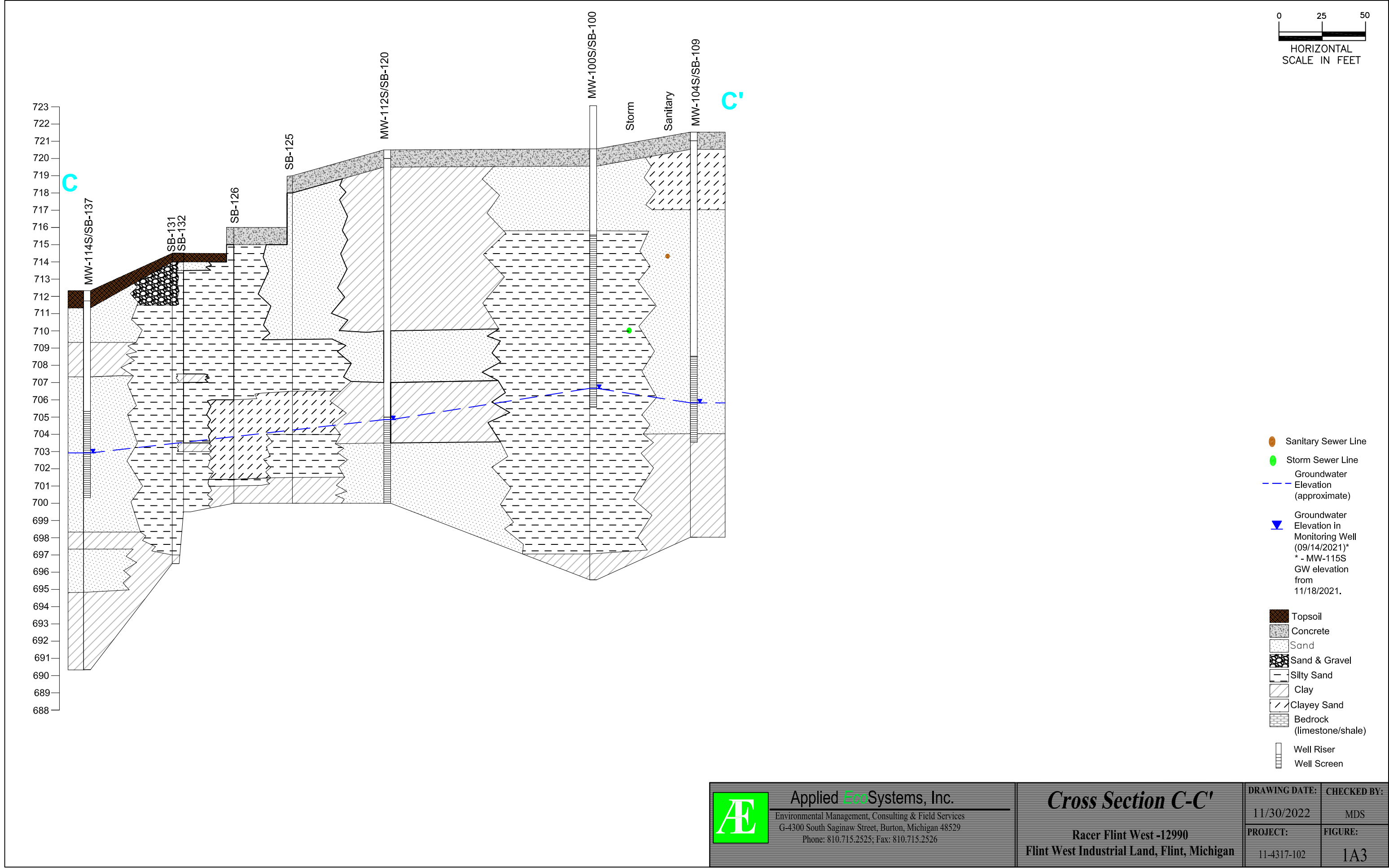


Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Acetone	Acrylonitrile	2-Butanone (MEK)	Benzene	n-Butylbenzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethylene
Drinking Water - Res						730	2.6	13,000	5 (A)	80	18	NA	80 (A,W)	80 (A,W)	10	80	80	800	5 (A)	100 (A)	430	80 (A,W)	260	880	7 (A)
Drinking Water - Non-Res						2,100	11	38,000	5 (A)	230	50	NA	80 (A,W)	80 (A,W)	29	230	230	2,300	5 (A)	100 (A)	1,700	80 (A,W)	1,100	2,500	7 (A)
Groundwater Surface Water Interface						1,700	1.2	2,200	200 (X)	ID	NA	NA	ID	ID	4.2; [5 (M)]	ID	ID	ID	38 (X)	25	1,100 (X)	350	ID	740	130
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-100S TOS(bgs): 5 BOS(bgs): 15 GE: 720.56 Finish: stickup Stickup Height: 2.50	723.06	ND	14.97	708.09	07/16/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.06	ND	15.26	707.80	02/25/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	0.15	<1	<1
	723.06	ND	16.07	706.99	08/18/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	0.25	<1	<1
	723.06	ND	17.48	705.58	03/02/21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	723.06	ND	16.40	706.66	09/14/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.06	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.63	705.43	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.42	705.64	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.62	705.44	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.40	705.66	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	16.35	706.71	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	15.94	707.12	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-101S TOS(bgs): 9 BOS(bgs): 19 GE: 719.58 Finish: stickup Stickup Height: 2.50 well destroyed well destroyed well destroyed well destroyed	722.08	ND	15.84	706.24	07/16/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.08	ND	16.00	706.08	02/25/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.08	ND	17.00	705.08	08/18/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.08	ND	18.58	703.50	03/03/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.08	ND	17.59	704.49	09/14/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.08	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	15.96	706.12	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	16.56	705.52	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-102S TOS(bgs): 9 BOS(bgs): 19 GE: 720.28 Finish: stickup Stickup Height: 2.50	722.78	ND	15.58	707.20	07/17/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.78	ND	15.61	707.17	02/25/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.78	ND	16.13	706.65	08/18/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	0.15	<1	<1
	722.78	ND	17.07	705.71	03/02/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.78	ND	16.48	706.30	09/14/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.78	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	16.81	705.97	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.36	705.42	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.39	705.39	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.23	705.55	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.78	707.00	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.88	706.90	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Acetone	Acrylonitrile	2-Butanone (MEK)	Benzene	n-Butylbenzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethylene
Drinking Water - Res						730	2.6	13,000	5 (A)	80	18	NA	80 (A,W)	80 (A,W)	10	80	80	800	5 (A)	100 (A)	430	80 (A,W)	260	880	7 (A)
Drinking Water - Non-Res						2,100	11	38,000	5 (A)	230	50	NA	80 (A,W)	80 (A,W)	29	230	230	2,300	5 (A)	100 (A)	1,700	80 (A,W)	1,100	2,500	7 (A)
Groundwater Surface Water Interface						1,700	1.2	2,200	200 (X)	ID	NA	NA	ID	ID	4.2; [5 (M)]	ID	ID	ID	38 (X)	25	1,100 (X)	350	ID	740	130
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-103S TOS(bgs): 9 BOS(bgs): 19 GE: 717.16 Finish: stickup Stickup Height: 2.50	719.66	ND	13.71	705.95	07/17/19	4.1	<2	<25	0.26	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	0.47	<5	<1	<5	<1	<1
	719.66	ND	13.58	706.08	02/28/20	<50	<2	<25	0.26	<1	<1	<1	<1	<1	<5	<1	<1	0.26	<1	0.53	<5	<1	<5	<1	<1
	719.66	ND	14.22	705.44	08/19/20	<50	<2	<25	0.91	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	3	<5	<1	0.91	<1	<1
	719.66	ND	15.05	704.61	03/03/21	<50	<2	<25	0.71	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	4	<5	<1	<5	<1	<1
	719.66	ND	14.31	705.35	09/14/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.17	<1	<1	<5	<1	<5	<1	<1
	719.66	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.66	14.68	14.86	704.80	03/16/22	<50	<2	<25	0.54	<1	<1	<1	<1	<1	<5	<1	<1	0.18	<1	0.64	<5	<1	<5	<1	<1
	719.66	ND	15.05	704.61	09/13/22	<50	<2	<25	1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	2	<5	<1	<5	<1	<1
	719.66	ND	15.00	704.66	03/21/23	<50	<2	<25	0.22	0.2	<1	<1	<1	<1	<5	<1	<1	0.24	<1	3	<5	<1	<5	<1	<1
	719.66	ND	13.22	706.44	09/14/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	0.18	<5	<1	<5	<1	<1
	719.66	ND	13.69	705.97	03/28/24	<50	<2	<25	0.25	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	0.33	<5	<1	<5	<1	<1
	719.66	ND	13.87	705.79	09/17/24	<50	<2	<25	0.92	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	1	<5	<1	<5	<1	<1
MW-104S TOS(bgs): 13 BOS(bgs): 18 GE: 721.53 Finish: flushmount TOC Depth: -0.50	721.03	ND	13.68	707.35	07/16/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	0.29	<5	<1	<1
	721.03	ND	13.79	707.24	02/25/20	<50	<2	<25	<1	<1	<1	<1	0.17	<1	<5	<1	<1	<5	<1	<1	<5	0.71	<5	<1	<1
	721.03	ND	14.22	706.81	08/18/20	<50	<2	<25	<1	<1	<1	<1	0.23	<1	<5	<1	<1	0.11	<1	<1	<5	1	0.17	<1	<1
	721.03	ND	9.12	711.91	03/02/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	1	<5	<1	<1
	721.03	ND	15.21	705.82	09/14/21	<50	<2	<25	<1	<1	<1	<1	0.25	<1	<5	<1	<1	<5	<1	<1	<5	1	<5	<1	<1
	721.03	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	15.47	705.56	03/16/22	<50	<2	<25	<1	<1	<1	<1	0.19	<1	<5	<1	<1	0.19	<1	<1	<5	0.45	<5	<1	<1
	721.03	ND	15.21	705.82	09/13/22	<50	<2	<25	<1	<1	<1	<1	0.28	<1	<5	<1	<1	0.13	<1	<1	<5	0.47	<5	<1	<1
	721.03	ND	16.25	704.78	03/21/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	0.59	<5	<1	<1
	721.03	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	14.52	706.51	03/27/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	721.03	ND	14.15	706.88	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-105S TOS(bgs): 13 BOS(bgs): 18 GE: 723.64 Finish: flushmount TOC Depth: -0.50	723.14	ND	12.88	710.26	07/16/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.14	ND	12.89	710.25	02/25/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.14	ND	14.32	708.82	08/18/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.14	ND	14.33	708.81	03/02/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.14	ND	14.34	708.80	09/14/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.14	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.15	708.99	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.17	708.97	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.69	708.45	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.08	709.06	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.30	709.84	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.43	709.71	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Acetone	Acrylonitrile	2-Butanone (MEK)	Benzene	n-Butylbenzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethylene
Drinking Water - Res						730	2.6	13,000	5 (A)	80	18	NA	80 (A,W)	80 (A,W)	10	80	80	800	5 (A)	100 (A)	430	80 (A,W)	260	880	7 (A)
Drinking Water - Non-Res						2,100	11	38,000	5 (A)	230	50	NA	80 (A,W)	80 (A,W)	29	230	230	2,300	5 (A)	100 (A)	1,700	80 (A,W)	1,100	2,500	7 (A)
Groundwater Surface Water Interface						1,700	1.2	2,200	200 (X)	ID	NA	NA	ID	ID	4.2; [5 (M)]	ID	ID	ID	38 (X)	25	1,100 (X)	350	ID	740	130
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-106SR TOS(bgs): 13 BOS(bgs): 18 GE: 723.86 Finish: flushmount TOC Depth: -0.50	723.36	ND	14.56	708.80	07/16/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.36	ND	14.63	708.73	02/25/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	0.24	<5	<1	<1
	723.36	ND	14.32	709.04	08/18/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	0.23	<5	<1	<1
	723.36	DRY	16.47	706.89	03/02/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	DRY	15.87	707.49	09/14/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.36	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	16.30	707.06	03/16/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.24	<1	<1	<5	<1	<5	<1	<1
	723.36	ND	15.92	707.44	09/13/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.15	<1	<1	<5	<1	<5	<1	<1
	723.36	ND	17.09	706.27	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	15.11	708.25	09/14/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.36	ND	15.21	708.15	03/27/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	723.36	ND	15.85	707.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-107S TOS(bgs): 13 BOS(bgs): 18 GE: 723.37 Finish: flushmount TOC Depth: -0.50	722.87	ND	15.35	707.52	07/16/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.87	ND	15.27	707.60	02/25/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.87	ND	14.62	708.25	08/18/20	<50	<2	<25	0.14	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	0.11	0.29	<1
	722.87	ND	16.81	706.06	03/02/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.87	ND	16.20	706.67	09/15/21	1.85	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.29	<1	<1	<5	<1	<5	<1	<1
	722.87	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.61	706.26	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.40	706.47	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	17.21	705.66	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.87	707.00	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.64	707.23	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-108S TOS(bgs): 11 BOS(bgs): 16 GE: 711.52 Finish: stickup Stickup Height: 2.50	714.02	ND	11.22	702.80	07/17/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	2	<1	<5	1	<5	<1	<1
	714.02	ND	10.85	703.17	02/27/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	2	<1	<5	0.81	<5	<1	<1
	714.02	ND	11.97	702.05	08/19/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.12	3	<1	<5	1	0.23	<1	<1
	714.02	ND	12.34	701.68	03/03/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	2	<1	<5	1	<5	<1	<1
	714.02	ND	12.32	701.70	09/15/21	2.6	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	2	<1	<5	2	<5	<1	<1
	714.02	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	ND	11.90	702.12	03/16/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.2	2	<1	<5	0.8	<5	<1	<1
	714.02	ND	12.97	701.05	09/13/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	2	<1	<5	2	<5	<1	<1
	714.02	ND	12.45	701.57	03/21/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	2	<1	<5	2	<5	<1	<1
	714.02	ND	10.66	703.36	09/14/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	3	<1	<5	1	<5	<1	<1
	714.02	ND	10.71	703.31	03/27/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	2	<1	<5	0.87	<5	<1	<1
	714.02	ND	11.47	702.55	09/17/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	2	<1	<5	0.67	<5	<1	<1

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Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Acetone	Acrylonitrile	2-Butanone (MEK)	Benzene	n-Butylbenzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethylene
Drinking Water - Res						730	2.6	13,000	5 (A)	80	18	NA	80 (A,W)	80 (A,W)	10	80	80	800	5 (A)	100 (A)	430	80 (A,W)	260	880	7 (A)
Drinking Water - Non-Res						2,100	11	38,000	5 (A)	230	50	NA	80 (A,W)	80 (A,W)	29	230	230	2,300	5 (A)	100 (A)	1,700	80 (A,W)	1,100	2,500	7 (A)
Groundwater Surface Water Interface						1,700	1.2	2,200	200 (X)	ID	NA	NA	ID	ID	4,2; [5 (M)]	ID	ID	ID	38 (X)	25	1,100 (X)	350	ID	740	130
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-109S TOS(bgs): 9 BOS(bgs): 14 GE: 712.12 Finish: stickup Stickup Height: 2.50	714.62	ND	11.14	703.48	07/17/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	1	0.82
	714.62	ND	10.89	703.73	02/27/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	0.13	1	1
	714.62	ND	11.66	702.96	08/19/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.1	<1	<1	<5	<1	0.22	0.96	1
	714.62	ND	11.98	702.64	03/03/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.7	1
	714.62	ND	11.67	702.95	09/15/21	0.78	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.93	1
	714.62	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.59	703.03	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	12.25	702.37	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.70	702.92	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.08	703.54	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	8.10	706.52	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.27	703.35	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-110S TOS(bgs): 9 BOS(bgs): 14 GE: 710.57 Finish: stickup Stickup Height: 2.50	713.07	ND	11.83	701.24	07/17/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	713.07	ND	11.45	701.62	02/27/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	713.07	ND	12.18	700.89	08/19/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	0.17	<1	<1
	713.07	ND	12.04	701.03	03/03/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	713.07	ND	12.36	700.71	09/15/21	2.02	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	713.07	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	713.07	ND	12.02	701.05	03/16/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.2	<1	<1	<5	<1	<5	<1	<1
	713.07	ND	12.76	700.31	09/13/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	713.07	ND	11.73	701.34	03/21/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	713.07	ND	11.54	701.53	09/14/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	713.07	ND	11.17	701.90	03/27/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	713.07	ND	12.88	700.19	09/17/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
MW-111S TOS(bgs): 9 BOS(bgs): 14 GE: 717.03 Finish: stickup Stickup Height: 2.50	719.53	ND	12.88	706.65	07/17/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	719.53	ND	12.65	706.88	02/27/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	719.53	ND	13.54	705.99	08/19/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.1	<1	<1	<5	0.11	0.2	<1	<1
	719.53	ND	14.55	704.98	03/03/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	0.34	<5	1	0.6
	719.53	ND	13.63	705.90	09/16/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.12	<1	<1	<5	<1	<5	<1	<1
	719.53	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.01	705.52	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.59	704.94	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.07	706.46	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.17	706.36	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Acetone	Acrylonitrile	2-Butanone (MEK)	Benzene	n-Butylbenzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethylene
Drinking Water - Res						730	2.6	13,000	5 (A)	80	18	NA	80 (A,W)	80 (A,W)	10	80	80	800	5 (A)	100 (A)	430	80 (A,W)	260	880	7 (A)
Drinking Water - Non-Res						2,100	11	38,000	5 (A)	230	50	NA	80 (A,W)	80 (A,W)	29	230	230	2,300	5 (A)	100 (A)	1,700	80 (A,W)	1,100	2,500	7 (A)
Groundwater Surface Water Interface						1,700	1.2	2,200	200 (X)	ID	NA	NA	ID	ID	4.2; [5 (M)]	ID	ID	ID	38 (X)	25	1,100 (X)	350	ID	740	130
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-112S TOS(bgs): 15 BOS(bgs): 20 GE: 720.50 Finish: flushmount TOC Depth: -0.50	720.00	ND	14.43	705.57	07/16/19	4.8	<2	<25	0.19	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.85	1
	Dupe 1 (MW-112S)			--	07/16/19	4.1	<2	<25	0.21	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.78	1
	720.00	ND	14.59	705.41	02/27/20	<50	<2	<25	0.2	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.99	1
	Dupe 1 (MW-112S)			--	02/27/20	<50	<2	<25	0.22	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	1	1
	720.00	ND	14.95	705.05	08/18/20	<50	<2	<25	0.17	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.7	1
	Dupe #1 (MW-112S)			--	08/18/20	<50	<2	<25	0.16	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.66	1
	720.00	ND	17.02	702.98	03/02/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	1	0.75
	Dupe1 (MW-112S)			--	03/02/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	1	0.82
	720.00	ND	15.15	704.85	09/15/21	4.13	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.51	0.92
	Dupe 1			--	09/15/21	<50	<2	<25	0.12	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	0.14	<5	<1	<5	0.61	1
	720.00	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	720.00	ND	16.35	703.65	03/16/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.23	<1	<1	<5	<1	<5	0.41	0.38
	720.00	ND	16.70	703.30	09/13/22	6.5	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.15	<1	<1	<5	<1	<5	0.69	0.39
	720.00	ND	16.80	703.20	03/21/23	5.4	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.23	<1	<1	<5	<1	<5	0.35	<1
MW-113S TOS(bgs): 8.5 BOS(bgs): 13.5 GE: 711.50 Finish: stickup Stickup Height: 2.50	720.00	ND	14.27	705.73	09/14/23	<50	<2	<25	0.2	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.68	1
	720.00	ND	15.19	704.81	03/27/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.44	0.35
	720.00	ND	14.61	705.39	09/17/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.55	0.95
	714.00	ND	12.31	701.69	07/17/19	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	714.00	ND	12.02	701.98	02/27/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	0.44	<1	<1
	714.00	ND	12.79	701.21	08/19/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.12	<1	<1	<5	0.12	0.31	<1	0.21
	714.00	ND	12.94	701.06	03/03/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	714.00	ND	13.01	700.99	09/15/21	1.93	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	714.00	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.89	701.11	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	13.60	700.40	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	13.00	701.00	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.78	701.22	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.21	701.79	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.49	701.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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EGLE Generic Residential Cleanup Criteria						Acetone	Acrylonitrile	2-Butanone (MEK)	Benzene	n-Butylbenzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethylene
Drinking Water - Res						730	2.6	13,000	5 (A)	80	18	NA	80 (A,W)	80 (A,W)	10	80	80	800	5 (A)	100 (A)	430	80 (A,W)	260	880	7 (A)
Drinking Water - Non-Res						2,100	11	38,000	5 (A)	230	50	NA	80 (A,W)	80 (A,W)	29	230	230	2,300	5 (A)	100 (A)	1,700	80 (A,W)	1,100	2,500	7 (A)
Groundwater Surface Water Interface						1,700	1.2	2,200	200 (X)	ID	NA	NA	ID	ID	4.2; [5 (M)]	ID	ID	ID	38 (X)	25	1,100 (X)	350	ID	740	130
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-114S TOS(bgs): 7 BOS(bgs): 12 GE: 712.33 Finish: stickup Stickup Height: -0.59	711.74	ND	8.36	703.38	07/17/19	48	<10	17	<5	<5	<5	<5	<5	<5	<30	<5	<5	<30	<5	<5	<30	<5	<30	2.5	<5
	Dupe 2 (MW-114S)			--	07/17/19	51	<10	18	<5	<5	<5	<5	<5	<5	<30	<5	<5	<30	<5	<5	<30	<5	<30	2.55	<5
	711.74	ND	8.11	703.63	02/27/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	0.22	<5	3	0.84
	Dupe 2 (MW-114S)			--	02/27/20	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	0.23	<5	2	0.82
	711.74	ND	8.82	702.92	08/19/20	<500	<20	<250	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<10	<10	<50	<10	<50	3	<10
	Dupe #2 (MW-114S)			--	08/19/20	<500	<20	<250	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<10	<10	<50	<10	<50	3.1	<10
	711.74	ND	9.12	702.62	03/03/21	<500	<20	<250	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<10	<10	<50	<10	<50	2.4	<10
	Dupe-2 (MW-114S)			--	03/03/21	<500	<20	<250	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<10	<10	<50	<10	<50	2.2	<10
	711.74	ND	8.82	702.92	09/15/21	21.3	<20	<250	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<10	<10	<50	<10	<50	2.4	<10
	Dupe 2			--	09/15/21	1.94	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	3	1
	711.74	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	711.74	ND	8.72	703.02	03/16/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.19	<1	<1	<5	0.14	<5	2	1
	Dupe1 (MW-114S)			--	03/16/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.2	<1	<1	<5	0.14	<5	2	1
	711.74	ND	9.42	702.32	09/13/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	2	2
	Dupe1 (MW-114S)			--	09/13/22	4.7	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	2	2
	711.74	ND	8.84	702.90	03/21/23	<250	<10	<130	<5	0.55	<5	<5	<5	<5	<30	<5	<5	<30	<5	<5	<30	<5	<30	1.3	0.9
	Dupe1 (MW-114S)			--	03/21/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	1	1
	711.74	ND	7.98	703.76	09/14/23	<250	<10	<130	<5	<5	<5	<5	<5	<5	<30	<5	<5	<30	<5	<5	<30	<5	<30	1.15	<5
	Dupe1 (MW-114S)			--	09/14/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	2	0.78
	711.74	ND	10.89	700.85	03/27/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.77	0.34
	Dup1 (MW-114S)			--	03/27/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	0.8	0.36
	711.74	ND	8.45	703.29	09/17/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	1	0.56
	Dup1 (MW-114S)			--	09/17/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	1	0.64
MW-115S TOS(bgs): 7 BOS(bgs): 12 GE: 711.92 Finish: Stickup Stickup Height: 3.06	714.98	ND	11.35	703.63	11/18/21	<50	<2	<25	0.25	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	0.23	<5	<1	<5	<1	<1
	714.98	ND	11.89	703.09	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	12.43	702.55	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.94	703.04	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.23	703.75	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.10	703.88	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.47	703.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-116S TOS(bgs): 14 BOS(bgs): 19 GE: 719.95 Finish: Stickup Stickup Height: 3.02	722.97	ND	19.99	702.98	11/18/21	<50	<2	<25	0.43	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	Dupe1 (MW-116S)			--	11/18/21	<50	<2	<25	0.42	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	722.97	ND	20.87	702.10	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.15	701.82	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.25	701.72	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	20.94	702.03	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.89	703.08	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.88	703.09	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Acetone	Acrylonitrile	2-Butanone (MEK)	Benzene	n-Butylbenzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethylene
Drinking Water - Res						730	2.6	13,000	5 (A)	80	18	NA	80 (A,W)	80 (A,W)	10	80	80	800	5 (A)	100 (A)	430	80 (A,W)	260	880	7 (A)
Drinking Water - Non-Res						2,100	11	38,000	5 (A)	230	50	NA	80 (A,W)	80 (A,W)	29	230	230	2,300	5 (A)	100 (A)	1,700	80 (A,W)	1,100	2,500	7 (A)
Groundwater Surface Water Interface						1,700	1.2	2,200	200 (X)	ID	NA	NA	ID	ID	4,2; [5 (M)]	ID	ID	ID	38 (X)	25	1,100 (X)	350	ID	740	130
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)						TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date															
MW-117S TOS(bgs): 9 BOS(bgs): 14 GE: 717.15 Finish: Stickup Stickup Height: 3.09	720.24	ND	14.87	705.37	11/18/21	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	0.18	<5	<1	<1
	720.24	ND	15.40	704.84	03/16/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.18	<1	<1	<5	0.25	<5	<1	<1
	720.24	ND	15.62	704.62	09/13/22	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	0.26	0.12	<1	<1
	720.24	ND	15.20	705.04	03/21/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	720.24	ND	14.59	705.65	09/14/23	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	720.24	ND	14.68	705.56	03/28/24	<50	<2	<25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1
	720.24	ND	14.97	705.27	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Results in micrograms per liter (ug/L).

Footnotes are presented behind the analytical summary tables.

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						1,2-Dibromo-3-chloropropane	Ethylene Dibromide (1,2-Dibromoethane)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diethyl ether	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Ethyl benzene	2-Hexanone	Hexachloroethane	p-Isopropyltoluene
Drinking Water - Res						NA	0.05	600 (A)	5	5 (A)	6.6	75 (A)	70 (A)	NA	80 (A,W)	80	1,700	10 (E)	100 (A)	8.5	NA	74 (E)	1,000	7.3	NA
Drinking Water - Non-Res						NA	0.05	600 (A)	5	5 (A)	19	75 (A)	70 (A)	NA	80 (A,W)	230	4,800	10 (E)	100 (A)	35	NA	74 (E)	2,900	21	NA
Groundwater Surface Water Interface						NA	5.7 (X)	13	360 (X)	230 (X)	28	17	620	NA	ID	NA	ID	ID	1,500 (X)	9.0 (X)	NA	18	ID	6.7 (X)	NA
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-100S TOS(bgs): 5 BOS(bgs): 15 GE: 720.56 Finish: stickup Stickup Height: 2.50	723.06	ND	14.97	708.09	07/16/19	<5	<1	<1	<1	<1	<1	<1	12	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.06	ND	15.26	707.80	02/25/20	<5	<1	<1	<1	<1	0.32	<1	9	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.06	ND	16.07	706.99	08/18/20	<5	<1	<1	<1	<1	<1	<1	3	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.06	ND	17.48	705.58	03/02/21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	723.06	ND	16.40	706.66	09/14/21	<5	<1	<1	<1	<1	<1	<1	6	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.06	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.63	705.43	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.42	705.64	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.62	705.44	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.40	705.66	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	16.35	706.71	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	15.94	707.12	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-101S TOS(bgs): 9 BOS(bgs): 19 GE: 719.58 Finish: stickup Stickup Height: 2.50 well destroyed well destroyed well destroyed well destroyed	722.08	ND	15.84	706.24	07/16/19	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.08	ND	16.00	706.08	02/25/20	<5	<1	<1	<1	<1	0.25	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.08	ND	17.00	705.08	08/18/20	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.08	ND	18.58	703.50	03/03/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.08	ND	17.59	704.49	09/14/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.08	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	15.96	706.12	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	16.56	705.52	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-102S TOS(bgs): 9 BOS(bgs): 19 GE: 720.28 Finish: stickup Stickup Height: 2.50	722.78	ND	15.58	707.20	07/17/19	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.78	ND	15.61	707.17	02/25/20	<5	<1	<1	<1	<1	0.11	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.78	ND	16.13	706.65	08/18/20	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.78	ND	17.07	705.71	03/02/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.78	ND	16.48	706.30	09/14/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.78	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	16.81	705.97	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.36	705.42	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.39	705.39	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.23	705.55	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.78	707.00	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.88	706.90	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						1,2-Dibromo-3-chloropropane	Ethylene Dibromide (1,2-Dibromoethane)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diethyl ether	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Ethyl benzene	2-Hexanone	Hexachloroethane	p-Isopropyltoluene
Drinking Water - Res						NA	0.05	600 (A)	5	5 (A)	6.6	75 (A)	70 (A)	NA	80 (A,W)	80	1,700	10 (E)	100 (A)	8.5	NA	74 (E)	1,000	7.3	NA
Drinking Water - Non-Res						NA	0.05	600 (A)	5	5 (A)	19	75 (A)	70 (A)	NA	80 (A,W)	230	4,800	10 (E)	100 (A)	35	NA	74 (E)	2,900	21	NA
Groundwater Surface Water Interface						NA	5.7 (X)	13	360 (X)	230 (X)	28	17	620	NA	ID	NA	ID	ID	1,500 (X)	9.0 (X)	NA	18	ID	6.7 (X)	NA
Sample Location TOS & BOS = Top & Bottom -of-Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-103S TOS(bgs): 9 BOS(bgs): 19 GE: 717.16 Finish: stickup Stickup Height: 2.50	719.66	ND	13.71	705.95	07/17/19	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.66	ND	13.58	706.08	02/28/20	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.66	ND	14.22	705.44	08/19/20	<5	<1	0.13	<1	<1	<1	<1	0.44	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.66	ND	15.05	704.61	03/03/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.66	ND	14.31	705.35	09/14/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.66	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.66	14.68	14.86	704.80	03/16/22	<5	<1	<1	<1	<1	<1	<1	0.12	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.66	ND	15.05	704.61	09/13/22	<5	<1	0.17	<1	<1	<1	0.13	0.16	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.66	ND	15.00	704.66	03/21/23	<5	<1	0.27	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	0.12	<50	<5	0.11
	719.66	ND	13.22	706.44	09/14/23	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.66	ND	13.69	705.97	03/28/24	<5	<1	<1	<1	<1	<1	<1	0.2	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.66	ND	13.87	705.79	09/17/24	<5	<1	<1	<1	<1	<1	<1	0.56	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
MW-104S TOS(bgs): 13 BOS(bgs): 18 GE: 721.53 Finish: flushmount TOC Depth: -0.50	721.03	ND	13.68	707.35	07/16/19	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	721.03	ND	13.79	707.24	02/25/20	<5	<1	<1	<1	<1	0.37	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	721.03	ND	14.22	706.81	08/18/20	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	721.03	ND	9.12	711.91	03/02/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	721.03	ND	15.21	705.82	09/14/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	721.03	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	15.47	705.56	03/16/22	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	721.03	ND	15.21	705.82	09/13/22	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	721.03	ND	16.25	704.78	03/21/23	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	721.03	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	14.52	706.51	03/27/24	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	721.03	ND	14.15	706.88	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-105S TOS(bgs): 13 BOS(bgs): 18 GE: 723.64 Finish: flushmount TOC Depth: -0.50	723.14	ND	12.88	710.26	07/16/19	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.14	ND	12.89	710.25	02/25/20	<5	<1	<1	<1	<1	0.26	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.14	ND	14.32	708.82	08/18/20	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.14	ND	14.33	708.81	03/02/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.14	ND	14.34	708.80	09/14/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.14	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.15	708.99	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.17	708.97	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.69	708.45	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.08	709.06	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.30	709.84	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.43	709.71	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						1,2-Dibromo-3-chloropropane	Ethylene Dibromide (1,2-Dibromoethane)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diethyl ether	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Ethyl benzene	2-Hexanone	Hexachloroethane	p-Isopropyltoluene
Drinking Water - Res						NA	0.05	600 (A)	5	5 (A)	6.6	75 (A)	70 (A)	NA	80 (A,W)	80	1,700	10 (E)	100 (A)	8.5	NA	74 (E)	1,000	7.3	NA
Drinking Water - Non-Res						NA	0.05	600 (A)	5	5 (A)	19	75 (A)	70 (A)	NA	80 (A,W)	230	4,800	10 (E)	100 (A)	35	NA	74 (E)	2,900	21	NA
Groundwater Surface Water Interface						NA	5.7 (X)	13	360 (X)	230 (X)	28	17	620	NA	ID	NA	ID	ID	1,500 (X)	9.0 (X)	NA	18	ID	6.7 (X)	NA
Sample Location TOS & BOS = Top & Bottom -of-Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-106SR TOS(bgs): 13 BOS(bgs): 18 GE: 723.86 Finish: flushmount TOC Depth: -0.50	723.36	ND	14.56	708.80	07/16/19	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.36	ND	14.63	708.73	02/25/20	<5	<1	<1	<1	<1	0.23	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.36	ND	14.32	709.04	08/18/20	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.36	DRY	16.47	706.89	03/02/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	DRY	15.87	707.49	09/14/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.36	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	16.30	707.06	03/16/22	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.36	ND	15.92	707.44	09/13/22	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.36	ND	17.09	706.27	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	15.11	708.25	09/14/23	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.36	ND	15.21	708.15	03/27/24	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	723.36	ND	15.85	707.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-107S TOS(bgs): 13 BOS(bgs): 18 GE: 723.37 Finish: flushmount TOC Depth: -0.50	722.87	ND	15.35	707.52	07/16/19	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.87	ND	15.27	707.60	02/25/20	<5	<1	<1	<1	<1	0.26	<1	0.11	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.87	ND	14.62	708.25	08/18/20	<5	<1	<1	<1	<1	<1	<1	1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.87	ND	16.81	706.06	03/02/21	<5	<1	<1	<1	<1	<1	<1	10	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.87	ND	16.20	706.67	09/15/21	<5	<1	<1	<1	<1	<1	0.26	0.57	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.87	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.61	706.26	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.40	706.47	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	17.21	705.66	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.87	707.00	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.64	707.23	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-108S TOS(bgs): 11 BOS(bgs): 16 GE: 711.52 Finish: stickup Stickup Height: 2.50	714.02	ND	11.22	702.80	07/17/19	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	ND	10.85	703.17	02/27/20	<5	<1	<1	<1	<1	0.13	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	ND	11.97	702.05	08/19/20	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	ND	12.34	701.68	03/03/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	ND	12.32	701.70	09/15/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	ND	11.90	702.12	03/16/22	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	ND	12.97	701.05	09/13/22	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	ND	12.45	701.57	03/21/23	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	ND	10.66	703.36	09/14/23	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	ND	10.71	703.31	03/27/24	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.02	ND	11.47	702.55	09/17/24	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						1,2-Dibromo-3-chloropropane	Ethylene Dibromide (1,2-Dibromoethane)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diethyl ether	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Ethyl benzene	2-Hexanone	Hexachloroethane	p-Isopropyltoluene
Drinking Water - Res						NA	0.05	600 (A)	5	5 (A)	6.6	75 (A)	70 (A)	NA	80 (A,W)	80	1,700	10 (E)	100 (A)	8.5	NA	74 (E)	1,000	7.3	NA
Drinking Water - Non-Res						NA	0.05	600 (A)	5	5 (A)	19	75 (A)	70 (A)	NA	80 (A,W)	230	4,800	10 (E)	100 (A)	35	NA	74 (E)	2,900	21	NA
Groundwater Surface Water Interface						NA	5.7 (X)	13	360 (X)	230 (X)	28	17	620	NA	ID	NA	ID	ID	1,500 (X)	9.0 (X)	NA	18	ID	6.7 (X)	NA
Sample Location TOS & BOS = Top & Bottom -of-Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-109S TOS(bgs): 9 BOS(bgs): 14 GE: 712.12 Finish: stickup Stickup Height: 2.50	714.62	ND	11.14	703.48	07/17/19	<5	<1	<1	<1	<1	<1	<1	9	<1	<5	<5	<5	<10	0.42	<1	<1	<1	<50	<5	<5
	714.62	ND	10.89	703.73	02/27/20	<5	<1	<1	<1	<1	0.1	<1	17	<1	<5	<5	<5	<10	0.5	<1	<1	<1	<50	<5	<5
	714.62	ND	11.66	702.96	08/19/20	<5	<1	<1	<1	<1	<1	<1	14	<1	<5	<5	<5	<10	0.57	<1	<1	<1	<50	<5	<5
	714.62	ND	11.98	702.64	03/03/21	<5	<1	<1	<1	<1	<1	<1	15	<1	<5	<5	<5	<10	0.48	<1	<1	<1	<50	<5	<5
	714.62	ND	11.67	702.95	09/15/21	<5	<1	<1	<1	<1	<1	<1	14	<1	<5	<5	<5	<10	0.62	<1	<1	<1	<50	<5	<5
	714.62	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.59	703.03	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	12.25	702.37	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.70	702.92	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.08	703.54	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	8.10	706.52	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.27	703.35	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-110S TOS(bgs): 9 BOS(bgs): 14 GE: 710.57 Finish: stickup Stickup Height: 2.50	713.07	ND	11.83	701.24	07/17/19	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	ND	11.45	701.62	02/27/20	<5	<1	<1	<1	<1	0.14	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	ND	12.18	700.89	08/19/20	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	ND	12.04	701.03	03/03/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	ND	12.36	700.71	09/15/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	713.07	ND	12.02	701.05	03/16/22	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	ND	12.76	700.31	09/13/22	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	ND	11.73	701.34	03/21/23	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	ND	11.54	701.53	09/14/23	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	ND	11.17	701.90	03/27/24	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	713.07	ND	12.88	700.19	09/17/24	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
MW-111S TOS(bgs): 9 BOS(bgs): 14 GE: 717.03 Finish: stickup Stickup Height: 2.50	719.53	ND	12.88	706.65	07/17/19	<5	<1	<1	<1	<1	<1	<1	0.82	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.53	ND	12.65	706.88	02/27/20	<5	<1	<1	<1	<1	0.21	<1	0.35	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.53	ND	13.54	705.99	08/19/20	<5	<1	<1	<1	<1	<1	<1	1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.53	ND	14.55	704.98	03/03/21	<5	<1	<1	<1	<1	<1	<1	18	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.53	ND	13.63	705.90	09/16/21	<5	<1	<1	<1	<1	<1	<1	8	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	719.53	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.01	705.52	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.59	704.94	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.07	706.46	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.17	706.36	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						1,2-Dibromo-3-chloropropane	Ethylene Dibromide (1,2-Dibromoethane)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diethyl ether	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Ethyl benzene	2-Hexanone	Hexachloroethane	p-Isopropyltoluene
Drinking Water - Res						NA	0.05	600 (A)	5	5 (A)	6.6	75 (A)	70 (A)	NA	80 (A,W)	80	1,700	10 (E)	100 (A)	8.5	NA	74 (E)	1,000	7.3	NA
Drinking Water - Non-Res						NA	0.05	600 (A)	5	5 (A)	19	75 (A)	70 (A)	NA	80 (A,W)	230	4,800	10 (E)	100 (A)	35	NA	74 (E)	2,900	21	NA
Groundwater Surface Water Interface						NA	5.7 (X)	13	360 (X)	230 (X)	28	17	620	NA	ID	NA	ID	ID	1,500 (X)	9.0 (X)	NA	18	ID	6.7 (X)	NA
Sample Location TOS & BOS = Top & Bottom -of-Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-112S TOS(bgs): 15 BOS(bgs): 20 GE: 720.50 Finish: flushmount TOC Depth: -0.50	720.00	ND	14.43	705.57	07/16/19	<5	<1	<1	<1	<1	<1	<1	3	<1	<5	<5	<5	<10	0.29	<1	<1	<1	<50	<5	<5
	Dupe 1 (MW-112S)			--	07/16/19	<5	<1	<1	<1	<1	<1	<1	3	<1	<5	<5	<5	<10	0.31	<1	<1	<1	<50	<5	<5
	720.00	ND	14.59	705.41	02/27/20	<5	<1	0.15	<1	<1	0.19	<1	3	<1	<5	<5	<5	<10	0.28	<1	<1	<1	<50	<5	<5
	Dupe 1 (MW-112S)			--	02/27/20	<5	<1	0.11	<1	<1	0.2	<1	3	<1	<5	<5	<5	<10	0.24	<1	<1	<1	<50	<5	<5
	720.00	ND	14.95	705.05	08/18/20	<5	<1	<1	<1	<1	<1	<1	2	<1	<5	<5	<5	<10	0.19	<1	<1	<1	<50	<5	<5
	Dupe #1 (MW-112S)			--	08/18/20	<5	<1	<1	<1	<1	<1	<1	2	<1	<5	<5	<5	<10	0.17	<1	<1	<1	<50	<5	<5
	720.00	ND	17.02	702.98	03/02/21	<5	<1	<1	<1	<1	<1	<1	4	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	Dupe1 (MW-112S)			--	03/02/21	<5	<1	<1	<1	<1	<1	<1	4	<1	<5	<5	<5	<10	0.24	<1	<1	<1	<50	<5	<5
	720.00	ND	15.15	704.85	09/15/21	<5	<1	<1	<1	<1	<1	<1	2	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	Dupe 1			--	09/15/21	<5	<1	0.11	<1	<1	<1	<1	3	<1	<5	<5	<5	<10	0.18	<1	<1	<1	<50	<5	<5
	720.00	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	720.00	ND	16.35	703.65	03/16/22	<5	<1	0.12	<1	<1	<1	<1	0.88	<1	<5	<5	<5	<10	0.13	<1	<1	<1	<50	<5	<5
	720.00	ND	16.70	703.30	09/13/22	<5	<1	<1	<1	<1	<1	<1	3	<1	<5	<5	<5	<10	0.17	<1	<1	<1	<50	<5	<5
	720.00	ND	16.80	703.20	03/21/23	<5	<1	<1	<1	<1	<1	<1	0.78	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	720.00	ND	14.27	705.73	09/14/23	<5	<1	<1	<1	<1	<1	<1	3	<1	<5	<5	<5	<10	0.3	<1	<1	<1	<50	<5	<5
	720.00	ND	15.19	704.81	03/27/24	<5	<1	<1	<1	<1	<1	<1	0.94	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	720.00	ND	14.61	705.39	09/17/24	<5	<1	0.14	<1	<1	<1	<1	2	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
MW-113S TOS(bgs): 8.5 BOS(bgs): 13.5 GE: 711.50 Finish: stickup Stickup Height: 2.50	714.00	ND	12.31	701.69	07/17/19	<5	<1	<1	<1	<1	<1	<1	1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.00	ND	12.02	701.98	02/27/20	<5	<1	<1	<1	<1	0.17	<1	0.44	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.00	ND	12.79	701.21	08/19/20	<5	<1	<1	<1	<1	<1	<1	1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.00	ND	12.94	701.06	03/03/21	<5	<1	<1	<1	<1	<1	<1	0.34	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.00	ND	13.01	700.99	09/15/21	<5	<1	<1	<1	<1	<1	<1	2	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.00	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.89	701.11	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	13.60	700.40	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	13.00	701.00	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.78	701.22	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.21	701.79	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.49	701.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						1,2-Dibromo-3-chloropropane	Ethylene Dibromide (1,2-Dibromoethane)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diethyl ether	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Ethyl benzene	2-Hexanone	Hexachloroethane	p-Isopropyltoluene
Drinking Water - Res						NA	0.05	600 (A)	5	5 (A)	6.6	75 (A)	70 (A)	NA	80 (A,W)	80	1,700	10 (E)	100 (A)	8.5	NA	74 (E)	1,000	7.3	NA
Drinking Water - Non-Res						NA	0.05	600 (A)	5	5 (A)	19	75 (A)	70 (A)	NA	80 (A,W)	230	4,800	10 (E)	100 (A)	35	NA	74 (E)	2,900	21	NA
Groundwater Surface Water Interface						NA	5.7 (X)	13	360 (X)	230 (X)	28	17	620	NA	ID	NA	ID	ID	1,500 (X)	9.0 (X)	NA	18	ID	6.7 (X)	NA
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-114S TOS(bgs): 7 BOS(bgs): 12 GE: 712.33 Finish: stickup Stickup Height: -0.59	711.74	ND	8.36	703.38	07/17/19	<30	<5	<5	<5	<5	<5	<5	244	<5	<30	<30	<30	<50	1.35	<5	<5	<5	2.05	<30	<30
	Dupe 2 (MW-114S)			--	07/17/19	<30	<5	<5	<5	<5	<5	<5	244	<5	<30	<30	<30	<50	1.45	<5	<5	<5	1.65	<30	<30
	711.74	ND	8.11	703.63	02/27/20	<5	<1	<1	<1	<1	<1	<1	127	<1	<5	<5	<5	<10	0.78	<1	<1	<1	<50	<5	<5
	Dupe 2 (MW-114S)			--	02/27/20	<5	<1	<1	<1	<1	<1	<1	125	<1	<5	<5	<5	<10	0.83	<1	<1	<1	<50	<5	<5
	711.74	ND	8.82	702.92	08/19/20	<50	<10	<10	<10	<10	<10	<10	130	<10	<50	<50	<50	<100	1.2	<10	<10	<10	<500	<50	<50
	Dupe #2 (MW-114S)			--	08/19/20	<50	<10	<10	<10	<10	<10	<10	120	<10	<50	<50	<50	<100	1	<10	<10	<10	<500	<50	<50
	711.74	ND	9.12	702.62	03/03/21	<50	<10	<10	<10	<10	<10	<10	100	<10	<50	<50	<50	<100	<10	<10	<10	<10	<500	<50	<50
	Dupe-2 (MW-114S)			--	03/03/21	<50	<10	<10	<10	<10	<10	<10	100	<10	<50	<50	<50	<100	<10	<10	<10	<10	<500	<50	<50
	711.74	ND	8.82	702.92	09/15/21	<50	<10	<10	<10	<10	<10	<10	150	<10	<50	<50	<50	<100	<10	<10	<10	<10	<500	<50	<50
	Dupe 2			--	09/15/21	<5	<1	<1	<1	<1	<1	<1	169	<1	<5	<5	<5	<10	0.94	<1	<1	<1	<50	<5	<5
	711.74	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	711.74	ND	8.72	703.02	03/16/22	<5	<1	<1	<1	<1	<1	<1	131	<1	<5	<5	<5	<10	0.75	<1	<1	<1	<50	<5	<5
	Dupe1 (MW-114S)			--	03/16/22	<5	<1	<1	<1	<1	<1	<1	124	<1	<5	<5	<5	<10	0.67	<1	<1	<1	<50	<5	<5
	711.74	ND	9.42	702.32	09/13/22	<5	<1	<1	<1	<1	<1	<1	142	<1	<5	<5	<5	<10	0.95	<1	<1	<1	<50	<5	<5
	Dupe1 (MW-114S)			--	09/13/22	<5	<1	<1	<1	<1	<1	<1	136	<1	<5	<5	<5	<10	0.82	<1	<1	<1	<50	<5	<5
	711.74	ND	8.84	702.90	03/21/23	<30	<5	<5	<5	<5	<5	<5	59	<5	<30	<30	<30	<50	0.55	<5	<5	<5	<250	<30	<30
	Dupe1 (MW-114S)			--	03/21/23	<5	<1	<1	<1	<1	<1	<1	70	<1	<5	<5	<5	<10	0.57	<1	<1	<1	<50	<5	<5
	711.74	ND	7.98	703.76	09/14/23	<30	<5	<5	<5	<5	<5	<5	63	<5	<30	<30	<30	<50	<5	<5	<5	<5	<250	<30	<30
	Dupe1 (MW-114S)			--	09/14/23	<5	<1	<1	<1	<1	<1	<1	70	<1	<5	<5	<5	<10	0.64	<1	<1	<1	<50	<5	<5
	711.74	ND	10.89	700.85	03/27/24	<5	<1	<1	<1	<1	<1	<1	36	<1	<5	<5	<5	<10	0.35	<1	<1	<1	<50	<5	<5
	Dup1 (MW-114S)			--	03/27/24	<5	<1	<1	<1	<1	<1	<1	36	<1	<5	<5	<5	<10	0.35	<1	<1	<1	<50	<5	<5
	711.74	ND	8.45	703.29	09/17/24	<5	<1	<1	<1	<1	<1	<1	58	<1	<5	<5	<5	<10	0.64	<1	<1	<1	<50	<5	<5
	Dup1 (MW-114S)			--	09/17/24	<5	<1	<1	<1	<1	<1	<1	58	<1	<5	<5	<5	<10	0.61	<1	<1	<1	<50	<5	<5
MW-115S TOS(bgs): 7 BOS(bgs): 12 GE: 711.92 Finish: Stickup Stickup Height: 3.06	714.98	ND	11.35	703.63	11/18/21	<5	<1	0.48	<1	<1	<1	0.15	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	714.98	ND	11.89	703.09	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	12.43	702.55	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.94	703.04	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.23	703.75	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.10	703.88	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-116S TOS(bgs): 14 BOS(bgs): 19 GE: 719.95 Finish: Stickup Stickup Height: 3.02	722.97	ND	19.99	702.98	11/18/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	Dupe1 (MW-116S)			--	11/18/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	722.97	ND	20.87	702.10	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.15	701.82	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.25	701.72	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	20.94	702.03	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.89	703.08	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.88	703.09	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						1,2-Dibromo-3-chloropropane	Ethylene Dibromide (1,2-Dibromoethane)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diethyl ether	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Ethyl benzene	2-Hexanone	Hexachloroethane	p-Isopropyltoluene
Drinking Water - Res						NA	0.05	600 (A)	5	5 (A)	6.6	75 (A)	70 (A)	NA	80 (A,W)	80	1,700	10 (E)	100 (A)	8.5	NA	74 (E)	1,000	7.3	NA
Drinking Water - Non-Res						NA	0.05	600 (A)	5	5 (A)	19	75 (A)	70 (A)	NA	80 (A,W)	230	4,800	10 (E)	100 (A)	35	NA	74 (E)	2,900	21	NA
Groundwater Surface Water Interface						NA	5.7 (X)	13	360 (X)	230 (X)	28	17	620	NA	ID	NA	ID	ID	1,500 (X)	9.0 (X)	NA	18	ID	6.7 (X)	NA
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)						TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date															
MW-117S TOS(bgs): 9 BOS(bgs): 14 GE: 717.15 Finish: Stickup Stickup Height: 3.09	720.24	ND	14.87	705.37	11/18/21	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	720.24	ND	15.40	704.84	03/16/22	<5	<1	<1	<1	<1	<1	<1	0.21	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	720.24	ND	15.62	704.62	09/13/22	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	720.24	ND	15.20	705.04	03/21/23	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	720.24	ND	14.59	705.65	09/14/23	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	720.24	ND	14.68	705.56	03/28/24	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<10	<1	<1	<1	<1	<50	<5	<5
	720.24	ND	14.97	705.27	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Results in micrograms per liter (ug/L).

Footnotes are presented behind the analytical summary tables.

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Isopropyl benzene	2-Methylnaphthalene	4-Methyl-2-pentanone (MIBK)	Methyl-t-butyl ether (MTBE)	Methyl iodide	Methylene chloride	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
Drinking Water - Res						800	260	1,800	40 (E)	NA	5 (A)	520	80	100 (A)	77	200 (A)	8.5	5 (A)	NA	42	NA	70 (A)	63 (E)	72 (E)
Drinking Water - Non-Res						2,300	750	5,200	40 (E)	NA	5 (A)	1,500	230	100 (A)	320	200 (A)	35	5 (A)	NA	120	NA	70 (A)	63 (E)	72 (E)
Groundwater Surface Water Interface						28	19	ID	7,100	NA	1,500 (X)	11	ID	80 (X)	ID	89	78 (X)	330 (X)	NA	NA	NA	99 (X)	17	45
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-100S TOS(bgs): 5 BOS(bgs): 15 GE: 720.56 Finish: stickup Stickup Height: 2.50	723.06	ND	14.97	708.09	07/16/19	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.06	ND	15.26	707.80	02/25/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.06	ND	16.07	706.99	08/18/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.06	ND	17.48	705.58	03/02/21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	723.06	ND	16.40	706.66	09/14/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.06	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.63	705.43	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.42	705.64	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.62	705.44	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.40	705.66	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	16.35	706.71	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	15.94	707.12	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-101S TOS(bgs): 9 BOS(bgs): 19 GE: 719.58 Finish: stickup Stickup Height: 2.50 well destroyed well destroyed well destroyed well destroyed	722.08	ND	15.84	706.24	07/16/19	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.08	ND	16.00	706.08	02/25/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.08	ND	17.00	705.08	08/18/20	<5	<5	<50	<5	<1	0.12	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.08	ND	18.58	703.50	03/03/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.08	ND	17.59	704.49	09/14/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.08	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	15.96	706.12	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	16.56	705.52	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-102S TOS(bgs): 9 BOS(bgs): 19 GE: 720.28 Finish: stickup Stickup Height: 2.50	722.78	ND	15.58	707.20	07/17/19	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.78	ND	15.61	707.17	02/25/20	<5	0.1	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.78	ND	16.13	706.65	08/18/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.78	ND	17.07	705.71	03/02/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.78	ND	16.48	706.30	09/14/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.78	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	16.81	705.97	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.36	705.42	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.39	705.39	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.23	705.55	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.78	707.00	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.88	706.90	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Isopropyl benzene	2-Methylnaphthalene	4-Methyl-2-pentanone (MIBK)	Methyl-t-butyl ether (MTBE)	Methyl iodide	Methylene chloride	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
Drinking Water - Res						800	260	1,800	40 (E)	NA	5 (A)	520	80	100 (A)	77	200 (A)	8.5	5 (A)	NA	42	NA	70 (A)	63 (E)	72 (E)
Drinking Water - Non-Res						2,300	750	5,200	40 (E)	NA	5 (A)	1,500	230	100 (A)	320	200 (A)	35	5 (A)	NA	120	NA	70 (A)	63 (E)	72 (E)
Groundwater Surface Water Interface						28	19	ID	7,100	NA	1,500 (X)	11	ID	80 (X)	ID	89	78 (X)	330 (X)	NA	NA	NA	99 (X)	17	45
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-103S TOS(bgs): 9 BOS(bgs): 19 GE: 717.16 Finish: stickup Stickup Height: 2.50	719.66	ND	13.71	705.95	07/17/19	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.66	ND	13.58	706.08	02/28/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.66	ND	14.22	705.44	08/19/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.66	ND	15.05	704.61	03/03/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.66	ND	14.31	705.35	09/14/21	<5	0.25	<50	<5	<1	<5	0.13	<1	<1	<1	<1	<1	<1	<5	<1	<1	0.11	<1	<1
	719.66	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.66	14.68	14.86	704.80	03/16/22	<5	0.3	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	0.14	<1	<1	0.17	<1	<1
	719.66	ND	15.05	704.61	09/13/22	<5	0.24	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.66	ND	15.00	704.66	03/21/23	<5	0.45	<50	<5	<1	<5	0.21	<1	<1	<1	<1	<1	<1	0.15	<1	<1	0.15	<1	<1
	719.66	ND	13.22	706.44	09/14/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.66	ND	13.69	705.97	03/28/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	0.33	<5	0.29	<1
	719.66	ND	13.87	705.79	09/17/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
MW-104S TOS(bgs): 13 BOS(bgs): 18 GE: 721.53 Finish: flushmount TOC Depth: -0.50	721.03	ND	13.68	707.35	07/16/19	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	721.03	ND	13.79	707.24	02/25/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	721.03	ND	14.22	706.81	08/18/20	<5	<5	<50	<5	<1	0.11	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	721.03	ND	9.12	711.91	03/02/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	721.03	ND	15.21	705.82	09/14/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	721.03	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	15.47	705.56	03/16/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	721.03	ND	15.21	705.82	09/13/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	721.03	ND	16.25	704.78	03/21/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	721.03	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	14.52	706.51	03/27/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	721.03	ND	14.15	706.88	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-105S TOS(bgs): 13 BOS(bgs): 18 GE: 723.64 Finish: flushmount TOC Depth: -0.50	723.14	ND	12.88	710.26	07/16/19	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.14	ND	12.89	710.25	02/25/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.14	ND	14.32	708.82	08/18/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.14	ND	14.33	708.81	03/02/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.14	ND	14.34	708.80	09/14/21	<5	0.11	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.14	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.15	708.99	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.17	708.97	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.69	708.45	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.08	709.06	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.30	709.84	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.43	709.71	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Isopropyl benzene	2-Methylnaphthalene	4-Methyl-2-pentanone (MIBK)	Methyl-t-butyl ether (MTBE)	Methyl iodide	Methylene chloride	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
Drinking Water - Res						800	260	1,800	40 (E)	NA	5 (A)	520	80	100 (A)	77	200 (A)	8.5	5 (A)	NA	42	NA	70 (A)	63 (E)	72 (E)
Drinking Water - Non-Res						2,300	750	5,200	40 (E)	NA	5 (A)	1,500	230	100 (A)	320	200 (A)	35	5 (A)	NA	120	NA	70 (A)	63 (E)	72 (E)
Groundwater Surface Water Interface						28	19	ID	7,100	NA	1,500 (X)	11	ID	80 (X)	ID	89	78 (X)	330 (X)	NA	NA	NA	99 (X)	17	45
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-106SR TOS(bgs): 13 BOS(bgs): 18 GE: 723.86 Finish: flushmount TOC Depth: -0.50	723.36	ND	14.56	708.80	07/16/19	<5	<5	<50	<5	<1	0.18	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.36	ND	14.63	708.73	02/25/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.36	ND	14.32	709.04	08/18/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.36	DRY	16.47	706.89	03/02/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	DRY	15.87	707.49	09/14/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.36	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	16.30	707.06	03/16/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.36	ND	15.92	707.44	09/13/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.36	ND	17.09	706.27	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	15.11	708.25	09/14/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.36	ND	15.21	708.15	03/27/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	723.36	ND	15.85	707.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-107S TOS(bgs): 13 BOS(bgs): 18 GE: 723.37 Finish: flushmount TOC Depth: -0.50	722.87	ND	15.35	707.52	07/16/19	<5	<5	<50	<5	<1	0.17	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.87	ND	15.27	707.60	02/25/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.87	ND	14.62	708.25	08/18/20	<5	<5	<50	<5	<1	0.1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.87	ND	16.81	706.06	03/02/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.87	ND	16.20	706.67	09/15/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.87	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.61	706.26	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.40	706.47	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	17.21	705.66	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.87	707.00	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.64	707.23	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-108S TOS(bgs): 11 BOS(bgs): 16 GE: 711.52 Finish: stickup Stickup Height: 2.50	714.02	ND	11.22	702.80	07/17/19	<5	<5	<50	<5	<1	0.18	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	ND	10.85	703.17	02/27/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	ND	11.97	702.05	08/19/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	ND	12.34	701.68	03/03/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	ND	12.32	701.70	09/15/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	ND	11.90	702.12	03/16/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	ND	12.97	701.05	09/13/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	ND	12.45	701.57	03/21/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	ND	10.66	703.36	09/14/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	ND	10.71	703.31	03/27/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.02	ND	11.47	702.55	09/17/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Isopropyl benzene	2-Methylnaphthalene	4-Methyl-2-pentanone (MIBK)	Methyl-t-butyl ether (MTBE)	Methyl iodide	Methylene chloride	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
Drinking Water - Res						800	260	1,800	40 (E)	NA	5 (A)	520	80	100 (A)	77	200 (A)	8.5	5 (A)	NA	42	NA	70 (A)	63 (E)	72 (E)
Drinking Water - Non-Res						2,300	750	5,200	40 (E)	NA	5 (A)	1,500	230	100 (A)	320	200 (A)	35	5 (A)	NA	120	NA	70 (A)	63 (E)	72 (E)
Groundwater Surface Water Interface						28	19	ID	7,100	NA	1,500 (X)	11	ID	80 (X)	ID	89	78 (X)	330 (X)	NA	NA	NA	99 (X)	17	45
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-109S TOS(bgs): 9 BOS(bgs): 14 GE: 712.12 Finish: stickup Stickup Height: 2.50	714.62	ND	11.14	703.48	07/17/19	<5	<5	<50	<5	<1	0.19	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.62	ND	10.89	703.73	02/27/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.62	ND	11.66	702.96	08/19/20	<5	<5	<50	<5	<1	0.12	<5	<1	<1	<1	0.15	<1	<1	<5	<1	<1	<5	<1	<1
	714.62	ND	11.98	702.64	03/03/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.62	ND	11.67	702.95	09/15/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.62	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.59	703.03	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	12.25	702.37	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.70	702.92	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.08	703.54	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	8.10	706.52	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.27	703.35	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-110S TOS(bgs): 9 BOS(bgs): 14 GE: 710.57 Finish: stickup Stickup Height: 2.50	713.07	ND	11.83	701.24	07/17/19	<5	<5	<50	<5	<1	0.19	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	ND	11.45	701.62	02/27/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	ND	12.18	700.89	08/19/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	ND	12.04	701.03	03/03/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	ND	12.36	700.71	09/15/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	713.07	ND	12.02	701.05	03/16/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	ND	12.76	700.31	09/13/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	ND	11.73	701.34	03/21/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	ND	11.54	701.53	09/14/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	ND	11.17	701.90	03/27/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	713.07	ND	12.88	700.19	09/17/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
MW-111S TOS(bgs): 9 BOS(bgs): 14 GE: 717.03 Finish: stickup Stickup Height: 2.50	719.53	ND	12.88	706.65	07/17/19	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.53	ND	12.65	706.88	02/27/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.53	ND	13.54	705.99	08/19/20	<5	<5	<50	<5	<1	0.13	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.53	ND	14.55	704.98	03/03/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.53	ND	13.63	705.90	09/16/21	<5	0.15	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	719.53	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.01	705.52	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.59	704.94	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.07	706.46	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.17	706.36	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Isopropyl benzene	2-Methylnaphthalene	4-Methyl-2-pentanone (MIBK)	Methyl-t-butyl ether (MTBE)	Methyl iodide	Methylene chloride	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
Drinking Water - Res						800	260	1,800	40 (E)	NA	5 (A)	520	80	100 (A)	77	200 (A)	8.5	5 (A)	NA	42	NA	70 (A)	63 (E)	72 (E)
Drinking Water - Non-Res						2,300	750	5,200	40 (E)	NA	5 (A)	1,500	230	100 (A)	320	200 (A)	35	5 (A)	NA	120	NA	70 (A)	63 (E)	72 (E)
Groundwater Surface Water Interface						28	19	ID	7,100	NA	1,500 (X)	11	ID	80 (X)	ID	89	78 (X)	330 (X)	NA	NA	NA	99 (X)	17	45
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)						TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date														
MW-112S TOS(bgs): 15 BOS(bgs): 20 GE: 720.50 Finish: flushmount TOC Depth: -0.50	720.00	ND	14.43	705.57	07/16/19																			
	Dupe 1 (MW-112S)			--	07/16/19																			
	720.00	ND	14.59	705.41	02/27/20																			
	Dupe 1 (MW-112S)			--	02/27/20																			
	720.00	ND	14.95	705.05	08/18/20																			
	Dupe #1 (MW-112S)			--	08/18/20																			
	720.00	ND	17.02	702.98	03/02/21																			
	Dupe1 (MW-112S)			--	03/02/21																			
	720.00	ND	15.15	704.85	09/15/21																			
	Dupe 1			--	09/15/21																			
	720.00	NG	NG	--	11/18/21																			
	720.00	ND	16.35	703.65	03/16/22																			
	720.00	ND	16.70	703.30	09/13/22																			
	720.00	ND	16.80	703.20	03/21/23																			
	720.00	ND	14.27	705.73	09/14/23																			
	720.00	ND	15.19	704.81	03/27/24																			
	720.00	ND	14.61	705.39	09/17/24																			
MW-113S TOS(bgs): 8.5 BOS(bgs): 13.5 GE: 711.50 Finish: stickup Stickup Height: 2.50	714.00	ND	12.31	701.69	07/17/19																			
	714.00	ND	12.02	701.98	02/27/20																			
	714.00	ND	12.79	701.21	08/19/20																			
	714.00	ND	12.94	701.06	03/03/21																			
	714.00	ND	13.01	700.99	09/15/21																			
	714.00	NG	NG	--	11/18/21																			
	714.00	ND	12.89	701.11	03/16/22																			
	714.00	ND	13.60	700.40	09/13/22																			
	714.00	ND	13.00	701.00	03/21/23																			
	714.00	ND	12.78	701.22	09/14/23																			
	714.00	ND	12.21	701.79	03/27/24																			
	714.00	ND	12.49	701.51	09/17/24																			

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Isopropyl benzene	2-Methylnaphthalene	4-Methyl-2-pentanone (MIBK)	Methyl-t-butyl ether (MTBE)	Methyl iodide	Methylene chloride	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
Drinking Water - Res						800	260	1,800	40 (E)	NA	5 (A)	520	80	100 (A)	77	200 (A)	8.5	5 (A)	NA	42	NA	70 (A)	63 (E)	72 (E)
Drinking Water - Non-Res						2,300	750	5,200	40 (E)	NA	5 (A)	1,500	230	100 (A)	320	200 (A)	35	5 (A)	NA	120	NA	70 (A)	63 (E)	72 (E)
Groundwater Surface Water Interface						28	19	ID	7,100	NA	1,500 (X)	11	ID	80 (X)	ID	89	78 (X)	330 (X)	NA	NA	NA	99 (X)	17	45
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-114S TOS(bgs): 7 BOS(bgs): 12 GE: 712.33 Finish: stickup Stickup Height: -0.59	711.74	ND	8.36	703.38	07/17/19	<30	<30	<250	<30	<5	2.5	<30	<5	<5	<5	1.7	<5	<5	<30	<5	<5	<30	<5	<5
	Dupe 2 (MW-114S)			--	07/17/19	<30	<30	<250	<30	<5	2.5	<30	<5	<5	<5	1.5	<5	<5	<30	<5	<5	<30	<5	<5
	711.74	ND	8.11	703.63	02/27/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	2	<1	<1	<5	<1	<1	<5	<1	<1
	Dupe 2 (MW-114S)			--	02/27/20	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	2	<1	<1	<5	<1	<1	<5	<1	<1
	711.74	ND	8.82	702.92	08/19/20	<50	<50	<500	<50	<10	10.2	<50	<10	<10	<10	1.9	<10	<10	<50	<10	<10	<50	<10	<10
	Dupe #2 (MW-114S)			--	08/19/20	<50	<50	<500	<50	<10	9.9	<50	<10	<10	<10	1.9	<10	<10	<50	<10	<10	<50	<10	<10
	711.74	ND	9.12	702.62	03/03/21	<50	<50	<500	<50	<10	<50	<50	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<10	<10
	Dupe-2 (MW-114S)			--	03/03/21	<50	<50	<500	<50	<10	<50	<50	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<10	<10
	711.74	ND	8.82	702.92	09/15/21	<50	<50	<500	<50	<10	<50	<50	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<10	<10
	Dupe 2			--	09/15/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	1	<1	<1	<5	<1	<1	<5	<1	<1
	711.74	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	711.74	ND	8.72	703.02	03/16/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	1	<1	<1	<5	<1	<1	<5	<1	<1
	Dupe1 (MW-114S)			--	03/16/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	1	<1	<1	<5	<1	<1	<5	<1	<1
	711.74	ND	9.42	702.32	09/13/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	1	<1	<1	<5	<1	<1	<5	<1	<1
	Dupe1 (MW-114S)			--	09/13/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	1	<1	<1	<5	<1	<1	<5	<1	<1
	711.74	ND	8.84	702.90	03/21/23	<30	1.6	<250	<30	<5	<30	0.65	<5	<5	<5	1.2	<5	<5	0.5	<5	<5	<30	<5	<5
	Dupe1 (MW-114S)			--	03/21/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	0.93	<1	<1	<5	<1	<1	<5	<1	<1
	711.74	ND	7.98	703.76	09/14/23	<30	<30	<250	<30	<5	<30	<30	<5	<5	<5	<5	<5	<5	<30	<5	<5	<30	<5	<5
	Dupe1 (MW-114S)			--	09/14/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	1	<1	<1	<5	<1	<1	<5	<1	<1
	711.74	ND	10.89	700.85	03/27/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	0.58	<1	<1	<5	<1	<1	<5	<1	<1
	Dup1 (MW-114S)			--	03/27/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	0.59	<1	<1	<5	<1	<1	<5	<1	<1
	711.74	ND	8.45	703.29	09/17/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	Dup1 (MW-114S)			--	09/17/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
MW-115S TOS(bgs): 7 BOS(bgs): 12 GE: 711.92 Finish: Stickup Stickup Height: 3.06	714.98	ND	11.35	703.63	11/18/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	714.98	ND	11.89	703.09	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	12.43	702.55	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.94	703.04	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.23	703.75	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.10	703.88	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.47	703.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-116S TOS(bgs): 14 BOS(bgs): 19 GE: 719.95 Finish: Stickup Stickup Height: 3.02	722.97	ND	19.99	702.98	11/18/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	Dupe1 (MW-116S)			--	11/18/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	722.97	ND	20.87	702.10	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.15	701.82	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.25	701.72	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	20.94	702.03	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.89	703.08	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.88	703.09	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Isopropyl benzene	2-Methylnaphthalene	4-Methyl-2-pentanone (MIBK)	Methyl-t-butyl ether (MTBE)	Methyl iodide	Methylene chloride	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
Drinking Water - Res						800	260	1,800	40 (E)	NA	5 (A)	520	80	100 (A)	77	200 (A)	8.5	5 (A)	NA	42	NA	70 (A)	63 (E)	72 (E)
Drinking Water - Non-Res						2,300	750	5,200	40 (E)	NA	5 (A)	1,500	230	100 (A)	320	200 (A)	35	5 (A)	NA	120	NA	70 (A)	63 (E)	72 (E)
Groundwater Surface Water Interface						28	19	ID	7,100	NA	1,500 (X)	11	ID	80 (X)	ID	89	78 (X)	330 (X)	NA	NA	NA	99 (X)	17	45
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)						TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date														
MW-117S TOS(bgs): 9 BOS(bgs): 14 GE: 717.15 Finish: Stickup Stickup Height: 3.09	720.24	ND	14.87	705.37	11/18/21	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	720.24	ND	15.40	704.84	03/16/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	720.24	ND	15.62	704.62	09/13/22	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	720.24	ND	15.20	705.04	03/21/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	720.24	ND	14.59	705.65	09/14/23	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	720.24	ND	14.68	705.56	03/28/24	<5	<5	<50	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<1	<1
	720.24	ND	14.97	705.27	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Results in micrograms per liter (ug/L).

Footnotes are presented behind the analytical summary tables.

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Tetrachloroethylene (PCE)	Tetrahydrofuran	Toluene	Trichloroethylene (TCE)	Trichlorofluoromethane	Vinyl Chloride	o-Xylene	p,m-Xylene	Xylenes, Total	Arsenic, Dissolved	Arsenic (B)	Chromium, Total, Dissolved	Chromium, Total	Chromium, VI, Dissolved	Chromium, VI	Copper, Dissolved	Copper (B)	Lead, Dissolved	Lead (B)
Drinking Water - Res						5 (A)	95	790 (E)	5 (A)	2,600	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Drinking Water - Non-Res						5 (A)	270	790 (E)	5 (A)	7,300	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Groundwater Surface Water Interface						60 (X)	11,000 (X)	270	200 (X)	NA	13 (X)	NA	NA	49	10	10	160	160	11	11	20	20	44	44
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-100S TOS(bgs): 5 BOS(bgs): 15 GE: 720.56 Finish: stickup Stickup Height: 2.50	723.06	ND	14.97	708.09	07/16/19	<1	<90	<1	10	<1	<1	<1	<2	<3	0.298	0.572	0.345	0.56	<0.01	<0.01	0.829	0.816	<0.003	<0.003
	723.06	ND	15.26	707.80	02/25/20	<1	<90	<1	16	<1	<1	<1	<2	<3	<2	<2	0.275	0.42	<5	<10	0.405	<5	<3	0.249
	723.06	ND	16.07	706.99	08/18/20	<1	<90	<1	10	<1	<1	<1	<2	<3	0.57	<2	0.548	0.938	<10	<10	0.489	0.709	0.274	0.234
	723.06	ND	17.48	705.58	03/02/21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	723.06	ND	16.40	706.66	09/14/21	<1	<90	<1	14	<1	<1	<1	<2	<3	<2	0.53	0.46	3.58	<10	<10	0.71	1.73	<3	0.35
	723.06	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.63	705.43	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.42	705.64	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.62	705.44	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.40	705.66	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	16.35	706.71	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	723.06	ND	15.94	707.12	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-101S TOS(bgs): 9 BOS(bgs): 19 GE: 719.58 Finish: stickup Stickup Height: 2.50 well destroyed well destroyed well destroyed well destroyed	722.08	ND	15.84	706.24	07/16/19	0.14	<90	<1	1	<1	<1	<1	<2	<3	0.475	0.521	3.944	2.54	<0.01	<0.01	2.404	3.124	1.434	0.361
	722.08	ND	16.00	706.08	02/25/20	<1	<90	<1	2	<1	<1	<1	<2	<3	<2	<2	0.891	2.753	<5	<10	<0.005	0.698	<3	0.283
	722.08	ND	17.00	705.08	08/18/20	<1	<90	<1	5	<1	<1	<1	<2	<3	<2	1.019	1.225	2.151	<10	<10	<5	0.596	<3	0.409
	722.08	ND	18.58	703.50	03/03/21	<1	<90	<1	2	<1	<1	<1	<2	<3	<2	9	4.09	351	<10	<2	0.579	34	0.4	17
	722.08	ND	17.59	704.49	09/14/21	<1	<90	0.11	3	<1	<1	<1	<2	<3	<2	6	1.05	70	<10	<250	1	22	<3	13
	722.08	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	15.96	706.12	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	16.56	705.52	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-102S TOS(bgs): 9 BOS(bgs): 19 GE: 720.28 Finish: stickup Stickup Height: 2.50	722.78	ND	15.58	707.20	07/17/19	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.577	<0.002	5	6	<0.01	<0.01	0.579	0.742	<0.003	<0.003
	722.78	ND	15.61	707.17	02/25/20	<1	<90	<1	0.16	<1	<1	<1	<2	<3	<2	<2	7	6	8	<10	<0.005	0.516	<3	<3
	722.78	ND	16.13	706.65	08/18/20	<1	<90	<1	0.12	<1	<1	<1	<2	<3	0.362	0.414	2.804	1170	<10	<10	1.301	55	<3	<3
	722.78	ND	17.07	705.71	03/02/21	<1	<90	<1	<1	<1	<1	<1	<2	<3	<2	0.318	2	15	<10	<10	<5	1.2	<3	0.412
	722.78	ND	16.48	706.30	09/14/21	<1	<90	<1	0.67	<1	<1	<1	<2	<3	<2	0.51	7	7	<10	8	<5	0.45	<3	<3
	722.78	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	16.81	705.97	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.36	705.42	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.39	705.39	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.23	705.55	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.78	707.00	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.88	706.90	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Tetrachloroethylene (PCE)	Tetrahydrofuran	Toluene	Trichloroethylene (TCE)	Trichlorofluoromethane	Vinyl Chloride	o-Xylene	p,m-Xylene	Xylenes, Total	Arsenic, Dissolved	Arsenic (B)	Chromium, Total, Dissolved	Chromium, Total	Chromium, VI, Dissolved	Chromium, VI	Copper, Dissolved	Copper (B)	Lead, Dissolved	Lead (B)
Drinking Water - Res						5 (A)	95	790 (E)	5 (A)	2,600	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Drinking Water - Non-Res						5 (A)	270	790 (E)	5 (A)	7,300	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Groundwater Surface Water Interface						60 (X)	11,000 (X)	270	200 (X)	NA	13 (X)	NA	NA	49	10	10	160	160	11	11	20	20	44	44
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-103S TOS(bgs): 9 BOS(bgs): 19 GE: 717.16 Finish: stickup Stickup Height: 2.50	719.66	ND	13.71	705.95	07/17/19	<1	<90	<1	<1	<1	<1	<1	<2	<3	7	39	0.246	0.382	<0.01	<0.02	<0.005	0.775	<0.003	<0.003
	719.66	ND	13.58	706.08	02/28/20	<1	<90	<1	<1	<1	0.81	<1	<2	<3	4	46	0.204	0.388	<10	<20	<0.005	0.528	0.208	<3
	719.66	ND	14.22	705.44	08/19/20	<1	<90	0.19	<1	<1	0.99	<1	<2	<3	13	64	0.174	0.221	<20	<250	<5	<5	<3	<3
	719.66	ND	15.05	704.61	03/03/21	<1	<90	0.34	<1	<1	<1	<1	<2	<3	18	37	0.212	0.229	<10	<2	<5	<5	<3	<3
	719.66	ND	14.31	705.35	09/14/21	<1	<90	<1	<1	<1	<1	<1	<2	<3	10	34	<5	0.36	<10	<250	<5	0.84	<3	0.21
	719.66	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.66	14.68	14.86	704.80	03/16/22	<1	<90	<1	<1	<1	0.21	<1	<2	<3	8	39	<10	<10	0.238	0.258	<5	<5	<3	<3
	719.66	ND	15.05	704.61	09/13/22	<1	<90	0.16	<1	<1	0.74	<1	<2	<3	20	57	<10	<250	0.2	0.969	<5	<5	<3	<3
	719.66	ND	15.00	704.66	03/21/23	<1	1.28	0.18	0.1	<1	<1	0.11	0.22	0.33	8	14	<10	<0.25	0.204	0.406	<0.005	0.469	<3	<3
	719.66	ND	13.22	706.44	09/14/23	<1	<90	<1	<1	<1	<1	<1	<2	<3	13	40	<50	<50	0.181	0.342	<5	<5	<3	<3
	719.66	ND	13.69	705.97	03/28/24	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.032	0.045	<5	<5	<20	<250	<5	<5	<3	<3
	719.66	ND	13.87	705.79	09/17/24	<1	<90	<1	<1	<1	1	<1	<2	<3	16	55	4	<250	<5	<5	<5	<5	<3	<3
MW-104S TOS(bgs): 13 BOS(bgs): 18 GE: 721.53 Finish: flushmount TOC Depth: -0.50	721.03	ND	13.68	707.35	07/16/19	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.496	0.358	0.302	34	<0.01	<0.01	1.698	3.404	<0.003	<0.003
	721.03	ND	13.79	707.24	02/25/20	<1	<90	<1	<1	<1	<1	<1	<2	<3	<2	<2	0.562	16	<5	<10	3.473	9	<3	<3
	721.03	ND	14.22	706.81	08/18/20	<1	<90	<1	<1	<1	<1	<1	<2	<3	<2	0.339	0.474	61	<10	<10	0.707	2.148	<3	<3
	721.03	ND	9.12	711.91	03/02/21	<1	<90	<1	<1	<1	<1	<1	<2	<3	<2	0.493	3.14	1210	<10	<10	0.766	30	<3	<3
	721.03	ND	15.21	705.82	09/14/21	<1	<90	<1	0.24	<1	<1	<1	<2	<3	<2	<2	0.19	100	<10	<10	0.75	2.89	<3	<3
	721.03	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	15.47	705.56	03/16/22	<1	<90	<1	0.21	<1	<1	<1	<2	<3	0.423	0.872	<10	<10	0.725	106	0.441	1.738	<3	<3
	721.03	ND	15.21	705.82	09/13/22	<1	<90	<1	<1	<1	<1	<1	<2	<3	1.779	4	<10	<50	10	17,100	1.252	129	<3	0.297
	721.03	ND	16.25	704.78	03/21/23	<1	<90	<1	<1	<1	<1	<1	<2	<3	1.4	1.38	<10	<10	0.502	70	1.46	3.59	<3	<3
	721.03	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	14.52	706.51	03/27/24	<1	<90	<1	<1	<1	<1	<1	<2	<3	<2	<2	<5	60	<10	<10	1.156	6	<3	<3
	721.03	ND	14.15	706.88	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-105S TOS(bgs): 13 BOS(bgs): 18 GE: 723.64 Finish: flushmount TOC Depth: -0.50	723.14	ND	12.88	710.26	07/16/19	43	<90	<1	<1	<1	<1	<1	<2	<3	0.399	1.03	0.802	83	<0.01	<0.01	2.039	4.683	0.673	0.303
	723.14	ND	12.89	710.25	02/25/20	78	<90	<1	<1	<1	<1	<1	<2	<3	<2	0.316	0.463	280	<5	<10	0.396	6	<3	<3
	723.14	ND	14.32	708.82	08/18/20	55	<90	<1	<1	<1	<1	<1	<2	<3	<2	0.558	1.072	24	<10	<10	0.563	0.971	<3	<3
	723.14	ND	14.33	708.81	03/02/21	101	<90	<1	<1	<1	<1	<1	<2	<3	<2	0.423	0.779	30	<10	<10	0.651	1.28	<3	<3
	723.14	ND	14.34	708.80	09/14/21	93	<90	<1	0.14	<1	<1	<1	<2	<3	0.52	0.78	0.76	35	<10	<10	<5	0.56	<3	0.25
	723.14	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.15	708.99	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.17	708.97	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.69	708.45	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.08	709.06	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.30	709.84	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.43	709.71	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Tetrachloroethylene (PCE)	Tetrahydrofuran	Toluene	Trichloroethylene (TCE)	Trichlorofluoromethane	Vinyl Chloride	o-Xylene	p,m-Xylene	Xylenes, Total	Arsenic, Dissolved	Arsenic (B)	Chromium, Total, Dissolved	Chromium, Total	Chromium, VI, Dissolved	Chromium, VI	Copper, Dissolved	Copper (B)	Lead, Dissolved	Lead (B)
Drinking Water - Res						5 (A)	95	790 (E)	5 (A)	2,600	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Drinking Water - Non-Res						5 (A)	270	790 (E)	5 (A)	7,300	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Groundwater Surface Water Interface						60 (X)	11,000 (X)	270	200 (X)	NA	13 (X)	NA	NA	49	10	10	160	160	11	11	20	20	44	44
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-106SR TOS(bgs): 13 BOS(bgs): 18 GE: 723.86 Finish: flushmount TOC Depth: -0.50	723.36	ND	14.56	708.80	07/16/19	<1	<90	<1	<1	<1	<1	<1	<2	<3	<0.002	0.275	0.328	4.544	<0.01	<0.01	0.898	1.603	<0.003	0.216
	723.36	ND	14.63	708.73	02/25/20	<1	<90	<1	<1	<1	<1	<1	<2	<3	<2	1.173	0.719	764	<5	<10	0.576	14	<3	0.886
	723.36	ND	14.32	709.04	08/18/20	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.934	0.314	1.389	22	<10	<10	0.814	1.003	<3	<3
	723.36	DRY	16.47	706.89	03/02/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	DRY	15.87	707.49	09/14/21	<1	<90	<1	0.11	<1	<1	<1	<2	<3	<2	2	2.19	5800	<10	<10	519	54	0.31	0.97
	723.36	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	16.30	707.06	03/16/22	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.616	1.593	<10	<10	0.875	2020	0.781	33	<3	1.062
	723.36	ND	15.92	707.44	09/13/22	<1	<90	<1	<1	<1	<1	<1	<2	<3	1.625	2	<10	<50	1.056	278	1.603	7	<3	0.271
	723.36	ND	17.09	706.27	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	15.11	708.25	09/14/23	<1	<90	<1	<1	<1	<1	<1	<2	<3	2	3	<10	<10	0.575	155	0.735	2.188	<3	0.251
	723.36	ND	15.21	708.15	03/27/24	<1	<90	<1	<1	<1	<1	<1	<2	<3	3	1.629	1.218	598	<10	<10	<5	9	<3	<3
	723.36	ND	15.85	707.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-107S TOS(bgs): 13 BOS(bgs): 18 GE: 723.37 Finish: flushmount TOC Depth: -0.50	722.87	ND	15.35	707.52	07/16/19	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.485	<0.002	0.286	0.301	<0.01	<0.01	1.576	1.663	<0.003	<0.003
	722.87	ND	15.27	707.60	02/25/20	<1	<90	<1	0.15	<1	<1	<1	<2	<3	<2	0.465	<5	0.185	<5	4	0.86	0.996	<3	0.283
	722.87	ND	14.62	708.25	08/18/20	<1	<90	<1	2	<1	0.94	<1	<2	<3	<2	0.258	0.14	<0.005	<10	<10	0.478	0.417	<3	<3
	722.87	ND	16.81	706.06	03/02/21	<1	<90	<1	2	<1	3	<1	<2	<3	0.441	0.578	0.181	<5	<10	<10	0.517	0.59	<3	<3
	722.87	ND	16.20	706.67	09/15/21	<1	<90	<1	2	<1	<1	<1	<2	<3	0.5	0.26	0.83	0.11	<10	<10	1.01	1	0.21	0.31
	722.87	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.61	706.26	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.40	706.47	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	17.21	705.66	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.87	707.00	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.64	707.23	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-108S TOS(bgs): 11 BOS(bgs): 16 GE: 711.52 Finish: stickup Stickup Height: 2.50	714.02	ND	11.22	702.80	07/17/19	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.483	0.328	0.326	0.575	<0.01	<0.01	0.545	0.975	<0.003	0.37
	714.02	ND	10.85	703.17	02/27/20	<1	<90	<1	0.14	<1	<1	<1	<2	<3	0.257	<2	0.295	0.431	<5	<25	1.357	0.564	<3	<3
	714.02	ND	11.97	702.05	08/19/20	<1	<90	<1	0.26	<1	<1	<1	<2	<3	<0.002	<0.002	0.299	0.207	<10	<10	0.418	0.448	<3	<3
	714.02	ND	12.34	701.68	03/03/21	<1	<90	<1	<1	<1	<1	<1	<2	<3	<0.002	0.257	0.132	1.03	<10	<10	0.665	0.963	<3	<3
	714.02	ND	12.32	701.70	09/15/21	<1	<90	<1	0.34	<1	<1	<1	<2	<3	<2	<2	0.35	0.16	<10	<10	1.28	1.34	0.24	0.23
	714.02	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	ND	11.90	702.12	03/16/22	<1	<90	<1	0.18	<1	<1	<1	<2	<3	<2	1.122	<10	<10	0.298	0.364	0.505	0.628	<3	<3
	714.02	ND	12.97	701.05	09/13/22	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.565	0.332	<10	<10	0.428	1.308	0.853	0.747	<3	<3
	714.02	ND	12.45	701.57	03/21/23	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.381	0.465	<10	<10	0.27	0.559	0.856	2.42	<3	0.508
	714.02	ND	10.66	703.36	09/14/23	<1	<90	<1	0.27	<1	<1	<1	<2	<3	1.347	2	<10	<10	1.099	0.414	<5	<5	<3	<3
	714.02	ND	10.71	703.31	03/27/24	<1	<90	<1	<1	<1	<1	<1	<2	<3	<2	<2	<5	<5	<10	<10	<5	<5	<3	<3
	714.02	ND	11.47	702.55	09/17/24	<1	<90	<1	<1	<1	<1	<1	<2	<3	<2	<2	<10	<10	<5	<5	<5	<5	<3	1.063

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Tetrachloroethylene (PCE)	Tetrahydrofuran	Toluene	Trichloroethylene (TCE)	Trichlorofluoromethane	Vinyl Chloride	o-Xylene	p,m-Xylene	Xylenes, Total	Arsenic, Dissolved	Arsenic (B)	Chromium, Total, Dissolved	Chromium, Total	Chromium, VI, Dissolved	Chromium, VI	Copper, Dissolved	Copper (B)	Lead, Dissolved	Lead (B)
Drinking Water - Res						5 (A)	95	790 (E)	5 (A)	2,600	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Drinking Water - Non-Res						5 (A)	270	790 (E)	5 (A)	7,300	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Groundwater Surface Water Interface						60 (X)	11,000 (X)	270	200 (X)	NA	13 (X)	NA	NA	49	10	10	160	160	11	11	20	20	44	44
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-109S TOS(bgs): 9 BOS(bgs): 14 GE: 712.12 Finish: stickup Stickup Height: 2.50	714.62	ND	11.14	703.48	07/17/19	<1	<90	<1	11	<1	7	<1	<2	<3	10	73	0.265	2.927	<0.01	<0.02	<0.005	0.774	<0.003	<0.003
	714.62	ND	10.89	703.73	02/27/20	<1	<90	<1	13	<1	18	<1	<2	<3	9	69	0.138	1.767	<5	<500	<5	<5	<3	<3
	714.62	ND	11.66	702.96	08/19/20	<1	<90	<1	21	<1	11	<1	<2	<3	16	113	0.17	0.282	<10	<0.25	<5	<5	<3	0.245
	714.62	ND	11.98	702.64	03/03/21	<1	<90	<1	23	<1	8	<1	<2	<3	10	86	0.269	1.27	<10	<5	<5	1.5	<3	1.28
	714.62	ND	11.67	702.95	09/15/21	<1	<90	<1	25	<1	11	<1	<2	<3	52	73	0.31	0.27	<10	<50	<5	<5	<5	<5
	714.62	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.59	703.03	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	12.25	702.37	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.70	702.92	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.08	703.54	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	8.10	706.52	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.27	703.35	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-110S TOS(bgs): 9 BOS(bgs): 14 GE: 710.57 Finish: stickup Stickup Height: 2.50	713.07	ND	11.83	701.24	07/17/19	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.295	1.72	0.406	1.283	<0.01	<0.02	0.497	0.543	<0.003	<0.003
	713.07	ND	11.45	701.62	02/27/20	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.518	2	0.312	0.862	<5	<500	<5	0.835	<3	0.242
	713.07	ND	12.18	700.89	08/19/20	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.616	1.261	0.393	0.458	<10	<50	<5	<5	0.904	<0.003
	713.07	ND	12.04	701.03	03/03/21	<1	<90	<1	<1	<1	<1	<1	<2	<3	1.03	2	0.194	0.261	<10	<10	1.56	4.08	<3	0.375
	713.07	ND	12.36	700.71	09/15/21	<1	<90	<1	<1	<1	<1	<1	<2	<3	1.06	1.85	0.26	13	<10	<50	0.59	1.86	<3	0.39
	713.07	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	713.07	ND	12.02	701.05	03/16/22	<1	<90	<1	<1	<1	<1	<1	<2	<3	1.91	9	<10	<10	0.216	2.794	<0.005	1.805	<3	0.99
	713.07	ND	12.76	700.31	09/13/22	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.968	2	<10	<10	1.952	1.516	0.626	0.914	<3	<3
	713.07	ND	11.73	701.34	03/21/23	<1	<90	<1	<1	<1	<1	<1	<2	<3	1.18	2	<10	<10	0.39	1.33	1.81	4.11	<3	0.743
	713.07	ND	11.54	701.53	09/14/23	<1	<90	<1	0.16	<1	<1	<1	<2	<3	3	6	<10	<10	0.107	1.803	0.51	1.899	<3	0.729
	713.07	ND	11.17	701.90	03/27/24	<1	<90	<1	<1	<1	<1	<1	<2	<3	2	3	<5	<5	<20	<250	<5	1.039	<3	<3
	713.07	ND	12.88	700.19	09/17/24	<1	<90	<1	<1	<1	<1	<1	<2	<3	<2	<2	<10	<250	<5	<5	<5	<5	<3	<3
MW-111S TOS(bgs): 9 BOS(bgs): 14 GE: 717.03 Finish: stickup Stickup Height: 2.50	719.53	ND	12.88	706.65	07/17/19	<1	<90	<1	10	<1	<1	<1	<2	<3	0.535	0.942	5	6	<0.01	<0.01	0.752	0.938	<0.003	0.214
	719.53	ND	12.65	706.88	02/27/20	<1	<90	<1	6	<1	<1	<1	<2	<3	<2	0.998	6	6	<5	<500	0.501	0.694	<3	0.339
	719.53	ND	13.54	705.99	08/19/20	<1	<90	<1	8	<1	<1	<1	<2	<3	0.589	0.676	5	7	<10	<10	<5	0.392	<3	<3
	719.53	ND	14.55	704.98	03/03/21	<1	<90	<1	53	<1	2	<1	<2	<3	0.636	0.727	2.01	6	<10	<10	0.682	1.01	<3	0.223
	719.53	ND	13.63	705.90	09/16/21	<1	<90	<1	16	<1	<1	<1	<2	<3	<2	1.77	1.98	15	<10	<10	1.44	1.06	<3	0.38
	719.53	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.01	705.52	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.59	704.94	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.07	706.46	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.17	706.36	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Tetrachloroethylene (PCE)	Tetrahydrofuran	Toluene	Trichloroethylene (TCE)	Trichlorofluoromethane	Vinyl Chloride	o-Xylene	p,m-Xylene	Xylenes, Total	Arsenic, Dissolved	Arsenic (B)	Chromium, Total, Dissolved	Chromium, Total	Chromium, VI, Dissolved	Chromium, VI	Copper, Dissolved	Copper (B)	Lead, Dissolved	Lead (B)
Drinking Water - Res						5 (A)	95	790 (E)	5 (A)	2,600	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Drinking Water - Non-Res						5 (A)	270	790 (E)	5 (A)	7,300	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Groundwater Surface Water Interface						60 (X)	11,000 (X)	270	200 (X)	NA	13 (X)	NA	NA	49	10	10	160	160	11	11	20	20	44	44
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																			
MW-112S TOS(bgs): 15 BOS(bgs): 20 GE: 720.50 Finish: flushmount TOC Depth: -0.50	720.00	ND	14.43	705.57	07/16/19	<1	<90	<1	9	<1	7	<1	<2	<3	15	68	0.512	0.495	<0.01	<0.02	1.826	0.458	0.263	0.274
	Dupe 1 (MW-112S)			--	07/16/19	<1	<90	0.17	9	<1	6	<1	<2	<3	15	63	0.343	0.365	<0.01	<0.02	<0.005	1.106	<0.003	<0.003
	720.00	ND	14.59	705.41	02/27/20	<1	<90	<1	6	<1	10	<1	<2	<3	13	41	0.214	0.349	4	<500	<5	<5	<3	<3
	Dupe 1 (MW-112S)			--	02/27/20	<1	<90	<1	6	<1	11	<1	<2	<3	13	43	0.39	0.356	<5	<500	0.391	<5	0.584	<3
	720.00	ND	14.95	705.05	08/18/20	<1	<90	<1	4	<1	6	<1	<2	<3	18	68	0.389	0.851	<10	<250	<5	<5	<3	<3
	Dupe #1 (MW-112S)			--	08/18/20	<1	<90	0.1	4	<1	5	<1	<2	<3	19	70	0.281	0.279	<10	<250	<5	<5	<3	<3
	720.00	ND	17.02	702.98	03/02/21	<1	<90	<1	10	<1	2	<1	<2	<3	33	79	0.242	0.392	<10	<5	<5	<5	<3	<3
	Dupe1 (MW-112S)			--	03/02/21	<1	<90	<1	11	<1	3	<1	<2	<3	30	77	0.358	0.487	<10	<50	<5	<5	<3	<3
	720.00	ND	15.15	704.85	09/15/21	<1	<90	<1	4	<1	4	<1	<2	<3	40	71	0.34	0.42	<10	<50	<5	0.49	<3	0.2
	Dupe 1			--	09/15/21	<1	<90	0.11	4	<1	4	<1	<2	<3	29	73	0.12	0.33	<10	<50	<5	0.49	<3	<3
	720.00	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	720.00	ND	16.35	703.65	03/16/22	<1	<90	<1	1	<1	2	<1	<2	<3	32	89	<10	<10	0.38	0.368	<0.005	<0.005	<3	<3
	720.00	ND	16.70	703.30	09/13/22	<1	<90	<1	7	<1	2	<1	<2	<3	45	97	<10	<10	0.728	8	<5	<5	<3	<3
	720.00	ND	16.80	703.20	03/21/23	<1	<90	<1	1	<1	0.83	<1	<2	<3	15	40	<10	<10	0.401	0.42	<5	<5	<3	<3
MW-113S TOS(bgs): 8.5 BOS(bgs): 13.5 GE: 711.50 Finish: stickup Stickup Height: 2.50	720.00	ND	14.27	705.73	09/14/23	<1	<90	<1	5	<1	9	<1	<2	<3	34	86	<10	<10	0.208	0.707	<5	<5	<3	0.204
	720.00	ND	15.19	704.81	03/27/24	<1	<90	<1	1	<1	3	<1	<2	<3	23	64	<5	<5	<10	<50	<5	6	<3	<3
	720.00	ND	14.61	705.39	09/17/24	<1	<90	<1	3	<1	7	<1	<2	<3	27	71	<10	<250	<5	<5	<5	<5	<3	<3
	714.00	ND	12.31	701.69	07/17/19	<1	<90	<1	12	<1	0.78	<1	<2	<3	1.38	5	1.132	1.634	<0.01	<0.02	1.465	1.144	<0.003	0.195
	714.00	ND	12.02	701.98	02/27/20	<1	<90	<1	7	<1	0.79	<1	<2	<3	1.511	3	0.518	6	<5	<250	0.492	0.973	<3	0.4
	714.00	ND	12.79	701.21	08/19/20	<1	<90	<1	30	<1	2	<1	<2	<3	1.145	4	0.283	1.506	<10	<50	<5	<5	<3	<3
	714.00	ND	12.94	701.06	03/03/21	<1	<90	<1	5	<1	0.62	<1	<2	<3	2	4	0.39	2.35	<10	<10	0.504	1.02	<3	0.449
	714.00	ND	13.01	700.99	09/15/21	<1	<90	<1	29	<1	1	<1	<2	<3	1.33	6	0.49	3.92	<10	<50	0.46	2.18	0.25	1.02
	714.00	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.89	701.11	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	13.60	700.40	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	13.00	701.00	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.78	701.22	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.21	701.79	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.49	701.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Tetrachloroethylene (PCE)	Tetrahydrofuran	Toluene	Trichloroethylene (TCE)	Trichlorofluoromethane	Vinyl Chloride	o-Xylene	p,m-Xylene	Xylenes, Total	Arsenic, Dissolved	Arsenic (B)	Chromium, Total, Dissolved	Chromium, Total	Chromium, VI, Dissolved	Chromium, VI	Copper, Dissolved	Copper (B)	Lead, Dissolved	Lead (B)
Drinking Water - Res						5 (A)	95	790 (E)	5 (A)	2,600	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Drinking Water - Non-Res						5 (A)	270	790 (E)	5 (A)	7,300	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Groundwater Surface Water Interface						60 (X)	11,000 (X)	270	200 (X)	NA	13 (X)	NA	NA	49	10	10	160	160	11	11	20	20	44	44
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)																								
TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																				
MW-114S TOS(bgs): 7 BOS(bgs): 12 GE: 712.33 Finish: stickup Stickup Height: -0.59	711.74	ND	8.36	703.38	07/17/19	<5	9.3	<5	179	<5	8	<5	<10	<3	16	101	0.171	0.371	<0.01	<0.02	0.879	1.317	<0.003	0.385
	Dupe 2 (MW-114S)			--	07/17/19	<5	9.8	<5	169	<5	8	<5	<10	<3	18	95	0.329	0.369	<0.01	<0.02	0.707	1.541	<0.003	0.615
	711.74	ND	8.11	703.63	02/27/20	0.2	<90	<1	335	<1	5	<1	<2	<3	25	62	13	0.97	<5	<500	0.751	6	<3	4
	Dupe 2 (MW-114S)			--	02/27/20	0.18	<90	<1	350	<1	3	<1	<2	<3	24	69	<5	1.084	<5	<500	0.611	6	<3	4
	711.74	ND	8.82	702.92	08/19/20	<10	7.6	<10	310	<10	10	<10	<20	<3	20	119	0.235	0.457	<10	<50	1.604	1.803	0.369	1.289
	Dupe #2 (MW-114S)			--	08/19/20	<10	7.2	<10	290	<10	10	<10	<20	<3	21	114	0.138	0.428	<10	<50	53	1.587	<3	1.194
	711.74	ND	9.12	702.62	03/03/21	<10	<900	<10	270	<10	5.3	<10	<20	<30	18	55	0.267	0.681	<10	<20	0.461	2.64	<3	1.51
	Dupe-2 (MW-114S)			--	03/03/21	<10	<900	<10	280	<10	6.2	<10	<20	<30	20	53	0.236	0.361	<10	<20	<5	1.55	0.278	0.947
	711.74	ND	8.82	702.92	09/15/21	<10	<900	<10	200	<10	9.3	<10	<20	<30	56	166	0.22	1	<10	<50	<5	1.5	<3	0.75
	Dupe 2			--	09/15/21	<1	<90	<1	226	<1	11	<1	<2	<3	61	168	0.21	0.78	<10	<50	<5	1.6	<3	1.17
	711.74	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	711.74	ND	8.72	703.02	03/16/22	<1	<90	<1	172	<1	7	<1	<2	<3	13	52	<10	<10	0.215	0.57	<5	3.007	<3	2.466
	Dupe1 (MW-114S)			--	03/16/22	<1	<90	<1	162	<1	6	<1	<2	<3	11	49	<10	<10	0.286	0.609	<5	3.227	<3	2.637
	711.74	ND	9.42	702.32	09/13/22	<1	<90	<1	252	<1	14	<1	<2	<3	45	127	<10	<10	0.437	1.219	0.459	8	<3	6
	Dupe1 (MW-114S)			--	09/13/22	<1	<90	<1	219	<1	13	<1	<2	<3	48	176	<10	<50	0.254	3.597	0.529	22	<3	17
	711.74	ND	8.84	702.90	03/21/23	<5	15.5	<5	173	<5	3.95	<5	<10	<15	18	34	<10	<10	0.182	0.514	0.379	1.56	<3	0.213
	Dupe1 (MW-114S)			--	03/21/23	<1	<90	<1	199	<1	6	<1	<2	<3	15	27	<10	<10	0.139	0.496	2.29	1	<3	0.38
	711.74	ND	7.98	703.76	09/14/23	<5	<450	<5	166	<5	3.5	<5	<10	<3	8	58	<10	<10	0.173	0.646	0.576	2.507	<3	1.477
	Dupe1 (MW-114S)			--	09/14/23	<1	<90	<1	202	<1	5	<1	<2	<3	9	57	<10	<10	<5	0.624	0.767	2.374	<4	1.459
	711.74	ND	10.89	700.85	03/27/24	<1	<90	<1	129	<1	2	<1	<2	<3	10	16	<5	<5	<10	<10	<5	1.073	0.74	<3
	Dup1 (MW-114S)			--	03/27/24	<1	<90	<1	132	<1	2	<1	<2	<3	11	16	<5	<5	<10	<10	<5	1.186	<3	<3
	711.74	ND	8.45	703.29	09/17/24	<1	<90	<1	216	<1	4	<1	<2	<3	20	35	<10	<50	<5	<5	<5	1.179	<3	0.558
	Dup1 (MW-114S)			--	09/17/24	<1	<90	<1	213	<1	4	<1	<2	<3	20	36	<10	<50	<5	<5	4.631	1.051	<3	0.525
MW-115S TOS(bgs): 7 BOS(bgs): 12 GE: 711.92 Finish: Stickup Stickup Height: 3.06	714.98	ND	11.35	703.63	11/18/21	<1	<90	<1	<1	<1	0.95	<1	<2	<3	0.01	41	<10	<50	0.136	0.75	0.468	1.11	<3	<3
	714.98	ND	11.89	703.09	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	12.43	702.55	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.94	703.04	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.23	703.75	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.10	703.88	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-116S TOS(bgs): 14 BOS(bgs): 19 GE: 719.95 Finish: Stickup Stickup Height: 3.02	722.97	ND	19.99	702.98	11/18/21	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.005	23	<10	<50	1.22	0.174	<5	0.638	<3	0.204
	Dupe1 (MW-116S)			--	11/18/21	<1	<90	<1	<1	<1	<1	<1	<2	<3	0.005	22	<10	<25	0.154	0.336	<5	0.653	<300	<3
	722.97	ND	20.87	702.10	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.15	701.82	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.25	701.72	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	20.94	702.03	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.89	703.08	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.88	703.09	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Tetrachloroethylene (PCE)	Tetrahydrofuran	Toluene	Trichloroethylene (TCE)	Trichlorofluoromethane	Vinyl Chloride	o-Xylene	p,m-Xylene	Xylenes, Total	Arsenic, Dissolved	Arsenic (B)	Chromium, Total, Dissolved	Chromium, Total	Chromium, VI, Dissolved	Chromium, VI	Copper, Dissolved	Copper (B)	Lead, Dissolved	Lead (B)
Drinking Water - Res						5 (A)	95	790 (E)	5 (A)	2,600	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Drinking Water - Non-Res						5 (A)	270	790 (E)	5 (A)	7,300	2 (A)	NA	NA	280 (E)	10 (A)	10 (A)	100 (A)	100 (A)	100 (A)	100 (A)	1,000 (E)	1,000 (E)	4 (L)	4 (L)
Groundwater Surface Water Interface						60 (X)	11,000 (X)	270	200 (X)	NA	13 (X)	NA	NA	49	10	10	160	160	11	11	20	20	44	44
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)																								
MW-117S TOS(bgs): 9 BOS(bgs): 14 GE: 717.15 Finish: Stickup Stickup Height: 3.09	720.24	ND	14.87	705.37	11/18/21	<1	<90	<1	1	<1	<1	<1	<2	<3	0.00059	0.314	<10	<10	0.266	0.299	1.2	1.26	<3	<3
	720.24	ND	15.40	704.84	03/16/22	<1	<90	<1	1	<1	<1	<1	<2	<3	1.131	0.597	<10	<10	0.417	12	1.321	2.285	<3	<3
	720.24	ND	15.62	704.62	09/13/22	0.21	<90	<1	1	<1	<1	<1	<2	<3	0.716	2	<10	<10	0.285	45	3.762	3.6	<3	0.407
	720.24	ND	15.20	705.04	03/21/23	0.14	<90	<1	<1	<1	<1	<1	<2	<3	0.941	1.06	<10	<10	1.27	49	1.13	2.16	<3	<3
	720.24	ND	14.59	705.65	09/14/23	0.19	<90	<1	0.29	<1	<1	<1	<2	<3	1.618	2	<10	<10	0.45	1610	0.752	67	<3	0.753
	720.24	ND	14.68	705.56	03/28/24	<1	<90	<1	0.22	<1	<1	<1	<2	<3	<2	<2	<5	22	<10	<10	0.932	1.674	<3	<3
	720.24	ND	14.97	705.27	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Results in micrograms per liter (ug/L).

Footnotes are presented behind the analytical summary tables.

Table 1a
Groundwater Analytical Results
RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Selenium, Dissolved	Selenium (B)	Zinc, Dissolved	Zinc (B)
Drinking Water - Res						50 (A)	50 (A)	2,400	2,400
Drinking Water - Non-Res						50 (A)	50 (A)	5,000 (E)	5,000 (E)
Groundwater Surface Water Interface						5	5	260	260
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date				
MW-100S TOS(bgs): 5 BOS(bgs): 15 GE: 720.56 Finish: stickup Stickup Height: 2.50	723.06	ND	14.97	708.09	07/16/19	<0.005	<0.005	7	2.75
	723.06	ND	15.26	707.80	02/25/20	<5	<5	6	1.56
	723.06	ND	16.07	706.99	08/18/20	<5	<5	3.794	2.732
	723.06	ND	17.48	705.58	03/02/21	NA	NA	NA	NA
	723.06	ND	16.40	706.66	09/14/21	3.79	2.65	4.11	3.09
	723.06	NG	NG	--	11/18/21	NS	NS	NS	NS
	723.06	ND	17.63	705.43	03/16/22	NS	NS	NS	NS
	723.06	ND	17.42	705.64	09/13/22	NS	NS	NS	NS
	723.06	ND	17.62	705.44	03/21/23	NS	NS	NS	NS
	723.06	ND	17.40	705.66	09/14/23	NS	NS	NS	NS
	723.06	ND	16.35	706.71	03/27/24				
	723.06	ND	15.94	707.12	09/17/24	NS	NS	NS	NS
MW-101S TOS(bgs): 9 BOS(bgs): 19 GE: 719.58 Finish: stickup Stickup Height: 2.50 well destroyed well destroyed well destroyed well destroyed	722.08	ND	15.84	706.24	07/16/19	<0.005	<0.005	9	7
	722.08	ND	16.00	706.08	02/25/20	<5	<5	4.654	2.074
	722.08	ND	17.00	705.08	08/18/20	<5	<5	7	2.35
	722.08	ND	18.58	703.50	03/03/21	<5	<5	3.28	75
	722.08	ND	17.59	704.49	09/14/21	2.29	<5	2.38	59
	722.08	NG	NG	--	11/18/21	NS	NS	NS	NS
	722.08	ND	15.96	706.12	03/16/22	NS	NS	NS	NS
	722.08	ND	16.56	705.52	09/13/22	NS	NS	NS	NS
	722.08	NG	NG	--	03/21/23	NS	NS	NS	NS
	722.08	NG	NG	--	09/14/23	NS	NS	NS	NS
	722.08	NG	NG	--	03/27/24	NS	NS	NS	NS
	722.08	NG	NG	--	09/17/24	NS	NS	NS	NS
MW-102S TOS(bgs): 9 BOS(bgs): 19 GE: 720.28 Finish: stickup Stickup Height: 2.50	722.78	ND	15.58	707.20	07/17/19	<0.005	<0.005	8	2.47
	722.78	ND	15.61	707.17	02/25/20	<5	<5	5	1.632
	722.78	ND	16.13	706.65	08/18/20	<5	<5	6	1.075
	722.78	ND	17.07	705.71	03/02/21	<5	<5	3.63	3.09
	722.78	ND	16.48	706.30	09/14/21	<5	<5	6	2.38
	722.78	NG	NG	--	11/18/21	NS	NS	NS	NS
	722.78	ND	16.81	705.97	03/16/22	NS	NS	NS	NS
	722.78	ND	17.36	705.42	09/13/22	NS	NS	NS	NS
	722.78	ND	17.39	705.39	03/21/23	NS	NS	NS	NS
	722.78	ND	17.23	705.55	09/14/23	NS	NS	NS	NS
	722.78	ND	15.78	707.00	03/27/24	NS	NS	NS	NS
	722.78	ND	15.88	706.90	09/17/24	NS	NS	NS	NS

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Selenium, Dissolved	Selenium (B)	Zinc, Dissolved	Zinc (B)
Drinking Water - Res						50 (A)	50 (A)	2,400	2,400
Drinking Water - Non-Res						50 (A)	50 (A)	5,000 (E)	5,000 (E)
Groundwater Surface Water Interface						5	5	260	260
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date				
MW-103S TOS(bgs): 9 BOS(bgs): 19 GE: 717.16 Finish: stickup Stickup Height: 2.50	719.66	ND	13.71	705.95	07/17/19	<0.005	<0.005	4.05	1.04
	719.66	ND	13.58	706.08	02/28/20	<5	<5	2.299	2.05
	719.66	ND	14.22	705.44	08/19/20	<5	<5	2.013	1.046
	719.66	ND	15.05	704.61	03/03/21	<5	<5	2.62	2.28
	719.66	ND	14.31	705.35	09/14/21	<5	3.31	5	7
	719.66	NG	NG	--	11/18/21	NS	NS	NS	NS
	719.66	14.68	14.86	704.80	03/16/22	<5	<5	1.75	1.72
	719.66	ND	15.05	704.61	09/13/22	<5	<5	0.823	<5
	719.66	ND	15.00	704.66	03/21/23	<5	<5	1.17	1.68
	719.66	ND	13.22	706.44	09/14/23	<5	<5	0.904	<5
	719.66	ND	13.69	705.97	03/28/24	<5	<5	<5	<5
	719.66	ND	13.87	705.79	09/17/24	<5	<5	<5	<5
MW-104S TOS(bgs): 13 BOS(bgs): 18 GE: 721.53 Finish: flushmount TOC Depth: -0.50	721.03	ND	13.68	707.35	07/16/19	<0.005	<0.005	7	4.85
	721.03	ND	13.79	707.24	02/25/20	<5	<5	9	14
	721.03	ND	14.22	706.81	08/18/20	<5	<5	9	1.538
	721.03	ND	9.12	711.91	03/02/21	<5	<5	3.3	2.44
	721.03	ND	15.21	705.82	09/14/21	2.79	2.1	5	3.17
	721.03	NG	NG	--	11/18/21	NS	NS	NS	NS
	721.03	ND	15.47	705.56	03/16/22	3.52	3.7	1.968	1.933
	721.03	ND	15.21	705.82	09/13/22	3.904	6	<5	7
	721.03	ND	16.25	704.78	03/21/23	<5	2.45	1.87	2.37
	721.03	DRY	DRY	--	09/14/23	NS	NS	NS	NS
	721.03	ND	14.52	706.51	03/27/24	5	6	<5	4.754
	721.03	ND	14.15	706.88	09/17/24	NS	NS	NS	NS
MW-105S TOS(bgs): 13 BOS(bgs): 18 GE: 723.64 Finish: flushmount TOC Depth: -0.50	723.14	ND	12.88	710.26	07/16/19	2.39	<0.005	7	6
	723.14	ND	12.89	710.25	02/25/20	9	9	1.504	1.948
	723.14	ND	14.32	708.82	08/18/20	9	10	3.668	6
	723.14	ND	14.33	708.81	03/02/21	<5	<5	3.21	1.81
	723.14	ND	14.34	708.80	09/14/21	6	4.95	4.37	2.39
	723.14	NG	NG	--	11/18/21	NS	NS	NS	NS
	723.14	ND	14.15	708.99	03/16/22	NS	NS	NS	NS
	723.14	ND	14.17	708.97	09/13/22	NS	NS	NS	NS
	723.14	ND	14.69	708.45	03/21/23	NS	NS	NS	NS
	723.14	ND	14.08	709.06	09/14/23	NS	NS	NS	NS
	723.14	ND	13.30	709.84	03/27/24	NS	NS	NS	NS
	723.14	ND	13.43	709.71	09/17/24	NS	NS	NS	NS

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Selenium, Dissolved	Selenium (B)	Zinc, Dissolved	Zinc (B)
Drinking Water - Res						50 (A)	50 (A)	2,400	2,400
Drinking Water - Non-Res						50 (A)	50 (A)	5,000 (E)	5,000 (E)
Groundwater Surface Water Interface						5	5	260	260
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date				
MW-106SR TOS(bgs): 13 BOS(bgs): 18 GE: 723.86 Finish: flushmount TOC Depth: -0.50	723.36	ND	14.56	708.80	07/16/19	<0.005	<0.005	7	2.62
	723.36	ND	14.63	708.73	02/25/20	<5	<5	1.216	7
	723.36	ND	14.32	709.04	08/18/20	<5	<5	3.46	1.828
	723.36	DRY	16.47	706.89	03/02/21	NS	NS	NS	NS
	723.36	DRY	15.87	707.49	09/14/21	3.53	4.53	3.11	7
	723.36	NG	NG	--	11/18/21	NS	NS	NS	NS
	723.36	ND	16.30	707.06	03/16/22	3.6	3.78	10	31
	723.36	ND	15.92	707.44	09/13/22	4.346	7	2.639	6
	723.36	ND	17.09	706.27	03/21/23	NS	NS	NS	NS
	723.36	ND	15.11	708.25	09/14/23	3.89	4.114	1.279	<5
	723.36	ND	15.21	708.15	03/27/24	<5	<5	<5	4.121
	723.36	ND	15.85	707.51	09/17/24	NS	NS	NS	NS
MW-107S TOS(bgs): 13 BOS(bgs): 18 GE: 723.37 Finish: flushmount TOC Depth: -0.50	722.87	ND	15.35	707.52	07/16/19	<0.005	<0.005	27	22
	722.87	ND	15.27	707.60	02/25/20	<5	<5	9	6
	722.87	ND	14.62	708.25	08/18/20	<5	<5	3.679	1.729
	722.87	ND	16.81	706.06	03/02/21	<5	<5	10	8
	722.87	ND	16.20	706.67	09/15/21	2.27	<5	7	4.08
	722.87	NG	NG	--	11/18/21	NS	NS	NS	NS
	722.87	ND	16.61	706.26	03/16/22	NS	NS	NS	NS
	722.87	ND	16.40	706.47	09/13/22	NS	NS	NS	NS
	722.87	ND	17.21	705.66	03/21/23	NS	NS	NS	NS
	722.87	ND	15.87	707.00	09/14/23	NS	NS	NS	NS
	722.87	ND	15.64	707.23	03/27/24	NS	NS	NS	NS
MW-108S TOS(bgs): 11 BOS(bgs): 16 GE: 711.52 Finish: stickup Stickup Height: 2.50	714.02	ND	11.22	702.80	07/17/19	<0.005	<0.005	1.13	5
	714.02	ND	10.85	703.17	02/27/20	<5	<5	7	2.742
	714.02	ND	11.97	702.05	08/19/20	<5	<5	6	4.07
	714.02	ND	12.34	701.68	03/03/21	<5	<5	5	3.88
	714.02	ND	12.32	701.70	09/15/21	<5	<5	12	6
	714.02	NG	NG	--	11/18/21	NS	NS	NS	NS
	714.02	ND	11.90	702.12	03/16/22	3.13	3.16	2.015	2.611
	714.02	ND	12.97	701.05	09/13/22	2.48	3.116	2.316	2.116
	714.02	ND	12.45	701.57	03/21/23	4.27	6	2.38	6
	714.02	ND	10.66	703.36	09/14/23	6	6	0.789	1.573
	714.02	ND	10.71	703.31	03/27/24	7	7	<5	<5
	714.02	ND	11.47	702.55	09/17/24	<5	<5	11	13

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Selenium, Dissolved	Selenium (B)	Zinc, Dissolved	Zinc (B)
Drinking Water - Res						50 (A)	50 (A)	2,400	2,400
Drinking Water - Non-Res						50 (A)	50 (A)	5,000 (E)	5,000 (E)
Groundwater Surface Water Interface						5	5	260	260
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date				
MW-109S TOS(bgs): 9 BOS(bgs): 14 GE: 712.12 Finish: stickup Stickup Height: 2.50	714.62	ND	11.14	703.48	07/17/19	<0.005	<0.005	1.92	4.43
	714.62	ND	10.89	703.73	02/27/20	<5	<5	3.151	2.004
	714.62	ND	11.66	702.96	08/19/20	<5	<5	2.365	1.703
	714.62	ND	11.98	702.64	03/03/21	<5	<5	2.92	5
	714.62	ND	11.67	702.95	09/15/21	<5	<5	3.34	2.68
	714.62	NG	NG	--	11/18/21	NS	NS	NS	NS
	714.62	ND	11.59	703.03	03/16/22	NS	NS	NS	NS
	714.62	ND	12.25	702.37	09/13/22	NS	NS	NS	NS
	714.62	ND	11.70	702.92	03/21/23	NS	NS	NS	NS
	714.62	ND	11.08	703.54	09/14/23	NS	NS	NS	NS
	714.62	ND	8.10	706.52	03/27/24	NS	NS	NS	NS
	714.62	ND	11.27	703.35	09/17/24	NS	NS	NS	NS
MW-110S TOS(bgs): 9 BOS(bgs): 14 GE: 710.57 Finish: stickup Stickup Height: 2.50	713.07	ND	11.83	701.24	07/17/19	<0.005	<0.005	5	2.37
	713.07	ND	11.45	701.62	02/27/20	<5	<5	3.037	1.879
	713.07	ND	12.18	700.89	08/19/20	<5	<5	3.312	1.381
	713.07	ND	12.04	701.03	03/03/21	<5	<5	22	25
	713.07	ND	12.36	700.71	09/15/21	<5	<5	8	4.69
	713.07	NG	NG	--	11/18/21	NS	NS	NS	NS
	713.07	ND	12.02	701.05	03/16/22	<5	<5	6	8
	713.07	ND	12.76	700.31	09/13/22	<5	<5	1.812	1.038
	713.07	ND	11.73	701.34	03/21/23	<5	<5	26	28
	713.07	ND	11.54	701.53	09/14/23	<5	<5	0.939	2.266
	713.07	ND	11.17	701.90	03/27/24	<5	<5	<5	<5
	713.07	ND	12.88	700.19	09/17/24	<5	<5	<5	<5
MW-111S TOS(bgs): 9 BOS(bgs): 14 GE: 717.03 Finish: stickup Stickup Height: 2.50	719.53	ND	12.88	706.65	07/17/19	<0.005	<0.005	5	3.3
	719.53	ND	12.65	706.88	02/27/20	<5	<5	6	1.594
	719.53	ND	13.54	705.99	08/19/20	<5	<5	3.689	1.424
	719.53	ND	14.55	704.98	03/03/21	<5	<5	4.98	1.35
	719.53	ND	13.63	705.90	09/16/21	<5	3.15	3.47	2.5
	719.53	NG	NG	--	11/18/21	NS	NS	NS	NS
	719.53	ND	14.01	705.52	03/16/22	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/13/22	NS	NS	NS	NS
	719.53	ND	14.59	704.94	03/21/23	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/14/23	NS	NS	NS	NS
	719.53	ND	13.07	706.46	03/27/24	NS	NS	NS	NS
	719.53	ND	13.17	706.36	09/17/24	NS	NS	NS	NS

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Selenium, Dissolved	Selenium (B)	Zinc, Dissolved	Zinc (B)
Drinking Water - Res						50 (A)	50 (A)	2,400	2,400
Drinking Water - Non-Res						50 (A)	50 (A)	5,000 (E)	5,000 (E)
Groundwater Surface Water Interface						5	5	260	260
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date				
MW-112S TOS(bgs): 15 BOS(bgs): 20 GE: 720.50 Finish: flushmount TOC Depth: -0.50	720.00	ND	14.43	705.57	07/16/19	<0.005	<0.005	20	2
	Dupe 1 (MW-112S)			--	07/16/19	<0.005	<0.005	3.34	2.32
	720.00	ND	14.59	705.41	02/27/20	<5	<5	2.665	1.588
	Dupe 1 (MW-112S)			--	02/27/20	<5	<5	6	1.221
	720.00	ND	14.95	705.05	08/18/20	<5	<5	2.558	1.471
	Dupe #1 (MW-112S)			--	08/18/20	<5	<5	2.599	1.117
	720.00	ND	17.02	702.98	03/02/21	<5	<5	2.13	1.61
	Dupe1 (MW-112S)			--	03/02/21	<5	<5	2.44	1.88
	720.00	ND	15.15	704.85	09/15/21	<5	<5	6	3.97
	Dupe 1			--	09/15/21	<5	<5	4	3.03
	720.00	NG	NG	--	11/18/21	NS	NS	NS	NS
	720.00	ND	16.35	703.65	03/16/22	<5	<5	1.144	1.89
	720.00	ND	16.70	703.30	09/13/22	<5	<5	<5	<5
	720.00	ND	16.80	703.20	03/21/23	<5	<5	1.36	1.82
	720.00	ND	14.27	705.73	09/14/23	<5	<5	<5	14
	720.00	ND	15.19	704.81	03/27/24	<5	<5	<5	3.513
	720.00	ND	14.61	705.39	09/17/24	<5	<5	<5	<5
MW-113S TOS(bgs): 8.5 BOS(bgs): 13.5 GE: 711.50 Finish: stickup Stickup Height: 2.50	714.00	ND	12.31	701.69	07/17/19	<0.005	<0.005	6	6
	714.00	ND	12.02	701.98	02/27/20	<5	<5	8	6
	714.00	ND	12.79	701.21	08/19/20	<5	<5	2.057	1.634
	714.00	ND	12.94	701.06	03/03/21	3.59	4.45	5	3.34
	714.00	ND	13.01	700.99	09/15/21	2.69	<5	6	9
	714.00	NG	NG	--	11/18/21	NS	NS	NS	NS
	714.00	ND	12.89	701.11	03/16/22	NS	NS	NS	NS
	714.00	ND	13.60	700.40	09/13/22	NS	NS	NS	NS
	714.00	ND	13.00	701.00	03/21/23	NS	NS	NS	NS
	714.00	ND	12.78	701.22	09/14/23	NS	NS	NS	NS
	714.00	ND	12.21	701.79	03/27/24	NS	NS	NS	NS
	714.00	ND	12.49	701.51	09/17/24	NS	NS	NS	NS

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Selenium, Dissolved	Selenium (B)	Zinc, Dissolved	Zinc (B)
Drinking Water - Res						50 (A)	50 (A)	2,400	2,400
Drinking Water - Non-Res						50 (A)	50 (A)	5,000 (E)	5,000 (E)
Groundwater Surface Water Interface						5	5	260	260
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date				
MW-114S TOS(bgs): 7 BOS(bgs): 12 GE: 712.33 Finish: stickup Stickup Height: -0.59	711.74	ND	8.36	703.38	07/17/19	<0.005	<0.005	13	12
	Dupe 2 (MW-114S)			--	07/17/19	<0.005	<0.005	4.37	10
	711.74	ND	8.11	703.63	02/27/20	<5	<5	27	44
	Dupe 2 (MW-114S)			--	02/27/20	<5	<5	29	43
	711.74	ND	8.82	702.92	08/19/20	<5	<5	8	15
	Dupe #2 (MW-114S)			--	08/19/20	<5	<5	7	16
	711.74	ND	9.12	702.62	03/03/21	<5	<5	6	10
	Dupe-2 (MW-114S)			--	03/03/21	<5	<5	5	9
	711.74	ND	8.82	702.92	09/15/21	<5	<5	4.33	7
	Dupe 2			--	09/15/21	<5	<5	4.8	6
	711.74	NG	NG	--	11/18/21	NS	NS	NS	NS
	711.74	ND	8.72	703.02	03/16/22	<5	<5	12	37
	Dupe1 (MW-114S)			--	03/16/22	<5	<5	13	23
	711.74	ND	9.42	702.32	09/13/22	<5	<5	3.777	32
	Dupe1 (MW-114S)			--	09/13/22	<5	<5	3.372	100
	711.74	ND	8.84	702.90	03/21/23	<5	<5	4.82	8
	Dupe1 (MW-114S)			--	03/21/23	<5	<5	12	8
	711.74	ND	7.98	703.76	09/14/23	<5	<5	14	30
	Dupe1 (MW-114S)			--	09/14/23	<5	<5	15	27
	711.74	ND	10.89	700.85	03/27/24	<5	<5	15	16
MW-115S TOS(bgs): 7 BOS(bgs): 12 GE: 711.92 Finish: Stickup Stickup Height: 3.06	Dup1 (MW-114S)			--	03/27/24	<5	<5	12	15
	711.74	ND	8.45	703.29	09/17/24	<5	<5	12	19
	Dup1 (MW-114S)			--	09/17/24	<5	<5	15	20
	714.98	ND	11.35	703.63	11/18/21	<5	<5	3.37	7
	714.98	ND	11.89	703.09	03/16/22	NS	NS	NS	NS
	714.98	ND	12.43	702.55	09/13/22	NS	NS	NS	NS
MW-116S TOS(bgs): 14 BOS(bgs): 19 GE: 719.95 Finish: Stickup Stickup Height: 3.02	714.98	ND	11.94	703.04	03/21/23	NS	NS	NS	NS
	714.98	ND	11.23	703.75	09/14/23	NS	NS	NS	NS
	714.98	ND	11.10	703.88	03/27/24	NS	NS	NS	NS
	714.98	ND	11.47	703.51	09/17/24	NS	NS	NS	NS
	722.97	ND	19.99	702.98	11/18/21	<5	<5	4.1	4.88
	Dupe1 (MW-116S)			--	11/18/21	<5	<5	9	9
	722.97	ND	20.87	702.10	03/16/22	NS	NS	NS	NS
	722.97	ND	21.15	701.82	09/13/22	NS	NS	NS	NS
	722.97	ND	21.25	701.72	03/21/23	NS	NS	NS	NS
	722.97	ND	20.94	702.03	09/14/23	NS	NS	NS	NS
	722.97	ND	19.89	703.08	03/27/24	NS	NS	NS	NS
	722.97	ND	19.88	703.09	09/17/24	NS	NS	NS	NS

Table 1a

Groundwater Analytical Results

RACER 12990 Flint West, Glenwood Avenue and Stevenson Street, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						Selenium, Dissolved	Selenium (B)	Zinc, Dissolved	Zinc (B)
Drinking Water - Res						50 (A)	50 (A)	2,400	2,400
Drinking Water - Non-Res						50 (A)	50 (A)	5,000 (E)	5,000 (E)
Groundwater Surface Water Interface						5	5	260	260
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date				
MW-117S TOS(bgs): 9 BOS(bgs): 14 GE: 717.15 Finish: Stickup Stickup Height: 3.09	720.24	ND	14.87	705.37	11/18/21	<5	<5	6	10
	720.24	ND	15.40	704.84	03/16/22	<5	<5	1.719	2.169
	720.24	ND	15.62	704.62	09/13/22	<5	<5	2.006	1.893
	720.24	ND	15.20	705.04	03/21/23	<5	<5	1.24	1.65
	720.24	ND	14.59	705.65	09/14/23	<5	<5	<5	2.789
	720.24	ND	14.68	705.56	03/28/24	<5	<5	<5	<5
	720.24	ND	14.97	705.27	09/17/24	NS	NS	NS	NS

Results in micrograms per liter (ug/L).

Footnotes are presented behind the analytical summary tables.

FOOTNOTES

NOTES:

DW - Drinking Water Residential Generic Criteria.

GSI - Groundwater Surface Water Interface Generic Criteria per MDEQ Surface Water Division Rule 57.

	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated method blank, suggesting a laboratory artifact.
NC	Insufficient data to develop criterion/no criterion
G	Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River

Code	Definition
TOC	Top of Casing Elevation
DT NAPL	Depth to Non-Aqueous Phase Liquid (NAPL)
DTW	Depth to Water
GW Elev.	Groundwater Elevation
bgs	below ground surface
ND	Not Detected
NA	Not submitted for Analyses, or Not Applicable
NS	Not Sampled on this date
NL	Not Located
NM	Not Measured/Well Inaccessible

TABLE 1b
Groundwater Analytical Results- Per- and Polyfluoroalkyl Substances (PFAS)
RACER 12990 Flint West
Stevenson Street and Glenwood Avenue, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						PFBA	PFPeA	PFHxA	PFBS	PFHpA	PFPeS	PFOA	PFHxS	PFHxS-LN	PFHxS-BR	PFNA	PFHpS	EtFOSAA	PFOS	PFOS-LN	PFOS-BR
Chemical Abstract Service Number						375-22-4	2706-90-3	307-24-4	375-73-5	375-85-9	2706-91-4	335-67-1	355-46-4	355-46-4-LN	355-46-4-BR	375-95-1	375-92-8	2991-50-6	1763-23-1	1763-23-1-LN	1763-23-1-BR
Drinking Water - Res*						NC	NC	400,000	420	NC	NC	4	10	NC	NC	10	NC	NC	4	NC	NC
Groundwater Surface Water Interface						NC	NC	NC	NC	NC	NC	12,000	NC	NC	NC	NC	NC	NC	12	NC	NC
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	DT NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																
MW-100S TOS(bgs): 5 BOS(bgs): 15 GE: 720.56 Finish: stickup Stickup Height: 2.50	723.06	ND	14.97	708.09	07/17/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	15.26	707.80	02/25/20	<20	<9.8	<9.8	2.7	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	20	7	12
	723.06	ND	16.07	706.99	08/18/20	<9.8	<3.9	<2.0	1.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.9	18	9	9
	723.06	ND	17.48	705.58	03/02/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	16.40	706.66	09/14/21	<9.8	1.1	<2.0	1.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.9	9	6	4
	723.06	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.63	705.43	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.42	705.64	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.62	705.44	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	17.40	705.66	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	16.35	706.71	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.06	ND	15.94	707.12	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-101S TOS(bgs): 9 BOS(bgs): 19 GE: 719.58 Finish: stickup Stickup Height: 2.50 well destroyed well destroyed well destroyed well destroyed	722.08	ND	15.84	706.24	07/17/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	16.00	706.08	02/25/20	<21	<10	1.7	2.3	<10	<10	<10	<10	<10	<10	<10	<10	<10	21	8	12
	722.08	ND	17.00	705.08	08/18/20	<9.7	1.9	<1.9	1.9	<1.9	<1.9	3.2	1.9	1.6	<1.9	<1.9	<1.9	<3.9	30	12	18
	722.08	ND	18.58	703.50	03/03/21	<10	<4.1	<2.1	1.9	<2.1	<2.1	2.5	<2.1	<2.1	<2.1	<2.1	<2.1	<4.1	25	10	15
	722.08	ND	17.59	704.49	09/14/21	<9.7	2.6	2.1	<1.9	<1.9	<1.9	5.5	<1.9	<1.9	<1.9	<1.9	<1.9	<3.9	37	23	13
	722.08	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	15.96	706.12	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	ND	16.56	705.52	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.08	NG	NG	--	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 1b
Groundwater Analytical Results- Per- and Polyfluoroalkyl Substances (PFAS)
RACER 12990 Flint West
Stevenson Street and Glenwood Avenue, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						PFBA	PFPeA	PFHxA	PFBS	PFHpA	PFPeS	PFOA	PFHxS	PFHxS-LN	PFHxS-BR	PFNA	PFHpS	EtFOSAA	PFOS	PFOS-LN	PFOS-BR
Chemical Abstract Service Number						375-22-4	2706-90-3	307-24-4	375-73-5	375-85-9	2706-91-4	335-67-1	355-46-4	355-46-4-LN	355-46-4-BR	375-95-1	375-92-8	2991-50-6	1763-23-1	1763-23-1-LN	1763-23-1-BR
Drinking Water - Res*						NC	NC	400,000	420	NC	NC	4	10	NC	NC	10	NC	NC	4	NC	NC
Groundwater Surface Water Interface						NC	NC	NC	NC	NC	NC	12,000	NC	NC	NC	NC	NC	NC	12	NC	NC
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	DT NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																
MW-102S TOS(bgs): 9 BOS(bgs): 19 GE: 720.28 Finish: stickup Stickup Height: 2.50	722.78	ND	15.58	707.20	07/17/19	<19	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	11	<9.7	<9.7
	722.78	ND	15.61	707.17	02/25/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	16.13	706.65	08/18/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.07	705.71	03/02/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	16.48	706.30	09/14/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	16.81	705.97	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.36	705.42	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.39	705.39	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	17.23	705.55	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.78	707.00	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.78	ND	15.88	706.90	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-103S TOS(bgs): 9 BOS(bgs): 19 GE: 717.16 Finish: stickup Stickup Height: 2.50	719.66	ND	13.71	705.95	07/17/19	<19	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	93	44	48
	719.66	ND	13.58	706.08	02/28/20	<19	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	2.7	3.0	<9.5	<9.5	<9.5	<9.5	84	47	35
	719.66	ND	14.22	705.44	08/19/20	<10	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.2	2.2	<2.0	<2.0	<2.0	<4.0	120	81	40
	719.66	ND	15.05	704.61	03/03/21	<28	<4.3	<2.2	1.6	<2.2	<2.2	<2.2	5.9	3.4	2.6	<2.2	<2.2	<5.4	91	65	26
	719.66	ND	14.31	705.35	09/16/21	<16	<3.9	<2.0	<2.0	<2.0	<2.0	2.7	5.0	3.1	<2.0	<2.0	<2.0	<3.9	46	24	20
	719.66	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.66	14.68	14.86	704.80	03/16/22	<39	<3.9	<2.0	1.6	<2.0	<2.0	2.6	2.1	2.1	<2.0	<2.0	<2.0	<3.9	74	47	25
	719.66	ND	15.05	704.61	09/13/22	<190	<3.8	<5.7	<1.9	<1.9	<1.9	2.5	<1.9	<1.9	<1.9	<1.9	<1.9	5.1	73	49	20
	719.66	ND	15.00	704.66	03/21/23	<19	<3.8	<1.9	1.7	2.0	<1.9	<1.9	2.6	2.0	<1.9	<1.9	<1.9	<3.8	10	6	4
	719.66	ND	13.22	706.44	09/14/23	<26	<3.9	<2.0	<2.0	1.9	<2.0	3.7	2.9	2.7	<2.0	<2.0	<2.0	<3.9	58	34	22
	719.66	ND	13.69	705.97	03/28/24	<33	<3.8	<2.7	<1.9	<1.9	<1.9	2.7	<1.9	<1.9	<1.9	<1.9	<1.9	<3.8	63	42	20
	719.66	ND	13.87	705.79	09/17/24	<22	<4.0	<2.0	<2.0	<2.0	<2.0	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	92	59	31

TABLE 1b
Groundwater Analytical Results- Per- and Polyfluoroalkyl Substances (PFAS)
RACER 12990 Flint West
Stevenson Street and Glenwood Avenue, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						PFBA	PFPeA	PFHxA	PFBS	PFHpA	PFPeS	PFOA	PFHxS	PFHxS-LN	PFHxS-BR	PFNA	PFHpS	EtFOSAA	PFOS	PFOS-LN	PFOS-BR
Chemical Abstract Service Number						375-22-4	2706-90-3	307-24-4	375-73-5	375-85-9	2706-91-4	335-67-1	355-46-4	355-46-4-LN	355-46-4-BR	375-95-1	375-92-8	2991-50-6	1763-23-1	1763-23-1-LN	1763-23-1-BR
Drinking Water - Res*						NC	NC	400,000	420	NC	NC	4	10	NC	NC	10	NC	NC	4	NC	NC
Groundwater Surface Water Interface						NC	NC	NC	NC	NC	NC	12,000	NC	NC	NC	NC	NC	NC	12	NC	NC
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	DT NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																
MW-104S TOS(bgs): 13 BOS(bgs): 18 GE: 721.53 Finish: flushmount TOC Depth: -0.50	721.03	ND	13.68	707.35	07/17/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	13.79	707.24	02/25/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	14.22	706.81	08/18/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	9.12	711.91	03/02/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	15.21	705.82	09/14/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	15.47	705.56	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	15.21	705.82	09/13/22	<9.5	<3.8	<1.9	1.6	<1.9	<1.9	<1.9	1.7	<1.9	<1.9	<1.9	<1.9	<3.8	<1.9	<1.9	<1.9
	721.03	ND	16.25	704.78	03/21/23	<9.8	0.9	0.6	2.0	<2.0	1.0	<2.0	2.2	1.9	<2.0	<2.0	<2.0	<3.9	<2.0	<2.0	<2.0
	721.03	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	721.03	ND	14.52	706.51	03/27/24	3.3	<3.9	<2.0	2.5	<2.0	<2.0	1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.9	<2.0	<2.0	<2.0
	721.03	ND	14.15	706.88	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-105S TOS(bgs): 13 BOS(bgs): 18 GE: 723.64 Finish: flushmount TOC Depth: -0.50	723.14	ND	12.88	710.26	07/17/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	12.89	710.25	02/25/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.32	708.82	08/18/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.33	708.81	03/02/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.34	708.80	09/14/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.15	708.99	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.17	708.97	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.69	708.45	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	14.08	709.06	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.30	709.84	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.14	ND	13.43	709.71	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 1b
Groundwater Analytical Results- Per- and Polyfluoroalkyl Substances (PFAS)
RACER 12990 Flint West
Stevenson Street and Glenwood Avenue, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						PFBA	PFPeA	PFHxA	PFBS	PFHpA	PFPeS	PFOA	PFHxS	PFHxS-LN	PFHxS-BR	PFNA	PFHpS	EtFOSAA	PFOS	PFOS-LN	PFOS-BR
Chemical Abstract Service Number						375-22-4	2706-90-3	307-24-4	375-73-5	375-85-9	2706-91-4	335-67-1	355-46-4	355-46-4-LN	355-46-4-BR	375-95-1	375-92-8	2991-50-6	1763-23-1	1763-23-1-LN	1763-23-1-BR
Drinking Water - Res*						NC	NC	400,000	420	NC	NC	4	10	NC	NC	10	NC	NC	4	NC	NC
Groundwater Surface Water Interface						NC	NC	NC	NC	NC	NC	12,000	NC	NC	NC	NC	NC	NC	12	NC	NC
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	DT NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																
MW-106SR TOS(bgs): 13 BOS(bgs): 18 GE: 723.86 Finish: flushmount TOC Depth: -0.50	723.36	ND	14.56	708.80	07/17/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	14.63	708.73	02/25/20	8.1	<10	3.5	4.5	2.8	<10	8.7	<10	<10	<10	<10	<10	<10	7.3	<10	6
	723.36	ND	14.32	709.04	08/18/20	<10	3.1	3.7	3.2	3.0	<2.0	11	3.1	2.3	<2.0	<2.0	<2.0	<4.0	7.3	<2.0	6
	723.36	DRY	16.47	706.89	03/02/21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	723.36	DRY	15.87	707.49	09/14/21	<9.6	3.3	3.8	3.6	2.1	<1.9	17	2.1	1.6	<1.9	<1.9	2.5	<3.8	18	3	15
	723.36	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	16.30	707.06	03/16/22	<9.7	1.2	2.0	3.6	2.2	<1.9	15	1.6	<1.9	<1.9	<1.9	<1.9	<3.9	11	3	8
	723.36	ND	15.92	707.44	09/13/22	<9.5	1.8	2.5	4.3	2.1	<1.9	13	1.9	1.6	<1.9	<1.9	<1.9	<3.8	16	4	11
	723.36	ND	17.09	706.27	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	723.36	ND	15.11	708.25	09/14/23	<10	1.5	<2.0	2.9	1.8	<2.0	6.1	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	10	3	8
	723.36	ND	15.21	708.15	03/27/24	7.5	2.5	2.4	4.3	1.0	<2.0	5.3	1.3	<2.0	<2.0	<2.0	0.9	<4.0	7	2	4
	723.36	ND	15.85	707.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-107S TOS(bgs): 13 BOS(bgs): 18 GE: 723.37 Finish: flushmount TOC Depth: -0.50	722.87	ND	15.35	707.52	07/17/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.27	707.60	02/25/20	<19	<9.6	<9.6	1.9	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	14	7	6
	722.87	ND	14.62	708.25	08/18/20	<10	<4.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<4.1	24	15	7
	722.87	ND	16.81	706.06	03/02/21	<10	<4.2	<2.1	1.5	<2.1	<2.1	1.9	2.9	2.2	<2.1	<2.1	<2.1	<4.2	16	10	5
	722.87	ND	16.20	706.67	09/15/21	19.0	<3.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<3.9	7	4	3
	722.87	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.61	706.26	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	16.40	706.47	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	17.21	705.66	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.87	707.00	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.64	707.23	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.87	ND	15.39	707.48	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 1b
Groundwater Analytical Results- Per- and Polyfluoroalkyl Substances (PFAS)
RACER 12990 Flint West
Stevenson Street and Glenwood Avenue, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						PFBA	PFPeA	PFHxA	PFBS	PFHpA	PFPeS	PFOA	PFHxS	PFHxS-LN	PFHxS-BR	PFNA	PFHpS	EtFOSAA	PFOS	PFOS-LN	PFOS-BR
Chemical Abstract Service Number						375-22-4	2706-90-3	307-24-4	375-73-5	375-85-9	2706-91-4	335-67-1	355-46-4	355-46-4-LN	355-46-4-BR	375-95-1	375-92-8	2991-50-6	1763-23-1	1763-23-1-LN	1763-23-1-BR
Drinking Water - Res*						NC	NC	400,000	420	NC	NC	4	10	NC	NC	10	NC	NC	4	NC	NC
Groundwater Surface Water Interface						NC	NC	NC	NC	NC	NC	12,000	NC	NC	NC	NC	NC	NC	12	NC	NC
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	DT NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																
MW-108S TOS(bgs): 11 BOS(bgs): 16 GE: 711.52 Finish: stickup Stickup Height: 2.50	714.02	ND	11.22	702.80	07/17/19	<19	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	11	<9.7	<9.7
	714.02	ND	10.85	703.17	02/25/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	ND	11.97	702.05	08/19/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	ND	12.34	701.68	03/03/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	ND	12.32	701.70	09/15/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	ND	11.90	702.12	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.02	ND	12.97	701.05	09/13/22	<9.1	<3.6	<1.8	1.5	<1.8	<1.8	<1.8	2.3	1.5	<1.8	<1.8	<1.8	<3.6	9	3	6
	714.02	ND	12.45	701.57	03/21/23	<9.8	<3.9	<2.0	1.1	1.0	<2.0	<2.0	1.6	1.6	<2.0	0.8	<2.0	<3.9	6	2	4
	714.02	ND	10.66	703.36	09/14/23	<22	<4.0	<2.0	<2.0	<2.0	<2.0	3.7	2.8	2.4	<2.0	<2.0	<2.0	<4.0	58	36	21
	714.02	ND	10.71	703.31	03/27/24	<10.0	<4.0	<2.0	1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	3	<2.0	2
	714.02	ND	11.28	702.74	09/17/24	<10	<4.1	<2.1	1.8	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<4.1	4	<2.1	2
MW-109S TOS(bgs): 9 BOS(bgs): 14 GE: 712.12 Finish: stickup Stickup Height: 2.50	714.62	ND	11.14	703.48	07/17/19	<19	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	28	12	16
	714.62	ND	10.89	703.73	02/27/20	5.5	<9.9	1.4	<9.9	<9.9	<9.9	2.3	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	31	11	19
	714.62	ND	11.66	702.96	08/19/20	<10	3.6	3.2	2.7	1.5	<2.0	3.1	2.5	1.8	<2.0	<2.0	<2.0	<4.0	29	15	13
	714.62	ND	11.98	702.64	03/03/21	<9.7	14.0	7.6	2.2	2.0	<1.9	3.6	1.9	<1.9	<1.9	<1.9	<1.9	<3.9	21	9	12
	714.62	ND	11.67	702.95	09/15/21	<9.8	2.1	<2.0	1.6	<2.0	<2.0	1.9	1.7	<2.0	<2.0	<2.0	<2.0	<3.9	23	12	11
	714.62	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.59	703.03	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	12.25	702.37	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.70	702.92	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.08	703.54	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	8.10	706.52	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.62	ND	11.27	703.35	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 1b
Groundwater Analytical Results- Per- and Polyfluoroalkyl Substances (PFAS)
RACER 12990 Flint West
Stevenson Street and Glenwood Avenue, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						PFBA	PFPeA	PFHxA	PFBS	PFHpA	PFPeS	PFOA	PFHxS	PFHxS-LN	PFHxS-BR	PFNA	PFHpS	EtFOSAA	PFOS	PFOS-LN	PFOS-BR
Chemical Abstract Service Number						375-22-4	2706-90-3	307-24-4	375-73-5	375-85-9	2706-91-4	335-67-1	355-46-4	355-46-4-LN	355-46-4-BR	375-95-1	375-92-8	2991-50-6	1763-23-1	1763-23-1-LN	1763-23-1-BR
Drinking Water - Res*						NC	NC	400,000	420	NC	NC	4	10	NC	NC	10	NC	NC	4	NC	NC
Groundwater Surface Water Interface						NC	NC	NC	NC	NC	NC	12,000	NC	NC	NC	NC	NC	NC	12	NC	NC
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	DT NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																
MW-110S TOS(bgs): 9 BOS(bgs): 14 GE: 710.57 Finish: stickup Stickup Height: 2.50	713.07	ND	11.83	701.24	07/17/19	20.0	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6
	713.07	ND	11.45	701.62	02/27/20	<19	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
	713.07	ND	12.18	700.89	08/19/20	<10.0	1.1	<2.0	1.9	<2.0	<2.0	2.8	2.0	<2.0	<2.0	<2.0	<2.0	<4.0	6	<2.0	5
	713.07	ND	12.04	701.03	03/03/21	<10.0	<4.0	<2.0	3.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	713.07	ND	12.36	700.71	09/15/21	<10	1.5	<2.1	1.7	<2.1	<2.1	2.7	<2.1	<2.1	<2.1	<2.1	<2.1	<4.2	6	<2.1	5
	713.07	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	713.07	ND	12.02	701.05	03/16/22	<9.8	<3.9	<2.0	2.3	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.9	<2.0	<2.0	<2.0
	713.07	ND	12.76	700.31	09/13/22	<9.6	<3.8	<1.9	1.7	<1.9	<1.9	2.5	2.5	1.6	<1.9	<1.9	<1.9	<3.8	6	<1.9	5
	713.07	ND	11.73	701.34	03/21/23	<10	<4.1	0.6	2.4	<2.0	1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.1	<2.0	<2.0	<2.0
	713.07	ND	11.54	701.53	09/14/23	21	1.1	<1.9	5.4	<1.9	<1.9	<1.9	2.4	<1.9	<1.9	<1.9	<1.9	<3.8	<1.9	<1.9	<1.9
	713.07	ND	11.17	701.90	03/27/24	<9.6	<3.8	<1.9	2.0	<1.9	<1.9	0.8	<1.9	<1.9	<1.9	<1.9	<1.9	<3.8	<1.9	<1.9	<1.9
	713.07	ND	12.88	700.19	09/17/24	<11	<4.3	1.8	2.1	<2.2	<2.2	2.7	2.5	1.7	<2.2	<2.2	<2.2	<4.3	6	1	4
MW-111S TOS(bgs): 9 BOS(bgs): 14 GE: 717.03 Finish: stickup Stickup Height: 2.50	719.53	ND	12.88	706.65	07/17/19	<19	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	36	16	21
	719.53	ND	12.65	706.88	02/27/20	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	32	14	16
	719.53	ND	13.54	705.99	08/19/20	<10	2.4	1.6	1.5	<2.1	<2.1	3.0	1.9	<2.1	<2.1	<2.1	<2.1	<4.1	33	17	15
	719.53	ND	14.55	704.98	03/03/21	<10	4.1	2.3	1.7	<2.1	<2.1	2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<4.1	25	13	11
	719.53	ND	13.63	705.90	09/16/21	<9.8	2.9	<2.2	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.9	11	6	5
	719.53	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.01	705.52	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	14.59	704.94	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	DRY	DRY	--	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.07	706.46	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	719.53	ND	13.17	706.36	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 1b
Groundwater Analytical Results- Per- and Polyfluoroalkyl Substances (PFAS)
RACER 12990 Flint West
Stevenson Street and Glenwood Avenue, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						PFBA	PFPeA	PFHxA	PFBS	PFHpA	PFPeS	PFOA	PFHxS	PFHxS-LN	PFHxS-BR	PFNA	PFHpS	EtFOSAA	PFOS	PFOS-LN	PFOS-BR
Chemical Abstract Service Number						375-22-4	2706-90-3	307-24-4	375-73-5	375-85-9	2706-91-4	335-67-1	355-46-4	355-46-4-LN	355-46-4-BR	375-95-1	375-92-8	2991-50-6	1763-23-1	1763-23-1-LN	1763-23-1-BR
Drinking Water - Res*						NC	NC	400,000	420	NC	NC	4	10	NC	NC	10	NC	NC	4	NC	NC
Groundwater Surface Water Interface						NC	NC	NC	NC	NC	NC	12,000	NC	NC	NC	NC	NC	NC	12	NC	NC
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	DT NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																
MW-112S TOS(bgs): 15 BOS(bgs): 20 GE: 720.50 Finish: flushmount TOC Depth: -0.50	720.00	ND	14.43	705.57	07/17/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	720.00	ND	14.59	705.41	02/27/20	<19	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	22	9	11
	Dupe 1 (MW-112S)			--	02/27/20	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	19	8	9
	720.00	ND	14.95	705.05	08/18/20	<9.9	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	11	5	5
	Dupe #1 (MW-112S)			--	08/18/20	<10	<4.1	<2.1	1.8	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<4.1	13	6	6
	720.00	ND	17.02	702.98	03/02/21	<21	<4.1	<2.1	1.7	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<4.1	9	4	5
	Dupe1 (MW-112S)			--	03/03/21	<20	<3.9	<2.0	1.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.9	10	4	5
	720.00	ND	15.15	704.85	09/15/21	<10	<4.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.1	7	4	3
	Dupe1 (MW-112S)			--	09/15/21	<10	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	8	4	4
	720.00	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	720.00	ND	16.35	703.65	03/16/22	<31	<4.1	<2.1	1.5	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<4.1	10	5	6
	720.00	ND	16.70	703.30	09/13/22	<28	<3.7	<1.8	1.4	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<3.7	6	3	3
	720.00	ND	16.80	703.20	03/21/23	<9.6	<3.8	<1.9	2.0	1.3	<1.9	2.3	1.3	1.3	<1.9	1.0	<1.9	<3.8	13	6	7
	720.00	ND	14.27	705.73	09/14/23	<31	<3.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<3.9	10	5	5
	720.00	ND	15.19	704.81	03/27/24	<27	<4.1	<2.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.1	7	4	3
	720.00	ND	14.61	705.39	09/17/24	<31	<4.1	<2.1	1.8	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<4.1	11	5	5
MW-113S TOS(bgs): 8.5 BOS(bgs): 13.5 GE: 711.50 Finish: stickup Stickup Height: 2.50	714.00	ND	12.31	701.69	07/17/19	<19	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	20	<9.5	16
	714.00	ND	12.02	701.98	02/27/20	<19	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	6	<9.5	4
	714.00	ND	12.79	701.21	08/19/20	<9.7	1.0	<1.9	1.8	<1.9	<1.9	<1.9	3.1	2.6	<1.9	<1.9	<1.9	<3.9	26	6	19
	714.00	ND	12.94	701.06	03/02/21	<10	<4.0	<2.0	1.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	12	5	7
	714.00	ND	13.01	700.99	09/15/21	<10	<4.1	<2.1	1.6	<2.1	<2.1	1.7	1.8	<2.1	<2.1	<2.1	<2.1	<4.1	23	10	13
	714.00	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.89	701.11	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	13.60	700.40	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	13.00	701.00	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.78	701.22	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.21	701.79	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.00	ND	12.49	701.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 1b
Groundwater Analytical Results- Per- and Polyfluoroalkyl Substances (PFAS)
RACER 12990 Flint West
Stevenson Street and Glenwood Avenue, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						PFBA	PFPeA	PFHxA	PFBS	PFHpA	PFPeS	PFOA	PFHxS	PFHxS-LN	PFHxS-BR	PFNA	PFHpS	EtFOSAA	PFOS	PFOS-LN	PFOS-BR
Chemical Abstract Service Number						375-22-4	2706-90-3	307-24-4	375-73-5	375-85-9	2706-91-4	335-67-1	355-46-4	355-46-4-LN	355-46-4-BR	375-95-1	375-92-8	2991-50-6	1763-23-1	1763-23-1-LN	1763-23-1-BR
Drinking Water - Res*						NC	NC	400,000	420	NC	NC	4	10	NC	NC	10	NC	NC	4	NC	NC
Groundwater Surface Water Interface						NC	NC	NC	NC	NC	NC	12,000	NC	NC	NC	NC	NC	NC	12	NC	NC
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	DT NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																
MW-114S TOS(bgs): 7 BOS(bgs): 12 GE: 712.33 Finish: stickup Stickup Height: -0.59	711.74	ND	8.36	703.38	07/17/19	<19	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	31	17	15
	711.74	ND	8.11	703.63	02/27/20	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	31	15	14
	Dupe 2 (MW-114S)			--	02/27/20	<19	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	35	17	17
	711.74	ND	8.82	702.92	08/19/20	<9.7	1.1	<1.9	1.8	<1.9	<1.9	1.8	2.3	1.6	<1.9	<1.9	<1.9	<3.9	29	18	12
	Dupe #2 (MW-114S)			--	08/19/20	<10	1.1	<2.0	<2.0	<2.0	<2.0	2.1	3.1	2.4	<2.0	<2.0	<2.0	<4.1	36	21	14
	711.74	ND	9.12	702.62	03/03/21	<10	<4.1	1.6	1.8	<2.0	<2.0	<2.0	1.8	<2.0	<2.0	<2.0	<2.0	<4.1	22	12	10
	Dupe-2 (MW-114S)			--	03/03/21	<10	1.6	1.7	1.8	<2.1	<2.1	1.9	1.8	<2.1	<2.1	<2.1	<2.1	<4.1	25	14	10
	711.74	ND	8.82	702.92	09/15/21	<10	<4.0	<2.2	<2.0	<2.0	<2.0	1.7	2.5	1.8	<2.0	<2.0	<2.0	<4.0	21	12	9
	Dupe-2 (MW-114S)			--	09/15/21	<10	<4.1	<2.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.1	18	11	7
	711.74	NG	NG	--	11/18/21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	711.74	ND	8.72	703.02	03/16/22	<9.8	<3.9	1.7	1.5	<2.0	<2.0	2.4	<2.0	<2.0	<2.0	<2.0	<2.0	<3.9	16	7	10
	Dupe1 (MW-114S)			--	03/16/22	<10	<4.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<4.1	13	5	8
	711.74	ND	9.42	702.32	09/13/22	<9.2	<3.7	<1.8	1.7	<1.8	<1.8	2.2	<1.8	<1.8	<1.8	<1.8	<1.8	<3.7	30	18	12
	Dupe1 (MW-114S)			--	09/13/22	<9.5	<3.8	<1.9	1.5	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<3.8	23	14	9
	711.74	ND	8.84	702.90	03/21/23	<10	3.4	2.0	2.2	1.3	<2.0	2.3	1.5	1.5	<2.0	1.0	<2.0	<4.0	17	9	8
	Dupe1 (MW-114S)			--	03/21/23	<9.8	3.5	2.0	2.0	1.6	<2.0	2.4	1.3	1.3	<2.0	1.0	<2.0	<3.9	15	8	8
	711.74	ND	7.98	703.76	09/14/23	<9.9	2.6	<2.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.9	14	7	7
	Dupe1 (MW-114S)			--	09/14/23	<9.9	1.7	<2.0	<2.0	<2.0	<2.0	1.9	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	14	8	7
	711.74	ND	10.89	700.85	03/27/24	4.2	1.8	1.5	1.6	<2.0	<2.0	1.2	<2.0	<2.0	<2.0	<2.0	<2.0	<3.9	13	5	7
	Dupe1 (MW-114S)			--	03/27/24	4.4	1.4	1.4	1.6	<2.0	<2.0	1.5	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	15	7	7
	711.74	ND	8.45	703.29	09/17/24	<10	<4.0	2.2	1.8	<2.0	<2.0	2.1	1.5	1.5	<2.0	<2.0	<2.0	<4.0	28	14	13
MW-115S TOS(bgs): 7 BOS(bgs): 12 GE: 711.92 Finish: Stickup Stickup Height: 3.06	714.98	ND	11.35	703.63	11/18/21	<41	<4.1	<2.0	2.3	<2.0	<2.0	2.3	2.9	<2.0	<2.0	<2.0	<2.0	2.6	27	18	10
	714.98	ND	11.89	703.09	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	12.43	702.55	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.94	703.04	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.23	703.75	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.10	703.88	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	714.98	ND	11.47	703.51	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 1b

Groundwater Analytical Results- Per- and Polyfluoroalkyl Substances (PFAS)

RACER 12990 Flint West

Stevenson Street and Glenwood Avenue, Flint, Michigan

EGLE Generic Residential Cleanup Criteria						PFBA	PFPeA	PFHxA	PFBS	PFHpA	PFPeS	PFOA	PFHxS	PFHxS-LN	PFHxS-BR	PFNA	PFHpS	EtFOSAA	PFOS	PFOS-LN	PFOS-BR
Chemical Abstract Service Number						375-22-4	2706-90-3	307-24-4	375-73-5	375-85-9	2706-91-4	335-67-1	355-46-4	355-46-4-LN	355-46-4-BR	375-95-1	375-92-8	2991-50-6	1763-23-1	1763-23-1-LN	1763-23-1-BR
Drinking Water - Res*						NC	NC	400,000	420	NC	NC	4	10	NC	NC	10	NC	NC	4	NC	NC
Groundwater Surface Water Interface						NC	NC	NC	NC	NC	NC	12,000	NC	NC	NC	NC	NC	NC	12	NC	NC
Sample Location TOS & BOS = Top & Bottom -of- Screen (ft bgs) Ground Elevation (GE) (ft)	TOC (feet)	DT NAPL (feet)	DTW (feet)	GW Elev (feet)	Sample Date																
MW-116S TOS(bgs): 14 BOS(bgs): 19 GE: 719.95 Finish: Stickup Stickup Height: 3.02	722.97	ND	19.99	702.98	11/18/21	<57	<3.8	<1.9	<1.9	<1.9	<1.9	2.0	<1.9	<1.9	<1.9	<1.9	<1.9	<3.8	22	15	7
	Dupe1 (MW-116S)			--	11/18/21	<40	<4.0	<2.0	<2.0	<2.0	<2.0	1.8	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	23	14	8
	722.97	ND	20.87	702.10	03/16/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.15	701.82	09/13/22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	21.25	701.72	03/21/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	20.94	702.03	09/14/23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.89	703.08	03/27/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	722.97	ND	19.88	703.09	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-117S TOS(bgs): 9 BOS(bgs): 14 GE: 717.15 Finish: Stickup Stickup Height: 3.09	720.24	ND	14.87	705.37	11/18/21	<9.7	<3.9	1.9	1.4	<1.9	<1.9	2.8	<1.9	<1.9	<1.9	<1.9	<1.9	<3.9	3	<1.9	<1.9
	720.24	ND	15.40	704.84	03/16/22	<10	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	720.24	ND	15.62	704.62	09/13/22	<10	<4.0	<2.0	1.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	720.24	ND	15.20	705.04	03/21/23	3.0	1.0	1.3	1.3	1.4	<2.0	3.2	1.4	<2.0	<2.0	<2.0	<2.0	<4.1	2	<2.0	1
	720.24	ND	14.59	705.65	09/14/23	<10.0	<4.0	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	3	<2.0	<2.0
	720.24	ND	14.68	705.56	03/28/24	5.8	<4.0	1.3	1.6	<2.0	<2.0	1.2	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	3	<2.0	<2.0
	720.24	ND	14.97	705.27	09/17/24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Results in micrograms per liter (ng/L).

*- USEPA established drinking water Maximum Contaminant Levels (MCLs) in April 2024 for five PFAS compounds, including PFOA and PFOS. MCLs for drining water are used for comparison.

Only PFAS compound detected above laboratory detection limits are summarized on this table. See laboratory report for other compounds.

Footnotes are presented behind the analytical summary tables.

FOOTNOTES - PFAS TABLES

NOTES:

*- Drinking Water Criteria for PFOA, PFOS, PFHxS, and HFPO-DA are USEPA Maximum Contaminant Levels (MCLs) published April 10, 2024

DW - Drinking Water Residential Generic Criteria.

GSI - Groundwater Surface Water Interface Generic Criteria per MDEQ Surface Water Division Rule 57.

	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated method blank, suggesting a laboratory artifact.
NC	Insufficient data to develop criterion/no criterion
G	Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River

Code	Definition
TOC	Top of Casing Elevation
DT NAPL	Depth to Non-Aqueous Phase Liquid (NAPL)
DTW	Depth to Water
GW Elev.	Groundwater Elevation
bgs	below ground surface
ND	Not Detected
NA	Not submitted for Analyses, or Not Applicable
NS	Not Sampled on this date
NL	Not Located
NM	Not Measured/Well Inaccessible
	Perfluorobutanoic acid (PFBA)
	Perfluoropentanoic acid (PFPeA)
	Fluorotelomer sulfonic acid (4:2 FTS)
	Perfluorohexanoic acid (PFHxA)
	Perfluorobutane sulfonic acid (PFBS)
	Perfluoroheptanoic acid (PFHpA)
	Perfluoropentane sulfonic acid (PFPeS)
	Fluorotelomer sulfonic acid (6:2 FTS)
	Perfluorooctanoic acid (PFOA)
	Perfluorohexane sulfonic acid (PFHxS)
	Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)
	Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)
	Perfluorononanoic acid (PFNA)
	Fluorotelomer sulfonic acid (8:2 FTS)
	Perfluoroheptane sulfonic acid (PFHpS)
	Perfluorodecanoic acid (PFDA)
	N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)
	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)
	Perfluorooctane sulfonic acid (PFOS)
	Perfluorooctane Sulfonic Acid - LN (PFOS-LN)
	Perfluorooctane Sulfonic Acid - BR (PFOS-BR)
	Perfluoroundecanoic acid (PFUnDA)
	Perfluorononane sulfonic acid (PFNS)
	Perfluorododecanoic acid (PFDoDA)
	Perfluorodecane sulfonic acid (PFDS)
	Perfluorotridecanoic acid (PFTriDA)
	Perfluorooctane sulfonamide (FOSA)
	Perfluorotetradecanoic acid (PFTeDA)
	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)
	4,8-dioxa-3H-perfluorononanoic acid (ADONA)
	Hexafluoropropylene oxide dimer (HFPO-DA)

Table 1
GROUNDWATER ANALYTICAL DATA
RACER - Flint West #12990

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	SB124-TWT	SB125-TWT	SB127-TWT	SB129-TWT	SB130-TWT	SB131-TWT	SB124-TWB	SB125-TWB	SB127-TWB	SB129-TWB	SB130-TWB	SB131-TWB	Dup1	Dup2	Dup3		
	Date Collected			4/3/14	4/3/14	3/29/14	4/3/14	4/3/14	4/3/14	4/3/14	3/29/14	3/29/14	3/29/14	3/29/14	4/3/14	3/29/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	3/29/14				
ANALYTE (ug/L)	DW	GSI																															
Arsenic (dissolved)	10	10				11			4				21		19			17	57	4	3	2	3	30	38								
Chromium (dissolved)	100	160	G		35		22	18					7	12		128	13			147	64	25	16		17	89	19	33	14				
Copper (dissolved)	1,000	20	G										28				21		5	22	140	28	42		12	24	94	144					
Lead (dissolved)	4	44	G										24				29		5	23	208	16	47	1	19	11	31	14					
Selenium (dissolved)	50	5						6	5		5						12				4		12				5	3					
Zinc (dissolved)	2,400	260	G		97		23	5		62	5	16	18	81	21	9	24	311	167	82	323	326	103	241	400	166	68	241	191	12			

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105SR	MW-106S	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	SB124-TWT	SB125-TWT	SB127-TWT	SB129-TWT	SB130-TWT	SB131-TWT	SB124-TWB	SB125-TWB	SB127-TWB	SB129-TWB	SB130-TWB	SB131-TWB	Dup1	Dup2	Dup3
	Date Collected																														
ANALYTE (ug/L)	DW	GSI																													
Acetone	730	1,700		1.13	2.36		0.88	1.82	3.58	3.82		1.22	2.11	0.72	5.17	0.93	5.7			9.1	5.7		10.3	66	25.8	5.9		5.8	1.06		
Methyl iodide	NC	NC																													
Carbon disulfide	800	NC																						0.86	0.4						
2 Butanone (MEK)	13,000	2,200		0.73	0.86		0.41	0.83	0.78	0.94					2.98									11.6	8.6						
Chloromethane	260	NC																					0.33		0.61						
Vinyl Chloride	2.0	13								0.64		18		4	6	0.45			5			2			2			2	4		
Chloroethane	430	1,100													0.6	1.13				1.07					0.77						
trichlorofluoromethane	2,600	NA																													
1,1-Dichloroethene	7.0	130										4		1	0.40				1						0.81				1		
Methylene Chloride	5.0	1,500																													
trans-1,2-Dichloroethene	100	1,500										0.92		0.24	0.23													0.28	0.26		
1,1-Dichloroethane	880	740								0.21		3.00		2	0.69	2.00						3.00						2.00	2.00		
cis-1,2-Dichloroethene	70	620								3		59		46	2	26				0.042	0.69	2	21		0.36	0.93	3.00	21.00	43.00		
Tetrahydrofuran	95	11,000													2																
Chloroform	80	350					3.00				0.35	0.35		0.29								0.042						0.41	0.29		
1,1,1-Trichloroethane	200	89										0.48		0.75								0.72						0.71	0.73		
4-Methyl-2-pentanone (M	1800	10000000000													0.67					0.390				0.590	2.190						
2-Hexanone	1000	10000000000																		0.750			0.210	2.170	4.570						
Carbontetrachloride	5.0	45									2																				
Benzene	5.0	200								0.25										0.43	0.12		0.17	0.21	0.81	0.21	0.16	0.23			
Bromodichloromethane	80.0	NC					0.89																								
Trichloroethene	5.0	200		3	2					4		102		92	3	23					8	3	81	0.55		8	5	78	86		
Toluene	790	270							0.35	0.63							0.23			0.39	0.20		0.38	0.30	1.00	0.35	0.24	0.44			
Tetrachloroethene	5.0	60					47															0.180						0.17			
Chlorobenzene	100	25																													
Styrene	100	80																		0.43											
Ethylbenzene	74	18																					0.12	0.11	0.31		0.11				
Total Xylenes	280	41																							0.79						
1,2 -Dichlorobenzene	600	13																													
1,2,4-Trimethylbenzene	63	17																						0.22	0.31						
1,2,3-Trimethylbenzene	NC	NC									0.07	0.07												0.20	0.18						
Naphthalene	520	11															0.34		0.31				0.75	1.68	0.55						
2-Methylnaphthalene	260	19															0.51		0.40				0.47	0.88	0.47						

NOTES:	
	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated method blank, suggesting a laboratory artifact.
NC	Insufficient data to develop criterion/no criterion
G	Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River

Table 1
GROUNDWATER ANALYTICAL DATA
RACER - Flint West #12990

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Dup1	Dup2	Dup3
	Date Collected		6/25/14	6/25/14	6/25/14	6/26/14	6/25/14	6/26/14	6/25/14	6/25/14	6/26/14	6/26/14	6/26/14	6/26/14	6/25/14	6/26/14			
ANALYTE (ug/L)	DW	GSI																	
Arsenic (dissolved)	10	10													19				
Chromium (dissolved)	100	160	G		51											152			
Copper (dissolved)	1,000	20	G													4			
Lead (dissolved)	4	44	G				25	22	23				15			5			
Selenium (dissolved)	50	5			66			8			6								
Zinc (dissolved)	2,400	260	G	5	11		10			5	7				8	13			

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105SR	MW-106S	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Dup1	Dup2	Dup3
	Date Collected		6/25/14	6/25/14	6/25/14	6/26/14	6/25/14	6/26/14	6/25/14	6/25/14	6/26/14	6/26/14	6/26/14	6/26/14	6/25/14	6/26/14			
ANALYTE (ug/L)	DW	GSI																	
Acetone	730	1,700		1.74	1.45	2.04	2.67	1.55	1.86	1.59	2.82	1.32	1.47	1.29	1.48	4.93	1.32		
Methyl iodide	NC	NC																	
Carbon disulfide	800	NC													0.42	0.36			
2 Butanone (MEK)	13,000	2,200								0.4	0.65	0.29		0.29	1.99				
Chloromethane	260	NC		0.32			0.34									0.29			
Vinyl Chloride	2.0	13										10			21	2			
Chloroethane	430	1,100													2.9				
trichlorofluoromethane	2,600	NA																	
1,1-Dichloroethene	7.0	130										4			2.00	0.39			
Methylene Chloride	5.0	1,500																	
trans-1,2-Dichloroethene	100	1,500										0.7			0.64	0.24			
1,1-Dichloroethane	880	740													1.00	3.00			
cis-1,2-Dichloroethene	70	620		0.62								3			7	59			
Tetrahydrofuran	95	11,000										70.0							
Chloroform	80	350					5.00		0.22		0.5	0.37				0.320			
1,1,1-Trichloroethane	200	89										0.50				1.00			
4-Methyl-2-pentanone (M	1800	1000000000													0.83				
2-Hexanone	1000	1000000000													1.46				
Carbontetrachloride	5.0	45									2								
Benzene	5.0	200																	
Bromodichloromethane	80.0	NC					0.82												
Trichloroethene	5.0	200		5	1	3		26		2		104		2	24	69			
Toluene	790	270																	
Tetrachloroethene	5.0	60																	
Chlorobenzene	100	25																	
Styrene	100	80																	
Ethylbenzene	74	18																	
Total Xylenes	280	41																	
1,2 -Dichlorobenzene	600	13																	
1,2,4-Trimethylbenzene	63	17																	
1,2,3-Trimethylbenzene	NC	NC																	
Naphthalene	520	11																	
2-Methylnaphthalene	260	19																	

NOTES:

	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated method blank, suggesting a laboratory artifact.
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Table 1
GROUNDWATER ANALYTICAL DATA
RACER - Flint West #12990

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Dup1	Dup2
	Date Collected		12/22/14	12/22/14	11/18/14	12/22/14	11/18/14	11/18/14	11/18/14	11/18/14	11/20/14	11/20/14	11/18/14	11/20/14	11/18/14	11/20/14	11/18/14	11/20/14
ANALYTE (ug/L)	DW	GSI																
Arsenic (dissolved)	10	10	na										17		20			
Arsenic	10	10	29	4	12	na	12	42	13	2	5	16	55	9	400	40	11.00	5.00
Cadmium (dissolved)	5	5	GX	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Cadmium	5	5	GX	6.90	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Chromium (dissolved)	100	160	G	na	na	7	na	9	6	15			7	7			10	
Chromium	100	160	GX	na	na	62	na	17,800	42,600	68,000	14	19	16	69	237	140	822	14,000
Copper (dissolved)	1,000	20	G	na			na											
Copper	1,000	20	GX	230	32	22	na	716	802	402	29	31	26	736	22	502	300	583
Lead (dissolved)	4	44	G	na			na											
Lead	4	44	GX	70	21	14	na	6	29	44	6	15	32	249	20	354	289	5
Selenium (dissolved)	50	5		na			na		14	5								
Selenium	50	5					na		16	5							6	
Zinc (dissolved)	2,400	260	G	na	66		na	28		15	9	13	11	25	34	9	23	36
Zinc	2,400	260	GX	493	74	33	na	29	52	210	27	222	47	556	36	920	504	23

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Dup1	Dup2
	Date Collected		12/22/14	12/22/14	11/18/14	12/22/14	11/18/14	11/18/14	11/18/14	11/18/14	11/20/14	11/20/14	11/18/14	11/20/14	11/18/14	11/20/14		
ANALYTE (ug/L)	DW	GSI																
Acetone	730	1,700		1.83	2.77	na									42			
Methyl iodide	NC	NC				na												
Carbon disulfide	800	NC		0.29		na	0.70											
2 Butanone (MEK)	13,000	2,200		0.55		na									24			
Chloromethane	260	NC				na	0.27	0.35		0.33		0.53	0.58	0.88		0.48	0.58	
Vinyl Chloride	2.0	13				na				0.58		12			3			
Chloroethane	430	1,100				na									0.88			
trichlorofluoromethane	2,600	NA				na												
1,1-Dichloroethene	7.0	130				na						5						
Methylene Chloride	5.0	1,500				na												
trans-1,2-Dichloroethene	100	1,500				na						0.9						
1,1-Dichloroethane	880	740				na				0.71		1			0.76	0.47		
cis-1,2-Dichloroethene	70	620		1		na				2	0.57	45		1	3	9		0.56
Tetrahydrofuran	95	11,000				na												
Chloroform	80	350				na	3				2	0.18					3	2
1,1,1-Trichloroethane	200	89				na						0.37				0.29		
4-Methyl-2-pentanone (MIBK)	1800	1000000000				na									3.88			
2-Hexanone	1000	1000000000				na									12			
Carbontetrachloride	5.0	45				na					2							2
Benzene	5.0	200				na						0.12			0.29			
Bromodichloromethane	80.0	NC				na	0.54										0.46	
Trichloroethene	5.0	200		2	4	0.36	na			5		160		7		61	0.3	
Toluene	790	270				na							0.22		0.51			
Tetrachloroethene	5.0	60			0.23	na		73				0.2				0.20		
Chlorobenzene	100	25				na												
Styrene	100	80				na												
Ethylbenzene	74	18				na									0.17			
Total Xylenes	280	41				na												
1,2 -Dichlorobenzene	600	13				na												
1,2,4-Trimethylbenzene	63	17				na												
1,2,3-Trimethylbenzene	NC	NC				na												
Naphthalene	520	11				na												
2-Methylnaphthalene	260	19				na												

NOTES:

	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated method blank, suggesting a laboratory artifact.
NC	Insufficient data to develop criterion/no criterion
G	Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River
na	Sample not analyzed for this constituent

Table 1
GROUNDWATER ANALYTICAL DATA
RACER - Flint West #12990

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Dup1	Dup2
	Date Collected		DRY	4/28/15	4/28/15	4/30/15	4/28/15	4/28/15	4/28/15	4/28/15	4/30/15	4/30/15	4/30/15	4/30/15	4/28/15	4/30/15	4/28/15	4/30/15
ANALYTE (ug/L)	DW	GSI																
Arsenic (dissolved)	10	10				6									16			6
Arsenic	10	10		4		23			5				2	6	277	6		20
Chromium (dissolved)	100	160	G		22		5	8									10	
Chromium	100	160	G	17	24		1590	829	58300					29	9	73	16	
Copper (dissolved)	1000	20	G															
Copper	1000	20	G	31	9		40	13	306						14	12		
Lead (dissolved)	4	44	G															
Lead	4	44	G	24					26						9	11		
Selenium (dissolved)	50	5						9										
Selenium	50	5						9										
Zinc (dissolved)	2400	260	G	9			8		120		6			9	39	22	11	
Zinc	2400	260	G	9			8		133		6			9	39	22	11	
Final Field Turbidity Reading, before filtering stated in ug/L				785E+3	432E+3	595E+3	1010E+3	1105E+3	1694E+3	479E+3	453E+3	505E+3	585E+3	617E+3	829E+3	729E+3		
	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105SR	MW-106S	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Dup1	Dup2
	Date Collected		DRY	4/28/15	4/28/15	4/30/15	4/28/15	4/28/15	4/28/15	4/28/15	4/30/15	4/30/15	4/30/15	4/30/15	4/28/15	4/30/15	4/28/15	4/30/15
ANALYTE (ug/L)	DW	GSI																
PNAs	varies	varies																

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105SR	MW-106S	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Dup1	Dup2
	Date Collected		DRY	4/28/15	4/28/15	4/30/15	4/28/15	4/28/15	4/28/15	4/28/15	4/30/15	4/30/15	4/30/15	4/30/15	4/28/15	4/30/15	4/28/15	4/30/15
ANALYTE (ug/L)	DW	GSI																
Acetone	730	1,700													10			
Methyl iodide	NC	NC																
Carbon disulfide	800	NC							0.17						0.16			
2 Butanone (MEK)	13,000	2,200													6.6			
Chloromethane	260	NC		4	6	2	6	5	5	4	4	4	5	5	4	2		3
Vinyl Chloride	2.0	13								0.6		21		4	4	2		
Chloroethane	430	1,100				0.7									5			0.77
trichlorofluoromethane	2,600	NA																
1,1-Dichloroethene	7.0	130										4		0.88				
Methylene Chloride	5.0	1,500																
trans-1,2-Dichloroethene	100	1,500										1		0.99		0.26		
1,1-Dichloroethane	880	740								0.56		2		2	0.52	3		
cis-1,2-Dichloroethene	70	620								2		51		48	0.66	19		
Tetrahydrofuran	95	11,000																
Chloroform	80	350					1		0.7		1	0.28		0.29	0.21	0.19		
1,1,1-Trichloroethane	200	89										0.51		0.36				
4-Methyl-2-pentanone (MIBK)	1800	1E+09													1			
2-Hexanone	1000	1E+09													3			
Carbontetrachloride	5.0	45									2							
Benzene	5.0	200		0.26		0.23												0.25
Bromodichloromethane	80.0	NC																
Trichloroethene	5.0	200		2	0.51					2		138		78	0.62	36		
Toluene	790	270		0.71					0.18									
Tetrachloroethene	5.0	60						69										
Chlorobenzene	100	25																0.17
Styrene	100	80				0.15												0.21
Ethylbenzene	?	?																
Total Xylenes	280	41																
1,2 -Dichlorobenzene	?	?																
1,2,4-Trimethylbenzene	63	17																
1,2,3-Trimethylbenzene	NC	NC																
Naphthalene	520	11																
2-Methylnaphthalene	260	19																

NOTES:

	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated method blank, suggesting a laboratory artifact.
NC	Insufficient data to develop criterion/no criterion
G	Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River

Table 1
GROUNDWATER ANALYTICAL DATA
RACER - Flint West #12990

	Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Trip Blank	Field Blank
	Date Collected			DRY	10/26/15	10/26/15	10/27/15	10/26/15	10/26/15	10/26/15	10/26/15	10/27/15	10/27/15	10/27/15	10/27/15	10/26/15	10/27/15	10/26/15	10/26/15
ANALYTE (ug/L)	DW	GSI																	
Arsenic (dissolved)	10	10		DRY			4							3.31	0.51	4	1.09		
Arsenic	10	10		DRY	4.3	20	140	13.6	70	53	68	18.4	40	30	60	235	30		
Chromium (dissolved)	100	160	G	DRY	2.39	7.1	0.51		23	128		0.67	0.5	0.66	4.35	0.57	0.76		
Chromium	100	160	G	DRY	49.1	90	120	10,000	16.2	446,000	29.5	70	70	16.4	1,140	150	220		
Copper (dissolved)	1000	20	G	DRY				1.04	1.89	1.5	4.88	2.28	7.11	12	2.85	115	3.13		
Copper	1000	20	G	DRY	14.42	37.44	160	210	820	2,760	70	90	90	90	70	200	80		
Lead (dissolved)	4	44	G	DRY				1.57		1.11						1.27			
Lead	4	44	G	DRY	7.61	20.45	80	29.78	180	300	16.86	90	70	20.3	40	100	50		
Selenium (dissolved)	50	5		DRY		1.3		1.9	9.9	4.6	2.2	1.4	2	1.2		102			
Selenium	50	5		DRY	12	16		15	17						16				
Zinc (dissolved)	2400	260	G	DRY	35	111	12	42	24	22	17	16	15	19	34	101	84		
Zinc	2400	260	G	DRY	40.3	100	410	160	800	1,600	110	350	230	70	140	450	170		
	Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Trip Blank	Field Blank
	Date Collected			DRY	10/26/15	10/26/15	10/27/15	10/26/15	10/26/15	10/26/15	10/26/15	10/27/15	10/27/15	10/27/15	10/27/15	10/26/15	10/27/15	10/26/15	10/26/15
ANALYTE (ug/L)	DW	GSI																	
Acetone	730	1,700		DRY															
Methyl iodide	NC	NC		DRY															
Carbon disulfide	800	NC		DRY															
2 Butanone (MEK)	13,000	2,200		DRY			1.74											0.82	0.79
Chloromethane	260	NC		DRY															
Vinyl Chloride	2.0	13		DRY									20		97				
Chloroethane	430	1,100		DRY															
trichlorofluoromethane	2,600	NA		DRY															
1,1-Dichloroethene	7.0	130		DRY									5.3		4	0.76			
Methylene Chloride	5.0	1,500		DRY															
trans-1,2-Dichloroethene	100	1,500		DRY											1		0.27		
1,1-Dichloroethane	880	740		DRY									3.3		2		1		
cis-1,2-Dichloroethene	70	620		DRY							0.42	0.66	80		42	1	23		
Tetrahydrofuran	95	11,000		DRY															
Chloroform	80	350		DRY				2				3							
1,1,1-Trichloroethane	200	89		DRY											0.33		0.45		
4-Methyl-2-pentanone (MIBK)	1800	1000000000		DRY												1.09			
2-Hexanone	1000	1000000000		DRY												1.64			
Carbontetrachloride	5.0	45		DRY									3						
Benzene	5.0	200		DRY			0.21		0.26	0.22						0.2			
Bromodichloromethane	80.0	NC		DRY				0.65											
Trichloroethene	5.0	200		DRY	3	0.68		0.68			2	0.33	200		92		67		
Toluene	790	270		DRY					0.58	0.4	0.31					0.37			
Tetrachloroethene	5.0	60		DRY					58										
Chlorobenzene	100	25		DRY															
Styrene	100	80		DRY															
Ethylbenzene	74	18		DRY															
Total Xylenes	280	41		DRY															
1,2 -Dichlorobenzene	600	13		DRY															
1,2,4-Trimethylbenzene	63	17		DRY															
1,2,3-Trimethylbenzene	NC	NC		DRY															
Naphthalene	520	11		DRY															
2-Methylnaphthalene	260	19		DRY															

NOTES:

	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated method blank, suggesting a laboratory artifact.
NC	Insufficient data to develop criterion/no criterion
G	Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River

Table 1
GROUNDWATER ANALYTICAL DATA
RACER - Flint West #12990

As Erroneously Labeled in May 23, 2016 Laboratory Report

As Erroneously Labeled in May 23, 2016 Laboratory Report			MW-112						MW-113		MW-120																			
	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Trip Blank	Field Blank	Trip Blank	Field Blank	Dup1	Trip Blank	Field Blank	Dup2	Dup3					
	Date Collected		5/11/16	5/11/16	NS	6/8/16	6/1/16	NS	5/11/16	5/11/16	6/1/16	6/1/16	6/1/16	6/8/16	5/11/16	6/1/16	5/11/16	5/11/16	6/1/16	6/1/16	6/1/16	6/8/16	6/8/16	6/8/16	6/8/16	6/8/16				
ANALYTE (ug/L)	DW	GSI																												
Arsenic (dissolved)	10	10			NS	6	1.65	NS				0.65	1.21	0.55	18	2.08														
Arsenic	10	10		3	NS	22	1.62	NS	3		0.96	5	3	1	79	9														
Chromium (dissolved)	100	160	G		NS	1.16	1.19	NS			1.42	1.17	1.77	3.33		1.73														
Chromium (total)	100	160	G	5	13	NS	1	465	NS	77	3	1.91	3.38	1.3	4	4.86														
Chromium VI (dissolved)	100	160			NS			NS																						
Chromium VI (total)	100	160		NA	NA	NS	NA	NS	NA				NA		NA	NA														
Copper (dissolved)	1000	20	G		NS	2.02	0.51	NS			2.32	6	1.49	1.25		0.73														
Copper	1000	20	G	4	7	NS	0.77	16	NS	7	3	1.95	8	0.74	1.38															
Lead (dissolved)	4	44	G		NS	0.278	0.764	NS			0.187	0.325	0.32	0.094	1	0.155														
Lead	4	44	G	2	3	NS	0.105	0.554	NS	2		0.785	2.6	0.5																
Selenium (dissolved)	50	5			NS			NS			6																			
Selenium	50	5			NS		6	NS			6																			
Zinc (dissolved)	2400	260	G	21		1870	18	NS			1220	730	373	49	5	317														
Zinc	2400	260	G	11	22	NS	2.46	1.48	NS	12	7	6	10	2.95	7															
	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Trip Blank	Field Blank	Trip Blank	Field Blank	Dup2	Trip Blank	Field Blank	Dup3	Dup3					
	Date Collected		5/11/16	5/11/16	NS	6/8/16	6/1/16	NS	5/11/16	5/11/16	6/1/16	6/1/16	6/1/16	6/8/16	5/11/16	6/1/16	5/11/16	5/11/16	6/1/16	6/1/16	6/1/16	6/8/16	6/8/16	6/8/16	6/8/16					
ANALYTE (ug/L)	DW	GSI																												
Acetone	730	1,700		2.72	1.62	NS		NS	2.72	2.1		0.6	0.67		4.21			1.98		0.69										
Methyl iodide	NC	NC			NS			NS																						
Carbon disulfide	800	NC			NS			NS																						
2 Butanone (MEK)	13,000	2,200			NS			NS							1.36			0.37												
Chloromethane	260	NC			NS			NS																						
Vinyl Chloride	2.0	13			NS			NS				15			17															
Chloroethane	430	1,100			NS			NS							2.59															
trichlorofluoromethane	2,600	NA			NS			NS																						
1,1-Dichloroethene	7.0	130			NS			NS				3																		
Methylene Chloride	5.0	1,500			NS			NS																						
trans-1,2-Dichloroethene	100	1,500			NS			NS				0.59			0.36															
1,1-Dichloroethane	880	740			NS			NS				1			1	3														
cis-1,2-Dichloroethene	70	620		0.34	NS			NS							3	30														
Tetrahydrofuran	95	11,000			NS			NS																						
Chloroform	80	350			NS		3	NS			1								0.490		3.000									
1,1,1-Trichloroethane	200	89			NS			NS				0.31				0.3														
4-Methyl-2-pentanone (MIBK)	1800	ID			NS			NS							0.3															
2-Hexanone	1000	ID			NS			NS							0.47															
Carbontetrachloride	5.0	45			NS			NS			2																			
Benzene	5.0	200			NS			NS													0.710									
Bromodichloromethane	80.0	NC			NS		0.74	NS																						
Trichloroethene	5.0	200		4	2	NS		NS	4	0.26		93		11	12	50														
Toluene	790	270			NS			NS																						
Tetrachloroethene	5.0	60			NS			NS																						
Chlorobenzene	100	25			NS			NS																						
Styrene	100	80			NS			NS																						
Ethylbenzene	74	18			NS			NS																						
Total Xylenes	280	41			NS			NS																						
1,2 -Dichlorobenzene	600	13			NS			NS																						
1,2,4-Trimethylbenzene	63	17			NS			NS																						
1,2,3-Trimethylbenzene	NC	NC			NS			NS																						
Naphthalene	520	11			NS			NS																						
2-Methylnaphthalene	260	19			NS			NS																						
Diethyl ether	10 (E)	ID			NS			NS																						
tert-Methyl butyl ether (MTBE)	40 (E)	7,100 (X)			NS			NS																						
Acrylonitrile	2.6	2.0 (M); 1.2			NS			NS																						
Dichlorodifluoromethane	1,700	ID			NS			NS																						
Bromomethane	10	35			NS			NS																						
1,2-Dichloroethane	5.0 (A)	360 (X)			NS			NS																						
Trichloroethene	5.0 (A)	200 (X)			NS			NS																						
1,2-Dichloropropane	5.0 (A)	230 (X)			NS			NS																						
cis-1,3-Dichloropropene	NC	NC			NS			NS																						
trans-1,3-Dichloropropene	NC	NC			NS			NS																						
1,1,2-Trichloroethane	5.0 (A)	330 (X)			NS			NS																						
trans-1,4-Dichloro-2-butene	NC	NC			NS			NS																						
Dibromochloromethane	80 (A,W)	ID			NS			NS																						
1,2-Dibromoethane	NC	NC			NS			NS																						
1,1,1,2-Tetrachloroethane	77	ID			NS			NS																						
Isopropylbenzene	800	28			NS			NS																						
Bromoform	80 (A,W)	ID			NS			NS																						
1,1,2,2-Tetrachloroethane	8.5	78 (X)			NS			NS																						
1,2,3-Trichloropropane	42	NA			NS			NS																						
n-Propylbenzene	80	ID			NS			NS																						
Bromobenzene	18	NA			NS			NS																						
1,3,5-Trimethylbenzene	72 (E)	45			NS			NS								</														

NOTES:	
	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated method blank, suggesting a laboratory artifact.
NC	Insufficient data to develop criterion/no criterion
G	Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S			Dup			Dup			
	Date Collected		10/27/16	10/27/16	11/1/16	10/31/16	11/1/16	11/1/16	10/27/16	10/27/16	10/31/16	10/31/16	10/31/16	10/31/16	10/27/16	10/31/16			10/27/16			10/31/16			
ANALYTE (ug/L)	DW	GSI																							
Arsenic (dissolved)	10	10			1.63			1.23		0.79	15			6	108	4			34						
Arsenic	10	10		1.69	0.7	4		6	0.93	1.05	52	1.26		11	265	17			259			2			
Chromium (dissolved)	100	160	G	0.95	20	6		24	407	340	0.18	0.56		0.41	2.41	2.86			0.59			0.64			
Chromium (total)	100	160	G	10	63	8	0.059	146	6540	619	19	1.31	0.62	6	2	9	22		6			1.38			
Chromium VI (dissolved)	100	160											14												
Chromium VI (total)	100	160																							
Copper (dissolved)	1000	20	G	0.91	4.31	2.20	0.99	2.22	31	32	1.25		6	6	6				3			0.86			
Copper	1000	20	G	5	18	1.41	1.1	4.16	203	64	2.46		6	1.85	6	10	2.94		6			1.63			
Lead (dissolved)	4	44	G	0.144	0.148	0.97	0.116		0.85	0.451			0.151	0.075	0.978	1.651			0.191			0.361			
Lead	4	44	G	2.32	0.895	1.33	0.306		3.00	0.632	0.35	0.161	0.479	0.523	1.3	5	2.855		3.000			0.928			
Selenium (dissolved)	50	5																							
Selenium	50	5																							
Zinc (dissolved)	2400	260	G	20.6	2.28	5	4.19		390	2.89	10	2.36	3.46	6	16	2.05			10			6			
Zinc	2400	260	G	12	5	6	2.35		1380	2	11		3.59	2.3	7	32	9		21			6			

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Trip Blank	Field Blank	Dup	Trip Blank	Field Blank	Dup			
	Date Collected		10/27/16	10/27/16	11/1/16	10/31/16	11/1/16	11/1/16	10/27/16	10/27/16	10/31/16	10/31/16	10/31/16	10/31/16	10/27/16	10/31/16	10/27/16	10/27/16	10/27/16	10/31/16	10/31/16	10/31/16			
ANALYTE (ug/L)	DW	GSI																							
Acetone	730	1,700													10										
Methyl Iodide	NC	NC																							
Carbon disulfide	800	NC																							
2 Butanone (MEK)	13,000	2,200																							
Chloromethano	260	NC																							
Vinyl Chloride	2.0	13										8		72	2				2						
Chloroethane	430	1,100													3				3						
Trichlorofluoromethane	2,600	NA																							
1,1-Dichloroethene	7.0	130										3		4											
Methylene Chloride	5.0	1,500																							
trans-1,2-Dichloroetheno	100	1,500																							
1,1-Dichloroethane	880	740											2	2	2	11			2						
cis-1,2-Dichloroethene	70	620							2			32		10	2										
Tetrahydrofuran	95	11,000																							
Chloroform	80	350					1				3										2				
1,1,1-Trichloroethane	200	89																							
4-Methyl-2-pentanono (MIBK)	1800	ID																							
2-Hexanone	1000	ID																							
Carbontetrachloride	5.0	45									2										1				
Benzene	5.0	200																							
Bromodichloromethane	80.0	NC																							
Trichloroethene	5.0	200	3	2						3		119		41	3	50			2						
Toluene	790	270																							
Tetrachloroethene	5.0	60						34																	
Chlorobenzene	100	25																							
Styrene	100	80																							
Ethylbenzene	74	18																							
Total Xylenes	280	41																							
1,2-Dichlorobenzene	600	13																							
1,2,4-Trimethylbenzene	63	17																							
1,2,3-Trimethylbenzene	NC	NC																							
Naphthalene	520	11																							
2-Methylnaphthalene	260	19																							
Diethyl ether	10 (E)	ID																							
tert-Methyl butyl ether (MTBE)	40 (E)	7,100 (X)																							
Acrylonitrile	2.6	2.0 (M); 1.2																							
Dichlorodifluoromethane	1,700	ID																							
Bromomethane	10	35																							
1,2-Dichloroethane	5.0 (A)	360 (X)																							
Trichloroethene	5.0 (A)	200 (X)																							
1,2-Dichloropropane	5.0 (A)	230 (X)																							
cis-1,3-Dichloropropene	NC	NC																							
trans-1,3-Dichloropropene	NC	NC																							
1,1,2-Trichloroethano	5.0 (A)	330 (X)																							
trans-1,4-Dichloro-2-butene	NC	NC																							
Dibromochloromethane	80 (A,W)	ID																							
1,2-Dibromoethano	NC	NC																							
1,1,1,2-Tetrachloroethane	77	ID																							
Isopropylbenzene	800	28																							
Bromoform	80 (A,W)	ID																							
1,1,2,2-Tetrachloroethane	8.5	78 (X)																							
1,2,3-Trichloropropane	42	NA																							
n-Propylbenzene	80	ID																							
Bromobenzene	18	NA																							
1,3,5-Trimethylbenzene	72 (E)	45																							
tert-Butylbenzene	80	ID																							
1,2,4-Trimethylbenzene	63 (E)	17																							
1,2,3-Trichlorobenzene	NC	NC																							

NOTES:	
X	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
NC	Insufficient data to develop criterion/no criterion
G	Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River
NS	No Sample
1	Filtered in lab
2	Filtered and preserved in lab
NA	Not analyzed due to turbidity

Detected Concentrations for compounds also found in the method blank that appear to be laboratory artifacts are not provided.

Table 1
GROUNDWATER ANALYTICAL DATA
RACER - Flint West #12990

As Erroneously Labeled in May 23, 2016 Laboratory Report

	Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Trip Blank	Field Blank	Trip Blank	Field Blank	Dup1	Trip Blank	Field Blank	Dup2	Dup3
	Date Collected			NS	6/13/17	6/13/17	6/13/17	6/13/17	6/13/17	6/13/17	6/13/17	NS	NS	NS	6/13/17	6/13/17	NS	6/13/17	6/13/17			6/13/17				
ANALYTE (ug/L)	DW	GSI										NS	NS	NS			NS									
Arsenic (dissolved)	10	10			0.85		9.00	0.41	0.64	0.58		NS	NS	NS	1.37	82.00	NS					84.000				
Arsenic	10	10			0.63	3.00	13.00	0.53	0.56	1.11	0.44	NS	NS	NS	1.45	126.00	NS					123.000				
Chromium (dissolved)	100	160	G		1.57	12.00	0.22	28.00	37.00	100.00	0.16	NS	NS	NS	2.69	0.34	NS					0.62				
Chromium (total)	100	160	G		21	72.00	1.50	1640.00	776.00	2500.00		NS	NS	NS	7.00	0.37	NS					0.7				
Chromium VI (dissolved)	100	160				8.00	0.86					NS	NS	NS			NS									
Chromium VI (total)	100	160				6.00						NS	NS	NS			NS									
Copper (dissolved)	1000	20	G		0.59	1.56	0.86	6.00	2.38	4.31	1.61	NS	NS	NS	1.34		NS					0.4				
Copper	1000	20	G		2.47	8.00	1.81	33.00	8.00	28.00	1.60	NS	NS	NS	1.38		NS					0.62				
Lead (dissolved)	4	44	G			0.15	0.09		0.06	0.18	0.13	NS	NS	NS	0.21	0.06	NS									
Lead	4	44	G		0.547	2.82	0.53	0.14	0.22	0.76	0.14	NS	NS	NS	0.96	0.08	NS					0.066				
Selenium (dissolved)	50	5										NS	NS	NS			NS									
Selenium	50	5										NS	NS	NS			NS									
Zinc (dissolved)	2400	260	G		1.69	2.09	2.48	3.13	5.00	2.20	4.41	NS	NS	NS	1.72	2.22	NS					2.25				
Zinc	2400	260	G		3.16	9.00	3.22	2.59	13.00	4.68	3.01	NS	NS	NS	2.54	4.07	NS					5				

	Sample ID		MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Trip Blank	Field Blank	Trip Blank	Field Blank	Dup1	Trip Blank	Field Blank	Dup3	Dup3
	Date Collected		6/13/17	6/13/17	6/13/17	6/13/17	6/13/17	6/13/17	6/13/17	6/13/17	NS	NS	NS	6/13/17	6/13/17	NS	6/13/17	6/13/17			6/13/17				
ANALYTE (ug/L)	DW	GSI	NS								NS	NS	NS			NS									
Acetone	730	1,700	NS	4.29	2.15	3.86	2.50	4.15	2.26	2.40	NS	NS	NS	4.31	5.87	NS	3.04	5.67			4.61				
Methyl iodide	NC	NC	NS								NS	NS	NS			NS									
Carbon disulfide	800	NC	NS								NS	NS	NS			NS									
2 Butanone (MEK)	13,000	2,200	NS	0.89							NS	NS	NS	0.80	2.00	NS		0.9			1.37				
Chloromethane	260	NC	NS								NS	NS	NS			NS									
Vinyl Chloride	2.0	13	NS								NS	NS	NS		10.00	NS					12				
Chloroethane	430	1,100	NS								NS	NS	NS		1.59	NS					2.05				
trichlorofluoromethane	2,600	NA	NS	0.56							NS	NS	NS			NS									
1,1-Dichloroethene	7.0	130	NS								NS	NS	NS		1.00	NS					2				
Methylene Chloride	5.0	1,500	NS								NS	NS	NS		0.35	NS		0.31			0.41				
trans-1,2-Dichloroethene	100	1,500	NS								NS	NS	NS		0.39	NS					0.53				
1,1-Dichloroethane	880	740	NS								NS	NS	NS		1.00	NS					1				
cis-1,2-Dichloroethene	70	620	NS								NS	NS	NS		4.00	NS					6				
Tetrahydrofuran	95	11,000	NS								NS	NS	NS			NS									
Chloroform	80	350	NS				1.00				NS	NS	NS			NS		11.000							
1,1,1-Trichloroethane	200	89	NS								NS	NS	NS			NS									
4-Methyl-2-pentanone (MIBK)	1800	ID	NS							0.15	NS	NS	NS		0.75	NS									
2-Hexanone	1000	ID	NS								NS	NS	NS		0.97	NS									
Carbontetrachloride	5.0	45	NS								NS	NS	NS			NS									
Benzene	5.0	200	NS								NS	NS	NS		0.20	NS									
Bromodichloromethane	80.0	NC	NS				0.55				NS	NS	NS			NS		2.00							
Trichloroethene	5.0	200	NS	0.97	0.74					0.25	NS	NS	NS	3.00	10.00	NS					15				
Toluene	790	270	NS								NS	NS	NS			NS									
Tetrachloroethene	5.0	60	NS					29.00			NS	NS	NS			NS									
Chlorobenzene	100	25	NS								NS	NS	NS			NS									
Styrene	100	80	NS								NS	NS	NS			NS									
Ethylbenzene	74	18	NS								NS	NS	NS			NS									
Total Xylenes	280	41	NS								NS	NS	NS			NS									
1,2 -Dichlorobenzene	600	13	NS								NS	NS	NS			NS									
1,2,4-Trimethylbenzene	63	17	NS								NS	NS	NS			NS									
1,2,3-Trimethylbenzene	NC	NC	NS								NS	NS	NS			NS									
Naphthalene	520	11	NS								NS	NS	NS			NS									
2-Methylnaphthalene	260	19	NS								NS	NS	NS	1.40		NS									
Diethyl ether	10 (E)	ID	NS								NS	NS	NS			NS									
tert-Methyl butyl ether (MTBE)	40 (E)	7,100 (X)	NS								NS	NS	NS			NS									
Acrylonitrile	2.6	2.0 (M); 1.2	NS								NS	NS	NS			NS									
Dichlorodifluoromethane	1,700	ID	NS								NS	NS	NS			NS		0.32							
Bromomethane	10	35	NS								NS	NS	NS			NS									
1,2-Dichloroethane	5.0 (A)	360 (X)	NS								NS	NS	NS			NS									
Trichloroethene	5.0 (A)	200 (X)	NS								NS	NS	NS			NS									
1,2-Dichloropropane	5.0 (A)	230 (X)	NS								NS	NS	NS			NS									
cis-1,3-Dichloropropene	NC	NC	NS								NS	NS	NS			NS									
trans-1,3-Dichloropropene	NC	NC	NS								NS	NS	NS			NS									
1,1,2-Trichloroethane	5.0 (A)	330 (X)	NS								NS	NS	NS			NS									
trans-1,4-Dichloro-2-butene	NC	NC	NS								NS	NS	NS			NS									
Dibromochloromethane	80 (A,W)	ID	NS								NS	NS	NS			NS									
1,2-Dibromoethane	NC	NC	NS								NS	NS	NS			NS									
1,1,1,2-Tetrachloroethane	77	ID	NS								NS	NS	NS			NS									
Isopropylbenzene	800	28	NS								NS	NS	NS			NS									
Bromoform	80 (A,W)	ID	NS								NS	NS	NS			NS									
1,1,2,2-Tetrachloroethane	8.5	78 (X)	NS								NS	NS	NS			NS									
1,2,3-Trichloropropane	42	NA	NS								NS	NS	NS			NS									
n-Propylbenzene	80	ID	NS								NS	NS	NS	0.30		NS									
Bromobenzene	18	NA	NS								NS	NS	NS			NS									
1,3,5-Trimethylbenzene	72 (E)	45	NS								NS	NS	NS			NS									
tert-Butylbenzene	80	ID	NS								NS	NS	NS			NS									
1,2,4-Trimethylbenzene	63 (E)	17	NS								NS	NS	NS			NS									
1,2,3-Trichlorobenzene	NC	NC	NS								NS	NS	NS			NS									
n-Butylbenzene	NC	NC	NS								NS	NS	NS	0.270		NS									

NOTES:

	Blank cells indicate no detectable concentrations	Blank cells indicate no detectable concentrations
X	Exceeds DW criteria	Exceeds DW criteria
X	Exceeds GSI criteria	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria	Exceeds both DW and GSI criteria
X	Compound also found in associated method blank, suggestin	Compound also found in associated method blank, suggesting a laboratory artifact.
NC	Insufficient data to develop criterion/no criterion	Insufficient data to develop criterion/no criterion
G	Groundwater to Surface Water Interface Criteria - calculated	Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Field Dupe	Trip Blank	Field Blank	Equip Blank
Date Collected			1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18
METALS ANALYTE (ug/L)	DW	GSI																		
Arsenic (dissolved)	10	10		2	1.094	29	<2	<2		0.548				4	100		108			
Arsenic	10	10		3	3	34	<2	<2		<2				10	129		131			
Chromium (dissolved)	100	160	G	41	9	<5	86	13		<5				37	1.217		0.537			
Chromium (total)	100	160	G	244	28	<5	1,740	141		<5				68	1.540		0.4368			
Chromium VI (dissolved)	100	160		<10	<10	<10	<10	<10		<10				<10	<10		<10			
Chromium VI (total)	100	160		<10	<10	<20	<10	<10		<10				<10	<20		<20			
Copper (dissolved)	1000	20	G	5	2.446	0.908	5	1.182		1.134				3.403	0.547		0.555			
Copper	1000	20	G	21	4.359	0.736	34	3.337		1.057				7	1.333		1.671			
Lead (dissolved)	4	44	G	1.836	1.058	<3	<3	<3		<3				2.084	<3		<3			
Lead	4	44	G	4	3	<3	0.739	<3		<3				6	<3		1.217			
Selenium (dissolved)	50	5		2	4	<5	2	8		1				1	1		1			
Selenium	50	5		2	4	<5	2	11		1				1	<5		1			
Zinc (dissolved)	2400	260	G	8	5	1.90	<5	2		2.24				7	2.480		2.5			
Zinc	2400	260	G	18	11	2.55	14	2.31		1.55				12	6		15			
VOC ANALYTE (ug/L)	DW	GSI																		
Acetone	730	1,700																	6.3	6.4
Methyl iodide	NC	NC																		
Carbon disulfide	800	NC																		
2 Butanone (MEK)	13,000	2,200																		
Chloromethane	260	NC																		
Vinyl Chloride	2.0	13				0.29				0.77					2		1			
Chloroethane	430	1,100															0.31			
trichlorofluoromethane	2,600	NA																		
1,1-Dichloroethene	7.0	130												0.31						
Methylene Chloride	5.0	1,500																		
trans-1,2-Dichloroethene	100	1,500												0.16						
1,1-Dichloroethane	880	740								0.97				2	0.70		0.75			
cis-1,2-Dichloroethene	70	620								2.00				51	3		2			
Tetrahydrofuran	95	11,000																		
Chloroform	80	350					2.00							0.24						
1,1,1-Trichloroethane	200	89																		
4-Methyl-2-pentanone (MIBK)	1800	ID															0.410			
2-Hexanone	1000	ID															0.95			
Carbon tetrachloride	5.0	45																		
Benzene	5.0	200				0.20				0.18										
Bromodichloromethane	80.0	NC					0.68													
Trichloroethene	5.0	200		3						5.00				30	2		0.83			
Toluene	790	270																		
Tetrachloroethene	5.0	60						43												
Chlorobenzene	100	25																		
Styrene	100	80																		

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Field Dupe	Trip Blank	Field Blank	Equip Blank
Date Collected			1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18
VOC ANALYTE (ug/L) {cont}	DW	GSI																		
Ethylbenzene	74	18																		
Total Xylenes	280	41																		
1,2 -Dichlorobenzene	600	13																		
1,3 -Dichlorobenzene	6.6	28		0.36	0.46	0.43		0.23						0.30	0.30		0.26			
1,2,4-Trimethylbenzene	63	17																		
1,2,3-Trimethylbenzene	NC	NC																		
Naphthalene	520	11																		
2-Methylnaphthalene	260	19																		
Diethyl ether	10 (E)	ID																		
tert-Methyl butyl ether (MTBE)	40 (E)	7,100 (X)																		
Acrylonitrile	2.6	2.0 (M); 1.2																		
Dichlorodifluoromethane	1,700	ID																		
Bromomethane	10	35																		
1,2-Dichloroethane	5.0 (A)	360 (X)																		
Trichloroethene	5.0 (A)	200 (X)																		
1,2-Dichloropropane	5.0 (A)	230 (X)																		
cis-1,3-Dichloropropene	NC	NC																		
trans-1,3-Dichloropropene	NC	NC																		
1,1,2-Trichloroethane	5.0 (A)	330 (X)																		
trans-1,4-Dichloro-2-butene	NC	NC																		
Dibromochloromethane	80 (A,W)	ID																		
1,2-Dibromoethane	NC	NC																		
1,1,1,2-Tetrachloroethane	77	ID																		
Isopropylbenzene	800	28																		
Bromoform	80 (A,W)	ID																		
1,1,2,2-Tetrachloroethane	8.5	78 (X)																		
1,2,3-Trichloropropane	42	NA																		
n-Propylbenzene	80	ID																		
Bromobenzene	18	NA																		
1,3,5-Trimethylbenzene	72 (E)	45																		
tert-Butylbenzene	80	ID																		
1,2,4-Trimethylbenzene	63 (E)	17																		
1,2,3-Trichlorobenzene	NC	NC																		
n-Butylbenzene	NC	NC																		
1,4-Dioxane (EPA8260)	7.2	2,800 (X)																		

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID				MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Field Dupe	Trip Blank	Field Blank	Equip Blank
Date Collected				1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18	1/28/18
PFA ANALYTE (ng/L)	DW	GSI																			
Perfluorobutanesulfonic acid (PFBS)	NC	NC														8.1		5.3			
Perfluorohexanesulfonic acid (PFHxS)	NC	NC													1.9						
Perfluoroheptanesulfonic Acid (PFHpS)	NC	NC																			
Perfluorooctanesulfonic acid (PFOS)	CC	12 (X)			35	7									44	16		16			
Perfluorodecanesulfonic acid (PFDS)	NC	NC																			
Perfluorobutanoic acid (PFBA)	NC	NC			3.1	4.8									4.8	180		180			
Perfluoropentanoic acid (PFPeA)	NC	NC				2.3															
Perfluorohexanoic acid (PFHxA)	NC	NC				2.5									2.6						
Perfluoroheptanoic acid (PFHpA)	NC	NC																			
Perfluorooctanoic acid (PFOA)	CC	12,000 (X)			4.4	4.1									6.1	4.2		4			
Perfluorononanoic acid (PFNA)	NC	NC																			
Perfluorodecanoic acid (PFDA)	NC	NC																			
Perfluoroundecanoic acid (PFUnA)	NC	NC																			
Perfluorododecanoic acid (PFDoA)	NC	NC																			
Perfluorotridecanoic Acid (PFTriA)	NC	NC																			
Perfluorotetradecanoic acid (PFTeA)	NC	NC																			
Perfluorooctane Sulfonamide (FOSA)	NC	NC																			

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

NOTES:

DW - Drinking Water Residential Generic Criteria.
GSI - Groundwater Surface Water Interface Generic Criteria per
MDEQ Surface Water Division Rule 57.

Blank cells indicate no detectable concentrations	
Exceeds DW criteria	X
Exceeds GSI criteria	X
Exceeds both DW and GSI criteria	X
Compound also found in associated method blank, suggesting a laboratory artifact.	X
Insufficient data to develop criterion/no criterion	NC
Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River	G
Not Sampled	NS
Filtered in lab	1
Filtered and preserved in lab	2
Not analyzed due to turbidity	NA
Combined PFOA and PFOS concentrations compared to 0.070 ppb (70 ppt) for the drinking water pathway.	CC

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Field Dupe	Trip Blank	Field Blank	Equip Blank
Date Collected			5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18		5/29/18	5/29/18
METALS ANALYTE (ug/L)	DW	GSI	DRY				DRY		DRY		NS	NS	NS			NS	MW-102S			
Arsenic (dissolved)	10	10				1.41									23					
Arsenic	10	10				9									60					
Chromium (dissolved)	100	160	G	1.62	14	0.168		1.01		0.328				4.13	0.431		14			
Chromium (total)	100	160	G	2.64	14	0.276		44		0.208				4.17	0.296		14			0.095
Chromium VI (dissolved)	100	160																		
Chromium VI (total)	100	160																		
Copper (dissolved)	1000	20	G	0.381	0.498			0.816		1.73				0.611			0.469			
Copper	1000	20	G	0.748	0.341			1.78		1.43				2.42						
Lead (dissolved)	4	44	G																	
Lead	4	44	G	0.408		0.068		0.304		0.121				0.067	0.062					
Selenium (dissolved)	50	5																		
Selenium	50	5																		
Zinc (dissolved)	2400	260	G	6	8	7		8		12				15	8		9			
Zinc	2400	260	G	6	7	8		7		8				6	4.76		9			1.79
VOC ANALYTE (ug/L)	DW	GSI																		
Acetone	730	1,700		5	4.5	6.4		5.6						5.9	8.2		5.6	4.8		8.4
Methyl iodide	NC	NC																		
Carbon disulfide	800	NC																		
2 Butanone (MEK)	13,000	2,200																		
Chloromethane	260	NC																		
Vinyl Chloride	2.0	13													9					
Chloroethane	430	1,100																		
trichlorofluoromethane	2,600	NA																		
1,1-Dichloroethene	7.0	130													1					
Methylene Chloride	5.0	1,500													0.17					
trans-1,2-Dichloroethene	100	1,500													0.25					
1,1-Dichloroethane	880	740													1					
cis-1,2-Dichloroethene	70	620													3					
Tetrahydrofuran	95	11,000																4.8		
Chloroform	80	350																		0.46
1,1,1-Trichloroethane	200	89																		
4-Methyl-2-pentanone (MIBK)	1800	ID																		
2-Hexanone	1000	ID																		
Carbon tetrachloride	5.0	38 (X)																		
Benzene	5.0	200													0.20					
Bromodichloromethane	80.0	NC																		
Trichloroethene	5.0	200		1	0.67									7	13		0.7			
Toluene	790	270			0.39															
Tetrachloroethene	5.0	60						45												
Chlorobenzene	100	25																		
Styrene	100	80																		

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Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Field Dupe	Trip Blank	Field Blank	Equip Blank
Date Collected			5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18		5/29/18	5/29/18
VOC ANALYTE (ug/L) {cont}	DW	GSI																		
Ethylbenzene	74	18																		
Total Xylenes	280	49																		
1,2 -Dichlorobenzene	600	13																		
1,3 -Dichlorobenzene	6.6	28				0.23														
1,2,4-Trimethylbenzene	63	17																		
1,2,3-Trimethylbenzene	NC	NC																		
Naphthalene	520	11			0.21															
2-Methylnaphthalene	260	19																		
Diethyl ether	10 (E)	ID																		
tert-Methyl butyl ether (MTBE)	40 (E)	7,100 (X)																		
Acrylonitrile	2.6	2.0 (M); 1.2																		
Dichlorodifluoromethane	1,700	ID																		
Bromomethane	10	4.2; [5(M)]																		
1,2-Dichloroethane	5.0 (A)	360 (X)																		
Trichloroethene	5.0 (A)	200 (X)																		
1,2-Dichloropropane	5.0 (A)	230 (X)																		
cis-1,3-Dichloropropene	NC	NC																		
trans-1,3-Dichloropropene	NC	NC																		
1,1,2-Trichloroethane	5.0 (A)	330 (X)																		
trans-1,4-Dichloro-2-butene	NC	NC																		
Dibromochloromethane	80 (A,W)	ID																		
1,2-Dibromoethane	NC	NC																		
1,1,1,2-Tetrachloroethane	77	ID																		
Isopropylbenzene	800	28																		
Bromoform	80 (A,W)	ID																		
1,1,2,2-Tetrachloroethane	8.5	78 (X)																		
1,2,3-Trichloropropane	42	NA																		
n-Propylbenzene	80	ID																		
Bromobenzene	18	NA																		
1,3,5-Trimethylbenzene	72 (E)	45																		
tert-Butylbenzene	80	ID																		
1,2,4-Trimethylbenzene	63 (E)	17																		
1,2,3-Trichlorobenzene	NC	NC																		
n-Butylbenzene	NC	NC																		
1,4-Dioxane (EPA SIM8270)	7.2	2,800 (X)													0.13		0.025	0.025		

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	Field Dupe	Trip Blank	Field Blank	Equip Blank
Date Collected			5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18	5/29/18		5/29/18	5/29/18
PFA ANALYTE (ng/L)	DW	GSI																		
Perfluorobutane sulfonic acid (PFBS)	NC	NC			1.3												1.2			
Perfluoropentane sulfonic acid (PFPeS)	NC	NC																		
Perfluorohexane sulfonic acid (PFHxS)	NC	NC		1.4	2									1.6			2			
Perfluoroheptane sulfonic acid (PFHpS)	NC	NC			0.18												1.1			
Perfluorooctane sulfonic acid (PFOS)	CC	12 (X)		12	12									47	27		12			
Perfluorononane sulfonic acid (PFNS)	NC	NC																		
Perfluorodecane sulfonic acid (PFDS)	NC	NC																		
Perfluorobutanoic acid (PFBA)	NC	NC													41					
Perfluoropentanoic acid (PFPeA)	NC	NC			1.2										1.7					
Perfluorohexanoic acid (PFHxA)	NC	NC			1.8												2.5			
Perfluoroheptanoic acid (PFHpA)	NC	NC			1.7															
Perfluorooctanoic acid (PFOA)	CC	12,000 (X)		2	4.2									1.7	2.5		4.3			
Perfluorononanoic acid (PFNA)	NC	NC		1.1	1										1.8					
Perfluorodecanoic acid (PFDA)	NC	NC																		
Perfluoroundecanoic acid (PFUnDA)	NC	NC													0.61					
Perfluorododecanoic acid (PFDoDA)	NC	NC		0.51																
Perfluorotridecanoic acid (PFTTrDA)	NC	NC		0.82										0.78	0.85			0.94	1.1	
Perfluorotetradecanoic acid (PFTeDA)	NC	NC		1.4	1.2															
Perfluorooctane sulfonamide (FOSA)	NC	NC																		
N-Methyl perfluorooctane sulfonamidoacetic acid	NC	NC																		
N-Ethyl perfluorooctane sulfonamidoacetic acid	NC	NC																		
Fluorotelomer sulfonic acid (4:2 FTS)	NC	NC																		
Fluorotelomer sulfonic acid (6:2 FTS)	NC	NC																		
Fluorotelomer sulfonic acid (8:2 FTS)	NC	NC																		

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

NOTES:

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GSI - Groundwater Surface Water Interface Generic Criteria per
MDEQ Surface Water Division Rule 57.

Blank cells indicate no detectable concentrations	
Exceeds DW criteria	X
Exceeds GSI criteria	X
Exceeds both DW and GSI criteria	X
Compound also found in associated method blank, suggesting a laboratory artifact.	X
Insufficient data to develop criterion/no criterion	NC
Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River	G
Not Sampled	NS
Filtered in lab	1
Filtered and preserved in lab	2
Not analyzed due to turbidity	NA
Combined PFOA and PFOS concentrations compared to 0.070 ppb (70 ppt) for the drinking water pathway.	CC

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Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	MW-114S	Field Dup (Dup-1)	Field Dup (Dup-2)	Trip Blank	Trip Blank	Field Blank	Field Blank (FB2)	Equip Blank	Equip Blank	
Date Collected			9/5/18	9/5/18	8/30/18	9/5/18	9/5/18	9/5/18	9/5/18	8/30/18	8/30/18	9/5/18	8/30/18	8/30/18	9/5/18	8/30/18	9/5/18	9/5/18	9/5/18	8/30/18	9/5/18	8/30/18	9/5/18	8/30/18	9/5/18	
METALS ANALYTE (ug/L)	DW	GSI																MW-104S	MW-109S							
Arsenic (dissolved)	10	10				19						4	1		52		1		3				1		1	
Arsenic	10	10				53		1	1			5	3		104		2		5				1		1	
Chromium (dissolved)	100	160	G		1		10	1	6				1	4		1	7	1								
Chromium (total)	100	160	G		2	6		388	62	789			1			1	9	13								
Chromium VI (dissolved)	100	160			1																					
Chromium VI	100	160												5			6									
Copper (dissolved)	1000	20	G	1	1	1		2	1	4	2	1	1	7	1		1	2	1							
Copper	1000	20	G		1	1		13	2	23	1	1	1		1		1	3	1							
Lead (dissolved)	4	44	G																							
Lead	4	44	G						1	1																
Selenium (dissolved)	50	5		1	4	2	3	3	8	1		2	4		5	1		1	9	2				1	1	
Selenium	50	5		2	4	4	4	3	9	5		4	1	3	2	3	3	3	6	2			1	1	1	
Zinc (dissolved)	2400	260	G	2	4	3	1	3	2	2	4	3	3	5	6	2	5	4	1	2			2	2	1	
Zinc	2400	260	G	3	2	5	2	5	2	6	2	4	5	3	2	4	5	3	1	2			1	1	1	
VOC ANALYTE (ug/L)	DW	GSI																								
Acetone	730	1,700			2.55	2.72	5.20	0.81	1.12	0.63	0.61		2.32			4.98	2.11	18.6		2.75	5.13	4.54	1.26	7.48	1.74	7.35
Methyl iodide	NC	NC																								
Carbon disulfide	800	NC																								
2 Butanone (MEK)	13,000	2,200				1.14									1.09								0.32	2.48		
Chloromethane	260	NC																		1.92						
Vinyl Chloride	2.0	13										42			5		9.5		41							
Chloroethane	430	1,100																								
trichlorofluoromethane	2,600	NA																								
1,1-Dichloroethene	7.0	130										2			0.66											
Methylene Chloride	5.0	1,500																								
trans-1,2-Dichloroethene	100	1,500										0.7							0.66							
1,1-Dichloroethane	880	740										1		0.27	0.63		3.6		1							
cis-1,2-Dichloroethene	70	620		9						0.34		68		5	2		490	0.36	65							
Tetrahydrofuran	95	11,000															16									
Chloroform	80	350					1				1												0.4	0.4	0.3	
1,1,1-Trichloroethane	200	89																								
4-Methyl-2-pentanone (MIBK)	1800	ID																								
2-Hexanone	1000	ID																								
Carbon tetrachloride	5.0	38 (X)									4															
Benzene	5.0	200				0.67																				
Bromodichloromethane	80.0	NC					0.5																	0.35		
Trichloroethene	5.0	200		4	4	0.39					1		17		12	7	1	210		17						
Toluene	790	270																								
Tetrachloroethene	5.0	60						40										40	0.22							
Chlorobenzene	100	25																								
Styrene	100	80																								

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	MW-114S	Field Dup (Dup-1)	Field Dup (Dup-2)	Trip Blank	Trip Blank	Field Blank	Field Blank (FB2)	Equip Blank	Equip Blank
Date Collected			9/5/18	9/5/18	8/30/18	9/5/18	9/5/18	9/5/18	9/5/18	8/30/18	8/30/18	9/5/18	8/30/18	8/30/18	9/5/18	8/30/18	9/5/18	9/5/18	9/5/18	8/30/18	9/5/18	8/30/18	9/5/18	8/30/18	9/5/18
VOC ANALYTE (ug/L) {cont}	DW	GSI																							
Ethylbenzene	74	18																							
Total Xylenes	280	49																							
1,2 -Dichlorobenzene	600	13																							
1,3 -Dichlorobenzene	6.6	28																							
Naphthalene	520	11																							
2-Methylnaphthalene	260	19																	0.23						
Diethyl ether	10 (E)	ID																							
tert-Methyl butyl ether (MTBE)	40 (E)	7,100 (X)																							
Acrylonitrile	2.6	2.0 (M); 1.2																							
Dichlorodifluoromethane	1,700	ID																							
Bromomethane	10	4.2; [5(M)]																							
1,2-Dichloroethane	5.0 (A)	360 (X)																							
Trichloroethene	5.0 (A)	200 (X)																							
1,2-Dichloropropane	5.0 (A)	230 (X)																							
cis-1,3-Dichloropropene	NC	NC																							
trans-1,3-Dichloropropene	NC	NC																							
1,1,2-Trichloroethane	5.0 (A)	330 (X)																							
trans-1,4-Dichloro-2-butene	NC	NC																							
Dibromochloromethane	80 (A,W)	ID																							
1,2-Dibromoethane	NC	NC																							
1,1,1,2-Tetrachloroethane	77	ID																							
Isopropylbenzene	800	28																							
Bromoform	80 (A,W)	ID																							
1,1,2,2-Tetrachloroethane	8.5	78 (X)																							
1,2,3-Trichloropropane	42	NA																							
n-Propylbenzene	80	ID																							
Bromobenzene	18	NA																							
1,3,5-Trimethylbenzene	72 (E)	45																							
tert-Butylbenzene	80	ID																							
1,2,4-Trimethylbenzene	63 (E)	17																							
1,2,4-Trichlorobenzene	NC	NC																					0.21		
1,2,3-Trichlorobenzene	NC	NC																					0.21		
n-Butylbenzene	NC	NC																							

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Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID				MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	MW-114S	Field Dup (Dup-1)	Field Dup (Dup-2)	Trip Blank	Trip Blank	Field Blank	Field Blank (FB2)	Equip Blank	Equip Blank	
Date Collected				9/5/18	9/5/18	8/30/18	9/5/18	9/5/18	9/5/18	9/5/18	8/30/18	8/30/18	9/5/18	8/30/18	8/30/18	9/5/18	8/30/18	9/5/18	9/5/18	9/5/18	9/5/18	8/30/18	9/5/18	8/30/18	9/5/18	8/30/18	9/5/18
PFA ANALYTE (ng/L)		DW	GSI																								
Perfluorobutane sulfonic acid (PFBS)		NC	NC		2.5	1.4	2	2.2	1.3	1.8	4.6		1.7	2.9	3.6	2.4	1.4	5	1.7	2.3	1.7						
Perfluoropentane sulfonic acid (PFPeS)		NC	NC																								
Perfluorohexane sulfonic acid (PFHxS)		NC	NC		4	1.9	6.1		2.1	12	3.3	2.7	2.9	3.2	4.3	3.8		2.6	2.4	12	2.6						
Perfluoroheptane sulfonic acid (PFHpS)		NC	NC		1.4	1.2	2.4			2.5	1.3			2.6						2.1							
Perfluorooctane sulfonic acid (PFOS)		CC	12		20	33	11	91			7.3	18	6	27	8.5	59	10	13	26		30						
Perfluorononane sulfonic acid (PFNS)		NC	NC																								
Perfluorodecane sulfonic acid (PFDS)		NC	NC																								
Perfluorobutanoic acid (PFBA)		NC	NC			3.8	3.2			3.2	5.9			2.9	6.7		48	7.1	2.7		3.2						
Perfluoropentanoic acid (PFPeA)		NC	NC			1.2	1.4				1.1				3	1.3			3.6								
Perfluorohexanoic acid (PFHxA)		NC	NC		1	1.5	4.1		1.2	1.6	2			1.7	4.8			1	3.3	1.7			1.3		1.6	1.2	
Perfluoroheptanoic acid (PFHpA)		NC	NC				2				2				3.7			1.3	3.3	2.4							
Perfluorooctanoic acid (PFOA)		CC	12,000		2	4.5	6.1	2.6	0.79	4.5	12	2.1	0.58	2.6	11	1.7	2.2	2.6	4.3	4.1	2.8						
Perfluorononanoic acid (PFNA)		NC	NC			1.2		1.1						1.2					1.3		1.1						
Perfluorodecanoic acid (PFDA)		NC	NC					0.53			0.58																
Perfluoroundecanoic acid (PFUnDA)		NC	NC																								
Perfluorododecanoic acid (PFDoDA)		NC	NC																								
Perfluorotridecanoic acid (PFTTrDA)		NC	NC																								
Perfluorotetradecanoic acid (PFTeDA)		NC	NC						1.6		2.8			1.7				1.9				3.3		1.8	1.9	1.7	
Perfluorooctane sulfonamide (FOSA)		NC	NC																					0.44			
N-Methyl perfluorooctane sulfonamidoacetic acid		NC	NC																								
N-Ethyl perfluorooctane sulfonamidoacetic acid		NC	NC					0.9																			
Fluorotelomer sulfonic acid (4:2 FTS)		NC	NC																								
Fluorotelomer sulfonic acid (6:2 FTS)		NC	NC																								
Fluorotelomer sulfonic acid (8:2 FTS)		NC	NC																								

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RACER - Flint West # 12990

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Exceeds DW criteria	X
Exceeds GSI criteria	X
Exceeds both DW and GSI criteria	X
Compound also found in associated method blank, suggesting a laboratory artifact.	X
Insufficient data to develop criterion/no criterion	NC
Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River	G
Not Sampled	NS
Filtered in lab	1
Filtered and preserved in lab	2
Not analyzed due to turbidity	NA
Combined PFOA and PFOS concentrations compared to 0.070 ppb (70 ppt) for the drinking water pathway.	CC

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RACER - Flint West # 12990

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Date Collected			DRY	DRY	02/27/19	02/28/19	02/27/19	02/27/19	NS	02/27/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/27/19	02/28/19	02/28/19
METALS ANALYTE (ug/L)		DW	GSI														MW-112S	MW-114S					
Arsenic (dissolved)		10	10			10				0.711	0.445	2	1.05	0.317	35	1.11	28	9	20				
Arsenic		10	10			30				0.33	0.265	39	1.952	0.759	102	13	86	0.101	80				
Chromium (dissolved)		100	160	G	2.604	0.103	0.105	1.711			0.155	0.246	0.172	4.979	0.357	1.61	0.172	0.436		0.131		0.052	
Chromium (total)		100	160	G	4.664	0.251	43	65			0.354	0.6	0.522	4.651	0.507	13	0.258	0.417	0.412		0.175	0.748	0.655
Chromium VI (dissolved)		100	160																				
Chromium VI		100	160																				
Copper (dissolved)		1000	20	G	0.937		1.208	1.375		1.733	0.993		0.704	1.32		1.34	0.823		0.434		1.685	1.53	1.47
Copper		1000	20	G	0.679		1.871	2.247		1.124	0.979	0.381	0.963	0.691		3.06	1.92		2.25		2.092	1.59	1.24
Lead (dissolved)		4	44	G						0.706													
Lead		4	44	G							0.23	0.206				1.14	0.191		0.208				
Selenium (dissolved)		50	5		2		4	8			3												
Selenium		50	5		3		4	9			0												
Zinc (dissolved)		2400	260	G	7	3.45	1	5		11	6	3	3	7	4	8	4	3	3		4	6	7
Zinc		2400	260	G	1.482		0.892	1.577		7	2.24	2.19	1.61	0.776	0.774	13	3.98		5		1.814	2.27	0.962
VOC ANALYTE (ug/L)		DW	GSI																				
Acetone		730	1,700		7.88		8.1	6.7		7.8	7.6	9.51	9.07	8.79	12.41	11.34	33.8	11.74	35.1	6.99	7.3	9.10	9.36
Methyl iodide		NC	NC																				
Carbon disulfide		800	NC																				
2 Butanone (MEK)		13,000	2,200			3.13						0.34	0.3	0.33	1.61	1.95	11.1	1.63	11.9	0.64		0.78	0.77
Chloromethane		260	NC																				
Vinyl Chloride		2	13			0.64				0.88		5			2	1	12	2	12				
Chloroethane		430	1,100																				
trichlorofluoromethane		2,600	NA																				
1,1-Dichloroethene		7	130									0.6			0.41			0.38					
Methylene Chloride		5	1,500																				
trans-1,2-Dichloroethene		100	1,500									0.41					1.9		1.80				
1,1-Dichloroethane		880	740							0.55		0.97		0.76	0.82		3.2	0.79	3.5				
cis-1,2-Dichloroethene		70	620							2		9		13	2	2	295	1	290				
Tetrahydrofuran		95	11,000			2.3										1.9	11.1		11.9				
Chloroform		80	350				2				1			0.25									
1,1,1-Trichloroethane		200	89																1.7				
4-Methyl-2-pentanone (MIBK)		1800	ID												0.31			0.38					
2-Hexanone		1000	ID																				
Carbon tetrachloride		5.0	38	X							2												
Benzene		5.0	200			1				0.24													
Bromodichloromethane		80.0	NC				0.25																
Trichloroethene		5.0	200							1	0.25	13		39	3	9	162	3	163				
Toluene		790	270			0.32																	
Tetrachloroethene		5.0	60					78															
Chlorobenzene		100	25			2																	
Styrene		100	80												0.58	0.28		0.64					

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	MW-114S	Field Dup (Dupe-1)	Field Dup (Dupe-2)	Trip Blank	Field Blank	Field Blank	Equip Blank
Date Collected			DRY	DRY	02/27/19	02/28/19	02/27/19	02/27/19	NS	02/27/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/27/19	02/28/19	02/28/19
VOC ANALYTE (ug/L) {cont}	DW	GSI																					
Ethylbenzene	74	18																					
Total Xylenes	280	49																					
1,2 -Dichlorobenzene	600	13																					
1,3 -Dichlorobenzene	6.6	28																					
Naphthalene	520	11																					
2-Methylnaphthalene	260	19				0.18																	
Diethyl ether	10 (E)	ID																					
tert-Methyl butyl ether (MTBE)	40 (E)	7,100 (X)																					
Acrylonitrile	2.6	2.0 (M); 1.2																					
Dichlorodifluoromethane	1,700	ID																					
Bromomethane	10	4.2; [5(M)]																					
1,2-Dichloroethane	5.0 (A)	360 (X)																					
1,2-Dichloropropane	5.0 (A)	230 (X)																					
cis-1,3-Dichloropropene	NC	NC																					
trans-1,3-Dichloropropene	NC	NC																					
1,1,2-Trichloroethane	5.0 (A)	330 (X)																					
trans-1,4-Dichloro-2-butene	NC	NC																					
Dibromochloromethane	80 (A,W)	ID																					
1,2-Dibromoethane	NC	NC																					
1,1,1,2-Tetrachloroethane	77	ID																					
Isopropylbenzene	800	28																					
Bromoform	80 (A,W)	ID																					
1,1,2,2-Tetrachloroethane	8.5	78 (X)																					
1,2,3-Trichloropropane	42	NA																					
n-Propylbenzene	80	ID																					
Bromobenzene	18	NA																					
1,3,5-Trimethylbenzene	72 (E)	45																					
tert-Butylbenzene	80	ID																					
1,2,4-Trimethylbenzene	63 (E)	17																					
1,2,4-Trichlorobenzene	NC	NC																					
1,2,3-Trichlorobenzene	NC	NC																					
n-Butylbenzene	NC	NC																					

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID			MW-100S	MW-101S	MW-102S	MW-103S	MW-104S	MW-105S	MW-106SR	MW-107S	MW-108S	MW-109S	MW-110S	MW-111S	MW-112S	MW-113S	MW-114S	Field Dup (Dupe-1)	Field Dup (Dupe-2)	Trip Blank	Field Blank	Field Blank	Equip Blank
Date Collected			DRY	DRY	02/27/19	02/28/19	02/27/19	02/27/19	NS	02/27/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/28/19	02/27/19	02/28/19	02/28/19
PFA ANALYTE (ng/L)	DW	GSI	NS	NS	NS	01/17/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	01/17/19	NS	NS	NS	NS	NS
Perfluorobutane sulfonic acid (PFBS)	NC	NC																					
Perfluoropentane sulfonic acid (PFPeS)	NC	NC																					
Perfluorohexane sulfonic acid (PFHxS)	NC	NC																					
Perfluoroheptane sulfonic acid (PFHpS)	NC	NC																					
Perfluorooctane sulfonic acid (PFOS)	CC	12				90												90					
Perfluorononane sulfonic acid (PFNS)	NC	NC																					
Perfluorodecane sulfonic acid (PFDS)	NC	NC																					
Perfluorobutanoic acid (PFBA)	NC	NC																					
Perfluoropentanoic acid (PFPeA)	NC	NC																					
Perfluorohexanoic acid (PFHxA)	NC	NC																					
Perfluoroheptanoic acid (PFHpA)	NC	NC																					
Perfluorooctanoic acid (PFOA)	CC	12,000																					
Perfluorononanoic acid (PFNA)	NC	NC																					
Perfluorodecanoic acid (PFDA)	NC	NC																					
Perfluoroundecanoic acid (PFUnDA)	NC	NC																					
Perfluorododecanoic acid (PFDoDA)	NC	NC																					
Perfluorotridecanoic acid (PFTTrDA)	NC	NC																					
Perfluorotetradecanoic acid (PFTeDA)	NC	NC																					
Perfluorooctane sulfonamide (FOSA)	NC	NC																					
N-Methyl perfluorooctane sulfonamidoacetic acid	NC	NC																					
N-Ethyl perfluorooctane sulfonamidoacetic acid	NC	NC																					
Fluorotelomer sulfonic acid (4:2 FTS)	NC	NC																					
Fluorotelomer sulfonic acid (6:2 FTS)	NC	NC																					
Fluorotelomer sulfonic acid (8:2 FTS)	NC	NC																					

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

NOTES:

DW - Drinking Water Residential Generic Criteria.
GSI - Groundwater Surface Water Interface Generic Criteria per
MDEQ Surface Water Division Rule 57.

Blank cells indicate no detectable concentrations	
Exceeds DW criteria	X
Exceeds GSI criteria	X
Exceeds both DW and GSI criteria	X
Compound also found in associated method blank, suggesting a laboratory artifact.	X
Insufficient data to develop criterion/no criterion	NC
Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River	G
Not Sampled	NS
Filtered in lab	1
Filtered and preserved in lab	2
Not analyzed due to turbidity	NA
Combined PFOA and PFOS concentrations compared to 0.070 ppb (70 ppt) for the drinking water pathway.	CC



Analytical Laboratory Report

Report ID: S66316.01(01)
Generated on 09/24/2024

Report to
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Applied Ecosystems
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Burton, MI 48529

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Report Summary
Lab Sample ID(s): S66316.01-S66316.11
Project: RACER Flint West #12990
Collected Date(s): 09/17/2024
Submitted Date/Time: 09/17/2024 16:25
Sampled by: Unknown
P.O. #: PO1107477

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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
E200.8	EPA Method 200.8 Revision 5.4
N/A	Not Applicable
SM3500-Cr B	Standard Method 3500 Cr B 2011
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003



Analytical Laboratory Report

Sample Summary (11 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S66316.01	MW-112S-240917	Water	09/17/24 11:25
S66316.02	MW-110S-240917	Water	09/17/24 12:40
S66316.03	MW-108S-240917	Water	09/17/24 13:25
S66316.04	MW-114S-240917	Water	09/17/24 14:02
S66316.05	MW-103S-240917	Water	09/17/24 15:00
S66316.06	DUP-1-240917	Water	09/17/24 00:01
S66316.07	MS(MW-103S-240917)	Water	09/17/24 15:00
S66316.08	MSD(MW-103S-240917)	Water	09/17/24 15:00
S66316.09	EB-1-240917	Water	09/17/24 15:10
S66316.10	FB-1-240917	Water	09/17/24 10:05
S66316.11	Trip Blank	Water	09/17/24 00:01



Analytical Laboratory Report

Lab Sample ID: S66316.01
Sample Tag: MW-112S-240917
Collected Date/Time: 09/17/2024 11:25
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 10:26, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	Not detected	0.01	0.004	mg/L	1	18540-29-9	f

Method: SM3500-Cr B, Run Date: 09/18/24 09:12, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	Not detected	0.25	0.10	mg/L	25	18540-29-9	

Metals

Method: E200.8, Run Date: 09/19/24 11:53, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.071	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	Not detected	0.005	0.000750	mg/L	5	7440-47-3	
Copper	Not detected	0.005	0.000800	mg/L	5	7440-50-8	
Lead	Not detected	0.003	0.000450	mg/L	5	7439-92-1	
Selenium	Not detected	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	Not detected	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 11:56, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	0.027	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	Not detected	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	Not detected	0.005	0.000800	mg/L	5	7440-50-8	f
Lead, Dissolved	Not detected	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	Not detected	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	Not detected	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 18:02, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10	0.33	ug/L	1	60-29-7	
Acetone	Not detected	50	8.9	ug/L	1	67-64-1	
Methyl iodide	Not detected	1	0.25	ug/L	1	74-88-4	
Carbon disulfide	Not detected	5	0.57	ug/L	1	75-15-0	

f-Filtered and preserved in lab



Analytical Laboratory Report

Lab Sample ID: S66316.01 (continued)

Sample Tag: MW-112S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 18:02, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5	0.12	ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2	0.48	ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25	4.7	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5	0.35	ug/L	1	75-71-8	
Chloromethane	Not detected	5	0.78	ug/L	1	74-87-3	
Vinyl chloride	7	1	0.22	ug/L	1	75-01-4	
Bromomethane	Not detected	5	0.24	ug/L	1	74-83-9	
Chloroethane	Not detected	5	0.37	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.21	ug/L	1	75-69-4	
1,1-Dichloroethene	0.95	1	0.28	ug/L	1	75-35-4	J
Methylene chloride	Not detected	5	0.24	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1	0.17	ug/L	1	156-60-5	
1,1-Dichloroethane	0.55	1	0.14	ug/L	1	75-34-3	J
cis-1,2-Dichloroethene	2	1	0.15	ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90	4.2	ug/L	1	109-99-9	
Chloroform	Not detected	1	0.13	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.17	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.21	ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50	0.35	ug/L	1	108-10-1	
2-Hexanone	Not detected	50	0.61	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.17	ug/L	1	56-23-5	
Benzene	Not detected	1	0.14	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.12	ug/L	1	107-06-2	
Trichloroethene	3	1	0.14	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.16	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.29	ug/L	1	75-27-4	
Dibromomethane	Not detected	5	0.16	ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	
Toluene	Not detected	1	0.13	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.21	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.19	ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1	0.49	ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5	0.22	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.20	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.13	ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1	0.17	ug/L	1	630-20-6	
Ethylbenzene	Not detected	1	0.15	ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2	0.33	ug/L	1		
o-Xylene	Not detected	1	0.19	ug/L	1	95-47-6	
Styrene	Not detected	1	0.16	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5	0.17	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.17	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.22	ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1	0.30	ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1	0.22	ug/L	1	103-65-1	
Bromobenzene	Not detected	1	0.19	ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1	0.22	ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1	0.23	ug/L	1	98-06-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.01 (continued)
Sample Tag: MW-112S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 18:02, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2,4-Trimethylbenzene	Not detected	1	0.26	ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1	0.24	ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5	0.24	ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1	0.18	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.16	ug/L	1	106-46-7	
1,2-Dichlorobenzene	0.14	1	0.13	ug/L	1	95-50-1	J
1,2,3-Trimethylbenzene	Not detected	1	0.16	ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1	0.49	ug/L	1	104-51-8	
Hexachloroethane	Not detected	5	0.29	ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5	0.29	ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5	0.45	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5	0.42	ug/L	1	87-61-6	
Naphthalene	Not detected	5	0.48	ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5	0.87	ug/L	1	91-57-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.02
Sample Tag: MW-110S-240917
Collected Date/Time: 09/17/2024 12:40
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 10:40, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	Not detected	0.01	0.004	mg/L	1	18540-29-9	f

Method: SM3500-Cr B, Run Date: 09/18/24 09:33, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	Not detected	0.25	0.10	mg/L	25	18540-29-9	

Metals

Method: E200.8, Run Date: 09/19/24 11:58, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	Not detected	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	Not detected	0.005	0.000750	mg/L	5	7440-47-3	
Copper	Not detected	0.005	0.000800	mg/L	5	7440-50-8	
Lead	Not detected	0.003	0.000450	mg/L	5	7439-92-1	
Selenium	Not detected	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	Not detected	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 12:01, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	Not detected	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	Not detected	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	Not detected	0.005	0.000800	mg/L	5	7440-50-8	f
Lead, Dissolved	Not detected	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	Not detected	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	Not detected	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 18:26, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10	0.33	ug/L	1	60-29-7	
Acetone	Not detected	50	8.9	ug/L	1	67-64-1	
Methyl iodide	Not detected	1	0.25	ug/L	1	74-88-4	
Carbon disulfide	Not detected	5	0.57	ug/L	1	75-15-0	

f-Filtered and preserved in lab



Analytical Laboratory Report

Lab Sample ID: S66316.02 (continued)

Sample Tag: MW-110S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 18:26, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5	0.12	ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2	0.48	ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25	4.7	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5	0.35	ug/L	1	75-71-8	
Chloromethane	Not detected	5	0.78	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.22	ug/L	1	75-01-4	
Bromomethane	Not detected	5	0.24	ug/L	1	74-83-9	
Chloroethane	Not detected	5	0.37	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.21	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.28	ug/L	1	75-35-4	
Methylene chloride	Not detected	5	0.24	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1	0.17	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.14	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.15	ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90	4.2	ug/L	1	109-99-9	
Chloroform	Not detected	1	0.13	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.17	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.21	ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50	0.35	ug/L	1	108-10-1	
2-Hexanone	Not detected	50	0.61	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.17	ug/L	1	56-23-5	
Benzene	Not detected	1	0.14	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.12	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.14	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.16	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.29	ug/L	1	75-27-4	
Dibromomethane	Not detected	5	0.16	ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	
Toluene	Not detected	1	0.13	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.21	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.19	ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1	0.49	ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5	0.22	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.20	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.13	ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1	0.17	ug/L	1	630-20-6	
Ethylbenzene	Not detected	1	0.15	ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2	0.33	ug/L	1		
o-Xylene	Not detected	1	0.19	ug/L	1	95-47-6	
Styrene	Not detected	1	0.16	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5	0.17	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.17	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.22	ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1	0.30	ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1	0.22	ug/L	1	103-65-1	
Bromobenzene	Not detected	1	0.19	ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1	0.22	ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1	0.23	ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1	0.26	ug/L	1	95-63-6	



Analytical Laboratory Report

Lab Sample ID: S66316.02 (continued)
Sample Tag: MW-110S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 18:26, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
sec-Butylbenzene	Not detected	1	0.24	ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5	0.24	ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1	0.18	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.16	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.13	ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1	0.16	ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1	0.49	ug/L	1	104-51-8	
Hexachloroethane	Not detected	5	0.29	ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5	0.29	ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5	0.45	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5	0.42	ug/L	1	87-61-6	
Naphthalene	Not detected	5	0.48	ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5	0.87	ug/L	1	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S66316.03
Sample Tag: MW-108S-240917
Collected Date/Time: 09/17/2024 13:25
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 10:48, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	Not detected	0.01	0.004	mg/L	1	18540-29-9	f

Method: SM3500-Cr B, Run Date: 09/18/24 09:28, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	Not detected	0.01	0.004	mg/L	1	18540-29-9	

Metals

Method: E200.8, Run Date: 09/19/24 12:03, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	Not detected	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	Not detected	0.005	0.000750	mg/L	5	7440-47-3	
Copper	Not detected	0.005	0.000800	mg/L	5	7440-50-8	
Lead	0.001063	0.003	0.000450	mg/L	5	7439-92-1	b
Selenium	Not detected	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	0.013	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 12:08, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	Not detected	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	Not detected	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	Not detected	0.005	0.000800	mg/L	5	7440-50-8	f
Lead, Dissolved	Not detected	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	Not detected	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	0.011	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 18:49, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10	0.33	ug/L	1	60-29-7	
Acetone	Not detected	50	8.9	ug/L	1	67-64-1	
Methyl iodide	Not detected	1	0.25	ug/L	1	74-88-4	

f-Filtered and preserved in lab
b-Value detected less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.03 (continued)

Sample Tag: MW-108S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 18:49, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon disulfide	Not detected	5	0.57	ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5	0.12	ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2	0.48	ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25	4.7	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5	0.35	ug/L	1	75-71-8	
Chloromethane	Not detected	5	0.78	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.22	ug/L	1	75-01-4	
Bromomethane	Not detected	5	0.24	ug/L	1	74-83-9	
Chloroethane	Not detected	5	0.37	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.21	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.28	ug/L	1	75-35-4	
Methylene chloride	Not detected	5	0.24	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1	0.17	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.14	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.15	ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90	4.2	ug/L	1	109-99-9	
Chloroform	0.67	1	0.13	ug/L	1	67-66-3	J
Bromochloromethane	Not detected	1	0.17	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.21	ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50	0.35	ug/L	1	108-10-1	
2-Hexanone	Not detected	50	0.61	ug/L	1	591-78-6	
Carbon tetrachloride	2	1	0.17	ug/L	1	56-23-5	
Benzene	Not detected	1	0.14	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.12	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.14	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.16	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.29	ug/L	1	75-27-4	
Dibromomethane	Not detected	5	0.16	ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	
Toluene	Not detected	1	0.13	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.21	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.19	ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1	0.49	ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5	0.22	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.20	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.13	ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1	0.17	ug/L	1	630-20-6	
Ethylbenzene	Not detected	1	0.15	ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2	0.33	ug/L	1		
o-Xylene	Not detected	1	0.19	ug/L	1	95-47-6	
Styrene	Not detected	1	0.16	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5	0.17	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.17	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.22	ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1	0.30	ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1	0.22	ug/L	1	103-65-1	
Bromobenzene	Not detected	1	0.19	ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1	0.22	ug/L	1	108-67-8	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.03 (continued)
Sample Tag: MW-108S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 18:49, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1	0.23	ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1	0.26	ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1	0.24	ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5	0.24	ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1	0.18	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.16	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.13	ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1	0.16	ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1	0.49	ug/L	1	104-51-8	
Hexachloroethane	Not detected	5	0.29	ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5	0.29	ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5	0.45	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5	0.42	ug/L	1	87-61-6	
Naphthalene	Not detected	5	0.48	ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5	0.87	ug/L	1	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S66316.04
Sample Tag: MW-114S-240917
Collected Date/Time: 09/17/2024 14:02
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 10:56, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	Not detected	0.01	0.004	mg/L	1	18540-29-9	f

Method: SM3500-Cr B, Run Date: 09/18/24 09:39, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	Not detected	0.05	0.02	mg/L	5	18540-29-9	

Metals

Method: E200.8, Run Date: 09/19/24 12:13, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.035	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	Not detected	0.005	0.000750	mg/L	5	7440-47-3	
Copper	0.001179	0.005	0.000800	mg/L	5	7440-50-8	b
Lead	0.000558	0.003	0.000450	mg/L	5	7439-92-1	b
Selenium	Not detected	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	0.019	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 12:18, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	0.020	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	Not detected	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	Not detected	0.005	0.000800	mg/L	5	7440-50-8	f
Lead, Dissolved	Not detected	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	Not detected	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	0.012	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 19:12, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10	0.33	ug/L	1	60-29-7	
Acetone	Not detected	50	8.9	ug/L	1	67-64-1	
Methyl iodide	Not detected	1	0.25	ug/L	1	74-88-4	

f-Filtered and preserved in lab
b-Value detected less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.04 (continued)

Sample Tag: MW-114S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 19:12, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon disulfide	Not detected	5	0.57	ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5	0.12	ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2	0.48	ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25	4.7	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5	0.35	ug/L	1	75-71-8	
Chloromethane	Not detected	5	0.78	ug/L	1	74-87-3	
Vinyl chloride	4	1	0.22	ug/L	1	75-01-4	
Bromomethane	Not detected	5	0.24	ug/L	1	74-83-9	
Chloroethane	Not detected	5	0.37	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.21	ug/L	1	75-69-4	
1,1-Dichloroethene	0.56	1	0.28	ug/L	1	75-35-4	J
Methylene chloride	Not detected	5	0.24	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	0.64	1	0.17	ug/L	1	156-60-5	J
1,1-Dichloroethane	1	1	0.14	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	58	1	0.15	ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90	4.2	ug/L	1	109-99-9	
Chloroform	Not detected	1	0.13	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.17	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.21	ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50	0.35	ug/L	1	108-10-1	
2-Hexanone	Not detected	50	0.61	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.17	ug/L	1	56-23-5	
Benzene	Not detected	1	0.14	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.12	ug/L	1	107-06-2	
Trichloroethene	216	1	0.14	ug/L	1	79-01-6	E
1,2-Dichloropropane	Not detected	1	0.16	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.29	ug/L	1	75-27-4	
Dibromomethane	Not detected	5	0.16	ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	
Toluene	Not detected	1	0.13	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.21	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.19	ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1	0.49	ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5	0.22	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.20	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.13	ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1	0.17	ug/L	1	630-20-6	
Ethylbenzene	Not detected	1	0.15	ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2	0.33	ug/L	1		
o-Xylene	Not detected	1	0.19	ug/L	1	95-47-6	
Styrene	Not detected	1	0.16	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5	0.17	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.17	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.22	ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1	0.30	ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1	0.22	ug/L	1	103-65-1	
Bromobenzene	Not detected	1	0.19	ug/L	1	108-86-1	

J-Estimated value less than reporting limit, but greater than MDL

E-Concentration exceeds calibration range



Analytical Laboratory Report

Lab Sample ID: S66316.04 (continued)

Sample Tag: MW-114S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 19:12, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,3,5-Trimethylbenzene	Not detected	1	0.22	ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1	0.23	ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1	0.26	ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1	0.24	ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5	0.24	ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1	0.18	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.16	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.13	ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1	0.16	ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1	0.49	ug/L	1	104-51-8	
Hexachloroethane	Not detected	5	0.29	ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5	0.29	ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5	0.45	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5	0.42	ug/L	1	87-61-6	
Naphthalene	Not detected	5	0.48	ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5	0.87	ug/L	1	91-57-6	

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 09/23/24 16:35, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	100	3.3	ug/L	10	60-29-7	Y
Acetone	Not detected	500	89	ug/L	10	67-64-1	Y
Methyl iodide	Not detected	10	2.5	ug/L	10	74-88-4	Y
Carbon disulfide	Not detected	50	5.7	ug/L	10	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	50	1.2	ug/L	10	1634-04-4	Y
Acrylonitrile	Not detected	20	4.8	ug/L	10	107-13-1	Y
2-Butanone (MEK)	Not detected	250	47	ug/L	10	78-93-3	Y
Dichlorodifluoromethane	Not detected	50	3.5	ug/L	10	75-71-8	Y
Chloromethane	Not detected	50	7.8	ug/L	10	74-87-3	Y
Vinyl chloride	Not detected	10	2.2	ug/L	10	75-01-4	Y
Bromomethane	Not detected	50	2.4	ug/L	10	74-83-9	Y
Chloroethane	Not detected	50	3.7	ug/L	10	75-00-3	Y
Trichlorofluoromethane	Not detected	10	2.1	ug/L	10	75-69-4	Y
1,1-Dichloroethene	Not detected	10	2.8	ug/L	10	75-35-4	Y
Methylene chloride	Not detected	50	2.4	ug/L	10	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	10	1.7	ug/L	10	156-60-5	Y
1,1-Dichloroethane	Not detected	10	1.4	ug/L	10	75-34-3	Y
cis-1,2-Dichloroethene	50	10	1.5	ug/L	10	156-59-2	Y
Tetrahydrofuran*	Not detected	900	42	ug/L	10	109-99-9	Y
Chloroform	Not detected	10	1.3	ug/L	10	67-66-3	Y
Bromochloromethane	Not detected	10	1.7	ug/L	10	74-97-5	Y
1,1,1-Trichloroethane	Not detected	10	2.1	ug/L	10	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	500	3.5	ug/L	10	108-10-1	Y
2-Hexanone	Not detected	500	6.1	ug/L	10	591-78-6	Y
Carbon tetrachloride	Not detected	10	1.7	ug/L	10	56-23-5	Y
Benzene	Not detected	10	1.4	ug/L	10	71-43-2	Y
1,2-Dichloroethane	Not detected	10	1.2	ug/L	10	107-06-2	Y
Trichloroethene	170	10	1.4	ug/L	10	79-01-6	Y
1,2-Dichloropropane	Not detected	10	1.6	ug/L	10	78-87-5	Y
Bromodichloromethane	Not detected	10	2.9	ug/L	10	75-27-4	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S66316.04 (continued)
Sample Tag: MW-114S-240917

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 09/23/24 16:35, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromomethane	Not detected	50	1.6	ug/L	10	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	10	1.9	ug/L	10	10061-01-5	Y
Toluene	Not detected	10	1.3	ug/L	10	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	10	1.9	ug/L	10	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	10	2.1	ug/L	10	79-00-5	Y
Tetrachloroethene	Not detected	10	1.9	ug/L	10	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	10	4.9	ug/L	10	110-57-6	Y
Dibromochloromethane	Not detected	50	2.2	ug/L	10	124-48-1	Y
1,2-Dibromoethane	Not detected	10	2.0	ug/L	10	106-93-4	Y
Chlorobenzene	Not detected	10	1.3	ug/L	10	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	10	1.7	ug/L	10	630-20-6	Y
Ethylbenzene	Not detected	10	1.5	ug/L	10	100-41-4	Y
p,m-Xylene*	Not detected	20	3.3	ug/L	10		Y
o-Xylene	Not detected	10	1.9	ug/L	10	95-47-6	Y
Styrene	Not detected	10	1.6	ug/L	10	100-42-5	Y
Isopropylbenzene	Not detected	50	1.7	ug/L	10	98-82-8	Y
Bromoform	Not detected	10	1.7	ug/L	10	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	10	2.2	ug/L	10	79-34-5	Y
1,2,3-Trichloropropane	Not detected	10	3.0	ug/L	10	96-18-4	Y
n-Propylbenzene	Not detected	10	2.2	ug/L	10	103-65-1	Y
Bromobenzene	Not detected	10	1.9	ug/L	10	108-86-1	Y
1,3,5-Trimethylbenzene	Not detected	10	2.2	ug/L	10	108-67-8	Y
tert-Butylbenzene	Not detected	10	2.3	ug/L	10	98-06-6	Y
1,2,4-Trimethylbenzene	Not detected	10	2.6	ug/L	10	95-63-6	Y
sec-Butylbenzene	Not detected	10	2.4	ug/L	10	135-98-8	Y
p-Isopropyltoluene	Not detected	50	2.4	ug/L	10	99-87-6	Y
1,3-Dichlorobenzene	Not detected	10	1.8	ug/L	10	541-73-1	Y
1,4-Dichlorobenzene	Not detected	10	1.6	ug/L	10	106-46-7	Y
1,2-Dichlorobenzene	Not detected	10	1.3	ug/L	10	95-50-1	Y
1,2,3-Trimethylbenzene	Not detected	10	1.6	ug/L	10	526-73-8	Y
n-Butylbenzene	Not detected	10	4.9	ug/L	10	104-51-8	Y
Hexachloroethane	Not detected	50	2.9	ug/L	10	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	50	2.9	ug/L	10	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	50	4.5	ug/L	10	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	50	4.2	ug/L	10	87-61-6	Y
Naphthalene	Not detected	50	4.8	ug/L	10	91-20-3	Y
2-Methylnaphthalene	Not detected	50	8.7	ug/L	10	91-57-6	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S66316.05
Sample Tag: MW-103S-240917
Collected Date/Time: 09/17/2024 15:00
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 11:02, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	0.004	0.01	0.004	mg/L	1	18540-29-9	fb

Method: SM3500-Cr B, Run Date: 09/18/24 09:45, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	Not detected	0.25	0.10	mg/L	25	18540-29-9	

Metals

Method: E200.8, Run Date: 09/19/24 12:21, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.055	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	Not detected	0.005	0.000750	mg/L	5	7440-47-3	
Copper	Not detected	0.005	0.000800	mg/L	5	7440-50-8	
Lead	Not detected	0.003	0.000450	mg/L	5	7439-92-1	
Selenium	Not detected	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	Not detected	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 12:34, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	0.016	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	Not detected	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	Not detected	0.005	0.000800	mg/L	5	7440-50-8	f
Lead, Dissolved	Not detected	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	Not detected	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	Not detected	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 19:35, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10	0.33	ug/L	1	60-29-7	
Acetone	Not detected	50	8.9	ug/L	1	67-64-1	
Methyl iodide	Not detected	1	0.25	ug/L	1	74-88-4	
Carbon disulfide	Not detected	5	0.57	ug/L	1	75-15-0	

f-Filtered and preserved in lab b-Value detected less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.05 (continued)

Sample Tag: MW-103S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 19:35, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5	0.12	ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2	0.48	ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25	4.7	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5	0.35	ug/L	1	75-71-8	
Chloromethane	Not detected	5	0.78	ug/L	1	74-87-3	
Vinyl chloride	1	1	0.22	ug/L	1	75-01-4	
Bromomethane	Not detected	5	0.24	ug/L	1	74-83-9	
Chloroethane	Not detected	5	0.37	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.21	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.28	ug/L	1	75-35-4	
Methylene chloride	Not detected	5	0.24	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1	0.17	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.14	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	0.56	1	0.15	ug/L	1	156-59-2	J
Tetrahydrofuran*	Not detected	90	4.2	ug/L	1	109-99-9	
Chloroform	Not detected	1	0.13	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.17	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.21	ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50	0.35	ug/L	1	108-10-1	
2-Hexanone	Not detected	50	0.61	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.17	ug/L	1	56-23-5	
Benzene	0.92	1	0.14	ug/L	1	71-43-2	J
1,2-Dichloroethane	Not detected	1	0.12	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.14	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.16	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.29	ug/L	1	75-27-4	
Dibromomethane	Not detected	5	0.16	ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	
Toluene	Not detected	1	0.13	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.21	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.19	ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1	0.49	ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5	0.22	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.20	ug/L	1	106-93-4	
Chlorobenzene	1	1	0.13	ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1	0.17	ug/L	1	630-20-6	
Ethylbenzene	Not detected	1	0.15	ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2	0.33	ug/L	1		
o-Xylene	Not detected	1	0.19	ug/L	1	95-47-6	
Styrene	Not detected	1	0.16	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5	0.17	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.17	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.22	ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1	0.30	ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1	0.22	ug/L	1	103-65-1	
Bromobenzene	Not detected	1	0.19	ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1	0.22	ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1	0.23	ug/L	1	98-06-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.05 (continued)
Sample Tag: MW-103S-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 19:35, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2,4-Trimethylbenzene	Not detected	1	0.26	ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1	0.24	ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5	0.24	ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1	0.18	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.16	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.13	ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1	0.16	ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1	0.49	ug/L	1	104-51-8	
Hexachloroethane	Not detected	5	0.29	ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5	0.29	ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5	0.45	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5	0.42	ug/L	1	87-61-6	
Naphthalene	Not detected	5	0.48	ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5	0.87	ug/L	1	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S66316.06
Sample Tag: DUP-1-240917
Collected Date/Time: 09/17/2024 00:01
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 11:09, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	Not detected	0.01	0.004	mg/L	1	18540-29-9	Ff

Method: SM3500-Cr B, Run Date: 09/18/24 09:51, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	Not detected	0.05	0.02	mg/L	5	18540-29-9	F

Metals

Method: E200.8, Run Date: 09/19/24 12:36, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.036	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	Not detected	0.005	0.000750	mg/L	5	7440-47-3	
Copper	0.001051	0.005	0.000800	mg/L	5	7440-50-8	b
Lead	0.000525	0.003	0.000450	mg/L	5	7439-92-1	b
Selenium	Not detected	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	0.020	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 12:39, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	0.020	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	Not detected	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	0.004631	0.005	0.000800	mg/L	5	7440-50-8	bf
Lead, Dissolved	Not detected	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	Not detected	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	0.015	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 19:59, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10	0.33	ug/L	1	60-29-7	
Acetone	Not detected	50	8.9	ug/L	1	67-64-1	
Methyl iodide	Not detected	1	0.25	ug/L	1	74-88-4	

F-Analysis run outside of holding time f-Filtered and preserved in lab
b-Value detected less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.06 (continued)
Sample Tag: DUP-1-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 19:59, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon disulfide	Not detected	5	0.57	ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5	0.12	ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2	0.48	ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25	4.7	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5	0.35	ug/L	1	75-71-8	
Chloromethane	Not detected	5	0.78	ug/L	1	74-87-3	
Vinyl chloride	4	1	0.22	ug/L	1	75-01-4	
Bromomethane	Not detected	5	0.24	ug/L	1	74-83-9	
Chloroethane	Not detected	5	0.37	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.21	ug/L	1	75-69-4	
1,1-Dichloroethene	0.64	1	0.28	ug/L	1	75-35-4	J
Methylene chloride	Not detected	5	0.24	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	0.61	1	0.17	ug/L	1	156-60-5	J
1,1-Dichloroethane	1	1	0.14	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	58	1	0.15	ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90	4.2	ug/L	1	109-99-9	
Chloroform	Not detected	1	0.13	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.17	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.21	ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50	0.35	ug/L	1	108-10-1	
2-Hexanone	Not detected	50	0.61	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.17	ug/L	1	56-23-5	
Benzene	Not detected	1	0.14	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.12	ug/L	1	107-06-2	
Trichloroethene	213	1	0.14	ug/L	1	79-01-6	E
1,2-Dichloropropane	Not detected	1	0.16	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.29	ug/L	1	75-27-4	
Dibromomethane	Not detected	5	0.16	ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	
Toluene	Not detected	1	0.13	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.21	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.19	ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1	0.49	ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5	0.22	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.20	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.13	ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1	0.17	ug/L	1	630-20-6	
Ethylbenzene	Not detected	1	0.15	ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2	0.33	ug/L	1		
o-Xylene	Not detected	1	0.19	ug/L	1	95-47-6	
Styrene	Not detected	1	0.16	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5	0.17	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.17	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.22	ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1	0.30	ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1	0.22	ug/L	1	103-65-1	
Bromobenzene	Not detected	1	0.19	ug/L	1	108-86-1	

J-Estimated value less than reporting limit, but greater than MDL
E-Concentration exceeds calibration range



Analytical Laboratory Report

Lab Sample ID: S66316.06 (continued)

Sample Tag: DUP-1-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 19:59, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,3,5-Trimethylbenzene	Not detected	1	0.22	ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1	0.23	ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1	0.26	ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1	0.24	ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5	0.24	ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1	0.18	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.16	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.13	ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1	0.16	ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1	0.49	ug/L	1	104-51-8	
Hexachloroethane	Not detected	5	0.29	ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5	0.29	ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5	0.45	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5	0.42	ug/L	1	87-61-6	
Naphthalene	Not detected	5	0.48	ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5	0.87	ug/L	1	91-57-6	

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 09/23/24 16:58, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	100	3.3	ug/L	10	60-29-7	Y
Acetone	Not detected	500	89	ug/L	10	67-64-1	Y
Methyl iodide	Not detected	10	2.5	ug/L	10	74-88-4	Y
Carbon disulfide	Not detected	50	5.7	ug/L	10	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	50	1.2	ug/L	10	1634-04-4	Y
Acrylonitrile	Not detected	20	4.8	ug/L	10	107-13-1	Y
2-Butanone (MEK)	Not detected	250	47	ug/L	10	78-93-3	Y
Dichlorodifluoromethane	Not detected	50	3.5	ug/L	10	75-71-8	Y
Chloromethane	Not detected	50	7.8	ug/L	10	74-87-3	Y
Vinyl chloride	Not detected	10	2.2	ug/L	10	75-01-4	Y
Bromomethane	Not detected	50	2.4	ug/L	10	74-83-9	Y
Chloroethane	Not detected	50	3.7	ug/L	10	75-00-3	Y
Trichlorofluoromethane	Not detected	10	2.1	ug/L	10	75-69-4	Y
1,1-Dichloroethene	Not detected	10	2.8	ug/L	10	75-35-4	Y
Methylene chloride	Not detected	50	2.4	ug/L	10	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	10	1.7	ug/L	10	156-60-5	Y
1,1-Dichloroethane	Not detected	10	1.4	ug/L	10	75-34-3	Y
cis-1,2-Dichloroethene	50	10	1.5	ug/L	10	156-59-2	Y
Tetrahydrofuran*	Not detected	900	42	ug/L	10	109-99-9	Y
Chloroform	Not detected	10	1.3	ug/L	10	67-66-3	Y
Bromochloromethane	Not detected	10	1.7	ug/L	10	74-97-5	Y
1,1,1-Trichloroethane	Not detected	10	2.1	ug/L	10	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	500	3.5	ug/L	10	108-10-1	Y
2-Hexanone	Not detected	500	6.1	ug/L	10	591-78-6	Y
Carbon tetrachloride	Not detected	10	1.7	ug/L	10	56-23-5	Y
Benzene	Not detected	10	1.4	ug/L	10	71-43-2	Y
1,2-Dichloroethane	Not detected	10	1.2	ug/L	10	107-06-2	Y
Trichloroethene	170	10	1.4	ug/L	10	79-01-6	Y
1,2-Dichloropropane	Not detected	10	1.6	ug/L	10	78-87-5	Y
Bromodichloromethane	Not detected	10	2.9	ug/L	10	75-27-4	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S66316.06 (continued)
Sample Tag: DUP-1-240917

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 09/23/24 16:58, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromomethane	Not detected	50	1.6	ug/L	10	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	10	1.9	ug/L	10	10061-01-5	Y
Toluene	Not detected	10	1.3	ug/L	10	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	10	1.9	ug/L	10	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	10	2.1	ug/L	10	79-00-5	Y
Tetrachloroethene	Not detected	10	1.9	ug/L	10	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	10	4.9	ug/L	10	110-57-6	Y
Dibromochloromethane	Not detected	50	2.2	ug/L	10	124-48-1	Y
1,2-Dibromoethane	Not detected	10	2.0	ug/L	10	106-93-4	Y
Chlorobenzene	Not detected	10	1.3	ug/L	10	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	10	1.7	ug/L	10	630-20-6	Y
Ethylbenzene	Not detected	10	1.5	ug/L	10	100-41-4	Y
p,m-Xylene*	Not detected	20	3.3	ug/L	10		Y
o-Xylene	Not detected	10	1.9	ug/L	10	95-47-6	Y
Styrene	Not detected	10	1.6	ug/L	10	100-42-5	Y
Isopropylbenzene	Not detected	50	1.7	ug/L	10	98-82-8	Y
Bromoform	Not detected	10	1.7	ug/L	10	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	10	2.2	ug/L	10	79-34-5	Y
1,2,3-Trichloropropane	Not detected	10	3.0	ug/L	10	96-18-4	Y
n-Propylbenzene	Not detected	10	2.2	ug/L	10	103-65-1	Y
Bromobenzene	Not detected	10	1.9	ug/L	10	108-86-1	Y
1,3,5-Trimethylbenzene	Not detected	10	2.2	ug/L	10	108-67-8	Y
tert-Butylbenzene	Not detected	10	2.3	ug/L	10	98-06-6	Y
1,2,4-Trimethylbenzene	Not detected	10	2.6	ug/L	10	95-63-6	Y
sec-Butylbenzene	Not detected	10	2.4	ug/L	10	135-98-8	Y
p-Isopropyltoluene	Not detected	50	2.4	ug/L	10	99-87-6	Y
1,3-Dichlorobenzene	Not detected	10	1.8	ug/L	10	541-73-1	Y
1,4-Dichlorobenzene	Not detected	10	1.6	ug/L	10	106-46-7	Y
1,2-Dichlorobenzene	Not detected	10	1.3	ug/L	10	95-50-1	Y
1,2,3-Trimethylbenzene	Not detected	10	1.6	ug/L	10	526-73-8	Y
n-Butylbenzene	Not detected	10	4.9	ug/L	10	104-51-8	Y
Hexachloroethane	Not detected	50	2.9	ug/L	10	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	50	2.9	ug/L	10	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	50	4.5	ug/L	10	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	50	4.2	ug/L	10	87-61-6	Y
Naphthalene	Not detected	50	4.8	ug/L	10	91-20-3	Y
2-Methylnaphthalene	Not detected	50	8.7	ug/L	10	91-57-6	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S66316.07
Sample Tag: MS(MW-103S-240917)
Collected Date/Time: 09/17/2024 15:00
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 11:32, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	0.125	0.01	0.004	mg/L	1	18540-29-9	1f

Method: SM3500-Cr B, Run Date: 09/18/24 09:57, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	4.82	0.25	0.10	mg/L	25	18540-29-9	2

Metals

Method: E200.8, Run Date: 09/19/24 12:26, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.314	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	0.252	0.005	0.000750	mg/L	5	7440-47-3	
Copper	0.250	0.005	0.000800	mg/L	5	7440-50-8	
Lead	0.248	0.003	0.000450	mg/L	5	7439-92-1	
Selenium	0.242	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	0.250	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 12:54, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	0.262	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	0.253	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	0.245	0.005	0.000800	mg/L	5	7440-50-8	f
Lead, Dissolved	0.241	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	0.232	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	0.237	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 20:45, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	52	10	0.33	ug/L	1	60-29-7	3
Acetone	50	50	8.9	ug/L	1	67-64-1	3

1-*Sample Spiked at 0.20mg/L f-Filtered and preserved in lab
2-*Sample Spiked at 5.0mg/L
3-Spiked at 50 ug/L



Analytical Laboratory Report

Lab Sample ID: S66316.07 (continued)

Sample Tag: MS(MW-103S-240917)

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 20:45, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methyl iodide	37	1	0.25	ug/L	1	74-88-4	1
Carbon disulfide	57	5	0.57	ug/L	1	75-15-0	1
tert-Methyl butyl ether (MTBE)	50	5	0.12	ug/L	1	1634-04-4	1
Acrylonitrile	48	2	0.48	ug/L	1	107-13-1	1
2-Butanone (MEK)	51	25	4.7	ug/L	1	78-93-3	1
Dichlorodifluoromethane	68	5	0.35	ug/L	1	75-71-8	1
Chloromethane	57	5	0.78	ug/L	1	74-87-3	1
Vinyl chloride	59	1	0.22	ug/L	1	75-01-4	1
Bromomethane	37	5	0.24	ug/L	1	74-83-9	1
Chloroethane	58	5	0.37	ug/L	1	75-00-3	1
Trichlorofluoromethane	62	1	0.21	ug/L	1	75-69-4	1
1,1-Dichloroethene	53	1	0.28	ug/L	1	75-35-4	1
Methylene chloride	52	5	0.24	ug/L	1	75-09-2	1
trans-1,2-Dichloroethene	52	1	0.17	ug/L	1	156-60-5	1
1,1-Dichloroethane	51	1	0.14	ug/L	1	75-34-3	1
cis-1,2-Dichloroethene	54	1	0.15	ug/L	1	156-59-2	1
Tetrahydrofuran*	47.4	90	4.2	ug/L	1	109-99-9	1J
Chloroform	52	1	0.13	ug/L	1	67-66-3	1
Bromochloromethane	52	1	0.17	ug/L	1	74-97-5	1
1,1,1-Trichloroethane	52	1	0.21	ug/L	1	71-55-6	1
4-Methyl-2-pentanone (MIBK)	52	50	0.35	ug/L	1	108-10-1	1
2-Hexanone	54	50	0.61	ug/L	1	591-78-6	1
Carbon tetrachloride	52	1	0.17	ug/L	1	56-23-5	1
Benzene	52	1	0.14	ug/L	1	71-43-2	1
1,2-Dichloroethane	48	1	0.12	ug/L	1	107-06-2	1
Trichloroethene	51	1	0.14	ug/L	1	79-01-6	1
1,2-Dichloropropane	49	1	0.16	ug/L	1	78-87-5	1
Bromodichloromethane	51	1	0.29	ug/L	1	75-27-4	1
Dibromomethane	51	5	0.16	ug/L	1	74-95-3	1
cis-1,3-Dichloropropene	51	1	0.19	ug/L	1	10061-01-5	1
Toluene	51	1	0.13	ug/L	1	108-88-3	1
trans-1,3-Dichloropropene	51	1	0.19	ug/L	1	10061-02-6	1
1,1,2-Trichloroethane	50	1	0.21	ug/L	1	79-00-5	1
Tetrachloroethene	52	1	0.19	ug/L	1	127-18-4	1
trans-1,4-Dichloro-2-butene	52	1	0.49	ug/L	1	110-57-6	1
Dibromochloromethane	53	5	0.22	ug/L	1	124-48-1	1
1,2-Dibromoethane	53	1	0.20	ug/L	1	106-93-4	1
Chlorobenzene	54	1	0.13	ug/L	1	108-90-7	1
1,1,1,2-Tetrachloroethane	54	1	0.17	ug/L	1	630-20-6	1
Ethylbenzene	53	1	0.15	ug/L	1	100-41-4	1
p,m-Xylene*	107	2	0.33	ug/L	1		1
o-Xylene	52	1	0.19	ug/L	1	95-47-6	1
Styrene	53	1	0.16	ug/L	1	100-42-5	1
Isopropylbenzene	54	5	0.17	ug/L	1	98-82-8	1
Bromoform	53	1	0.17	ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	54	1	0.22	ug/L	1	79-34-5	1
1,2,3-Trichloropropane	51	1	0.30	ug/L	1	96-18-4	1
n-Propylbenzene	49	1	0.22	ug/L	1	103-65-1	1

1-Spiked at 50 ug/L

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.07 (continued)
Sample Tag: MS(MW-103S-240917)

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 20:45, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Bromobenzene	53	1	0.19	ug/L	1	108-86-1	1
1,3,5-Trimethylbenzene	54	1	0.22	ug/L	1	108-67-8	1
tert-Butylbenzene	51	1	0.23	ug/L	1	98-06-6	1
1,2,4-Trimethylbenzene	53	1	0.26	ug/L	1	95-63-6	1
sec-Butylbenzene	50	1	0.24	ug/L	1	135-98-8	1
p-Isopropyltoluene	51	5	0.24	ug/L	1	99-87-6	1
1,3-Dichlorobenzene	52	1	0.18	ug/L	1	541-73-1	1
1,4-Dichlorobenzene	52	1	0.16	ug/L	1	106-46-7	1
1,2-Dichlorobenzene	52	1	0.13	ug/L	1	95-50-1	1
1,2,3-Trimethylbenzene	50	1	0.16	ug/L	1	526-73-8	1
n-Butylbenzene	49	1	0.49	ug/L	1	104-51-8	1
Hexachloroethane	52	5	0.29	ug/L	1	67-72-1	1
1,2-Dibromo-3-chloropropane	57	5	0.29	ug/L	1	96-12-8	1
1,2,4-Trichlorobenzene	54	5	0.45	ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	52	5	0.42	ug/L	1	87-61-6	1
Naphthalene	55	5	0.48	ug/L	1	91-20-3	1
2-Methylnaphthalene	54	5	0.87	ug/L	1	91-57-6	1

1-Spiked at 50 ug/L



Analytical Laboratory Report

Lab Sample ID: S66316.08

Sample Tag: MSD(MW-103S-240917)

Collected Date/Time: 09/17/2024 15:00

Matrix: Water

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 11:38, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	0.134	0.01	0.004	mg/L	1	18540-29-9	1f

Method: SM3500-Cr B, Run Date: 09/18/24 10:02, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	4.90	0.25	0.10	mg/L	25	18540-29-9	2

Metals

Method: E200.8, Run Date: 09/19/24 12:27, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.320	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	0.252	0.005	0.000750	mg/L	5	7440-47-3	
Copper	0.248	0.005	0.000800	mg/L	5	7440-50-8	
Lead	0.244	0.003	0.000450	mg/L	5	7439-92-1	
Selenium	0.253	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	0.247	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 12:55, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	0.261	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	0.254	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	0.249	0.005	0.000800	mg/L	5	7440-50-8	f
Lead, Dissolved	0.241	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	0.238	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	0.240	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 21:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	53	10	0.33	ug/L	1	60-29-7	3
Acetone	51	50	8.9	ug/L	1	67-64-1	3

1-*Sample Spiked at 0.20mg/L f-Filtered and preserved in lab

2-*Sample spiked at 5.0mg/L

3-Spiked at 50 ug/L



Analytical Laboratory Report

Lab Sample ID: S66316.08 (continued)

Sample Tag: MSD(MW-103S-240917)

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 21:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methyl iodide	46	1	0.25	ug/L	1	74-88-4	1
Carbon disulfide	56	5	0.57	ug/L	1	75-15-0	1
tert-Methyl butyl ether (MTBE)	50	5	0.12	ug/L	1	1634-04-4	1
Acrylonitrile	49	2	0.48	ug/L	1	107-13-1	1
2-Butanone (MEK)	51	25	4.7	ug/L	1	78-93-3	1
Dichlorodifluoromethane	69	5	0.35	ug/L	1	75-71-8	1
Chloromethane	56	5	0.78	ug/L	1	74-87-3	1
Vinyl chloride	58	1	0.22	ug/L	1	75-01-4	1
Bromomethane	46	5	0.24	ug/L	1	74-83-9	1
Chloroethane	55	5	0.37	ug/L	1	75-00-3	1
Trichlorofluoromethane	60	1	0.21	ug/L	1	75-69-4	1
1,1-Dichloroethene	51	1	0.28	ug/L	1	75-35-4	1
Methylene chloride	52	5	0.24	ug/L	1	75-09-2	1
trans-1,2-Dichloroethene	51	1	0.17	ug/L	1	156-60-5	1
1,1-Dichloroethane	50	1	0.14	ug/L	1	75-34-3	1
cis-1,2-Dichloroethene	53	1	0.15	ug/L	1	156-59-2	1
Tetrahydrofuran*	47.3	90	4.2	ug/L	1	109-99-9	1J
Chloroform	51	1	0.13	ug/L	1	67-66-3	1
Bromochloromethane	52	1	0.17	ug/L	1	74-97-5	1
1,1,1-Trichloroethane	51	1	0.21	ug/L	1	71-55-6	1
4-Methyl-2-pentanone (MIBK)	53	50	0.35	ug/L	1	108-10-1	1
2-Hexanone	54	50	0.61	ug/L	1	591-78-6	1
Carbon tetrachloride	51	1	0.17	ug/L	1	56-23-5	1
Benzene	51	1	0.14	ug/L	1	71-43-2	1
1,2-Dichloroethane	47	1	0.12	ug/L	1	107-06-2	1
Trichloroethene	50	1	0.14	ug/L	1	79-01-6	1
1,2-Dichloropropane	49	1	0.16	ug/L	1	78-87-5	1
Bromodichloromethane	50	1	0.29	ug/L	1	75-27-4	1
Dibromomethane	52	5	0.16	ug/L	1	74-95-3	1
cis-1,3-Dichloropropene	51	1	0.19	ug/L	1	10061-01-5	1
Toluene	50	1	0.13	ug/L	1	108-88-3	1
trans-1,3-Dichloropropene	50	1	0.19	ug/L	1	10061-02-6	1
1,1,2-Trichloroethane	50	1	0.21	ug/L	1	79-00-5	1
Tetrachloroethene	52	1	0.19	ug/L	1	127-18-4	1
trans-1,4-Dichloro-2-butene	53	1	0.49	ug/L	1	110-57-6	1
Dibromochloromethane	53	5	0.22	ug/L	1	124-48-1	1
1,2-Dibromoethane	53	1	0.20	ug/L	1	106-93-4	1
Chlorobenzene	53	1	0.13	ug/L	1	108-90-7	1
1,1,1,2-Tetrachloroethane	53	1	0.17	ug/L	1	630-20-6	1
Ethylbenzene	52	1	0.15	ug/L	1	100-41-4	1
p,m-Xylene*	103	2	0.33	ug/L	1		1
o-Xylene	51	1	0.19	ug/L	1	95-47-6	1
Styrene	52	1	0.16	ug/L	1	100-42-5	1
Isopropylbenzene	52	5	0.17	ug/L	1	98-82-8	1
Bromoform	54	1	0.17	ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	52	1	0.22	ug/L	1	79-34-5	1
1,2,3-Trichloropropane	51	1	0.30	ug/L	1	96-18-4	1
n-Propylbenzene	48	1	0.22	ug/L	1	103-65-1	1

1-Spiked at 50 ug/L

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.08 (continued)
Sample Tag: MSD(MW-103S-240917)

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 21:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Bromobenzene	53	1	0.19	ug/L	1	108-86-1	1
1,3,5-Trimethylbenzene	53	1	0.22	ug/L	1	108-67-8	1
tert-Butylbenzene	49	1	0.23	ug/L	1	98-06-6	1
1,2,4-Trimethylbenzene	52	1	0.26	ug/L	1	95-63-6	1
sec-Butylbenzene	48	1	0.24	ug/L	1	135-98-8	1
p-Isopropyltoluene	50	5	0.24	ug/L	1	99-87-6	1
1,3-Dichlorobenzene	51	1	0.18	ug/L	1	541-73-1	1
1,4-Dichlorobenzene	52	1	0.16	ug/L	1	106-46-7	1
1,2-Dichlorobenzene	51	1	0.13	ug/L	1	95-50-1	1
1,2,3-Trimethylbenzene	49	1	0.16	ug/L	1	526-73-8	1
n-Butylbenzene	48	1	0.49	ug/L	1	104-51-8	1
Hexachloroethane	53	5	0.29	ug/L	1	67-72-1	1
1,2-Dibromo-3-chloropropane	58	5	0.29	ug/L	1	96-12-8	1
1,2,4-Trichlorobenzene	53	5	0.45	ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	53	5	0.42	ug/L	1	87-61-6	1
Naphthalene	55	5	0.48	ug/L	1	91-20-3	1
2-Methylnaphthalene	56	5	0.87	ug/L	1	91-57-6	1

1-Spiked at 50 ug/L



Analytical Laboratory Report

Lab Sample ID: S66316.09
Sample Tag: EB-1-240917
Collected Date/Time: 09/17/2024 15:10
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 11:44, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	Not detected	0.01	0.004	mg/L	1	18540-29-9	f

Method: SM3500-Cr B, Run Date: 09/18/24 10:14, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	Not detected	0.01	0.004	mg/L	1	18540-29-9	

Metals

Method: E200.8, Run Date: 09/19/24 12:44, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	Not detected	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	Not detected	0.005	0.000750	mg/L	5	7440-47-3	
Copper	Not detected	0.005	0.000800	mg/L	5	7440-50-8	
Lead	Not detected	0.003	0.000450	mg/L	5	7439-92-1	
Selenium	Not detected	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	Not detected	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 12:47, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	Not detected	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	Not detected	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	Not detected	0.005	0.000800	mg/L	5	7440-50-8	f
Lead, Dissolved	Not detected	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	Not detected	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	Not detected	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 14:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10	0.33	ug/L	1	60-29-7	
Acetone	Not detected	50	8.9	ug/L	1	67-64-1	
Methyl iodide	Not detected	1	0.25	ug/L	1	74-88-4	
Carbon disulfide	Not detected	5	0.57	ug/L	1	75-15-0	

f-Filtered and preserved in lab



Analytical Laboratory Report

Lab Sample ID: S66316.09 (continued)

Sample Tag: EB-1-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 14:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5	0.12	ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2	0.48	ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25	4.7	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5	0.35	ug/L	1	75-71-8	
Chloromethane	Not detected	5	0.78	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.22	ug/L	1	75-01-4	
Bromomethane	Not detected	5	0.24	ug/L	1	74-83-9	
Chloroethane	Not detected	5	0.37	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.21	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.28	ug/L	1	75-35-4	
Methylene chloride	Not detected	5	0.24	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1	0.17	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.14	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.15	ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90	4.2	ug/L	1	109-99-9	
Chloroform	Not detected	1	0.13	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.17	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.21	ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50	0.35	ug/L	1	108-10-1	
2-Hexanone	Not detected	50	0.61	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.17	ug/L	1	56-23-5	
Benzene	Not detected	1	0.14	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.12	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.14	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.16	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.29	ug/L	1	75-27-4	
Dibromomethane	Not detected	5	0.16	ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	
Toluene	Not detected	1	0.13	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.21	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.19	ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1	0.49	ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5	0.22	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.20	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.13	ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1	0.17	ug/L	1	630-20-6	
Ethylbenzene	Not detected	1	0.15	ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2	0.33	ug/L	1		
o-Xylene	Not detected	1	0.19	ug/L	1	95-47-6	
Styrene	Not detected	1	0.16	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5	0.17	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.17	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.22	ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1	0.30	ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1	0.22	ug/L	1	103-65-1	
Bromobenzene	Not detected	1	0.19	ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1	0.22	ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1	0.23	ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1	0.26	ug/L	1	95-63-6	



Analytical Laboratory Report

Lab Sample ID: S66316.09 (continued)
Sample Tag: EB-1-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 14:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
sec-Butylbenzene	Not detected	1	0.24	ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5	0.24	ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1	0.18	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.16	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.13	ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1	0.16	ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1	0.49	ug/L	1	104-51-8	
Hexachloroethane	Not detected	5	0.29	ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5	0.29	ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5	0.45	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5	0.42	ug/L	1	87-61-6	
Naphthalene	Not detected	5	0.48	ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5	0.87	ug/L	1	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S66316.10
Sample Tag: FB-1-240917
Collected Date/Time: 09/17/2024 10:05
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125mL Plastic	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	
Metal Digestion	Completed	SW3015A	09/19/24 10:40	CCM	

Inorganics

Method: SM3500-Cr B, Run Date: 09/18/24 10:09, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI, Dissolved*	Not detected	0.01	0.004	mg/L	1	18540-29-9	Ff

Method: SM3500-Cr B, Run Date: 09/18/24 09:06, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium VI*	Not detected	0.01	0.004	mg/L	1	18540-29-9	

Metals

Method: E200.8, Run Date: 09/19/24 12:50, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	Not detected	0.002	0.00145	mg/L	5	7440-38-2	
Chromium	Not detected	0.005	0.000750	mg/L	5	7440-47-3	
Copper	Not detected	0.005	0.000800	mg/L	5	7440-50-8	
Lead	Not detected	0.003	0.000450	mg/L	5	7439-92-1	
Selenium	Not detected	0.005	0.00435	mg/L	5	7782-49-2	
Zinc	Not detected	0.005	0.00325	mg/L	5	7440-66-6	

Method: E200.8, Run Date: 09/19/24 12:53, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic, Dissolved	Not detected	0.002	0.00145	mg/L	5	7440-38-2	f
Chromium, Dissolved	Not detected	0.005	0.000750	mg/L	5	7440-47-3	f
Copper, Dissolved	Not detected	0.005	0.000800	mg/L	5	7440-50-8	f
Lead, Dissolved	Not detected	0.003	0.000450	mg/L	5	7439-92-1	f
Selenium, Dissolved	Not detected	0.005	0.00435	mg/L	5	7782-49-2	f
Zinc, Dissolved	Not detected	0.005	0.00325	mg/L	5	7440-66-6	f

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 14:33, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10	0.33	ug/L	1	60-29-7	
Acetone	10.0	50	8.9	ug/L	1	67-64-1	J
Methyl iodide	Not detected	1	0.25	ug/L	1	74-88-4	

F-Analysis run outside of holding time f-Filtered and preserved in lab
J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66316.10 (continued)

Sample Tag: FB-1-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 14:33, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon disulfide	Not detected	5	0.57	ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5	0.12	ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2	0.48	ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25	4.7	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5	0.35	ug/L	1	75-71-8	
Chloromethane	Not detected	5	0.78	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.22	ug/L	1	75-01-4	
Bromomethane	Not detected	5	0.24	ug/L	1	74-83-9	
Chloroethane	Not detected	5	0.37	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.21	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.28	ug/L	1	75-35-4	
Methylene chloride	Not detected	5	0.24	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1	0.17	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.14	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.15	ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90	4.2	ug/L	1	109-99-9	
Chloroform	Not detected	1	0.13	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.17	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.21	ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50	0.35	ug/L	1	108-10-1	
2-Hexanone	Not detected	50	0.61	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.17	ug/L	1	56-23-5	
Benzene	Not detected	1	0.14	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.12	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.14	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.16	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.29	ug/L	1	75-27-4	
Dibromomethane	Not detected	5	0.16	ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	
Toluene	Not detected	1	0.13	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.21	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.19	ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1	0.49	ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5	0.22	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.20	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.13	ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1	0.17	ug/L	1	630-20-6	
Ethylbenzene	Not detected	1	0.15	ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2	0.33	ug/L	1		
o-Xylene	Not detected	1	0.19	ug/L	1	95-47-6	
Styrene	Not detected	1	0.16	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5	0.17	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.17	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.22	ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1	0.30	ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1	0.22	ug/L	1	103-65-1	
Bromobenzene	Not detected	1	0.19	ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1	0.22	ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1	0.23	ug/L	1	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S66316.10 (continued)
Sample Tag: FB-1-240917

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 14:33, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2,4-Trimethylbenzene	Not detected	1	0.26	ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1	0.24	ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5	0.24	ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1	0.18	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.16	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.13	ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1	0.16	ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1	0.49	ug/L	1	104-51-8	
Hexachloroethane	Not detected	5	0.29	ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5	0.29	ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5	0.45	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5	0.42	ug/L	1	87-61-6	
Naphthalene	Not detected	5	0.48	ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5	0.87	ug/L	1	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S66316.11
Sample Tag: Trip Blank
Collected Date/Time: 09/17/2024 00:01
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
4	40ml Glass	HCL	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/20/24 11:59	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 14:56, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10	0.33	ug/L	1	60-29-7	
Acetone	Not detected	50	8.9	ug/L	1	67-64-1	
Methyl iodide	Not detected	1	0.25	ug/L	1	74-88-4	
Carbon disulfide	Not detected	5	0.57	ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5	0.12	ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2	0.48	ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25	4.7	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5	0.35	ug/L	1	75-71-8	
Chloromethane	Not detected	5	0.78	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.22	ug/L	1	75-01-4	
Bromomethane	Not detected	5	0.24	ug/L	1	74-83-9	
Chloroethane	Not detected	5	0.37	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.21	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.28	ug/L	1	75-35-4	
Methylene chloride	Not detected	5	0.24	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1	0.17	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.14	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.15	ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90	4.2	ug/L	1	109-99-9	
Chloroform	Not detected	1	0.13	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.17	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.21	ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50	0.35	ug/L	1	108-10-1	
2-Hexanone	Not detected	50	0.61	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.17	ug/L	1	56-23-5	
Benzene	Not detected	1	0.14	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.12	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.14	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.16	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.29	ug/L	1	75-27-4	
Dibromomethane	Not detected	5	0.16	ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	
Toluene	Not detected	1	0.13	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.21	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.19	ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1	0.49	ug/L	1	110-57-6	



Analytical Laboratory Report

Lab Sample ID: S66316.11 (continued)

Sample Tag: Trip Blank

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 09/19/24 14:56, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromochloromethane	Not detected	5	0.22	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.20	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.13	ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1	0.17	ug/L	1	630-20-6	
Ethylbenzene	Not detected	1	0.15	ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2	0.33	ug/L	1		
o-Xylene	Not detected	1	0.19	ug/L	1	95-47-6	
Styrene	Not detected	1	0.16	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5	0.17	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.17	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.22	ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1	0.30	ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1	0.22	ug/L	1	103-65-1	
Bromobenzene	Not detected	1	0.19	ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1	0.22	ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1	0.23	ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1	0.26	ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1	0.24	ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5	0.24	ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1	0.18	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.16	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.13	ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1	0.16	ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1	0.49	ug/L	1	104-51-8	
Hexachloroethane	Not detected	5	0.29	ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5	0.29	ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5	0.45	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5	0.42	ug/L	1	87-61-6	
Naphthalene	Not detected	5	0.48	ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5	0.87	ug/L	1	91-57-6	

Merit Laboratories Login Checklist

Lab Set ID:S66316

Client:APPLIED (Applied Ecosystems)

Project: RACER Flint West #12990

Submitted:09/17/2024 16:25 Login User: PFD

Attention: Rodney Abke

Address: Applied Ecosystems
G4300 S. Saginaw Street
Burton, MI 48529

Phone: 810-715-2525

FAX:

Email: rabke@appliedecosystems.com

Selection	Description	Note
Sample Receiving		
01.	☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # IR 4.7
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☐ Yes ☒ No ☐ N/A	Samples shipped
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☐ Yes ☒ No ☐ N/A	Subcontracting needed? Subcontacted to:
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☒ Yes ☐ No ☐ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☐ No ☒ N/A	Do water VOC, TOX, DO or Alkalinity bottles contain

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S66316 Submitted: 09/17/2024 16:25

Client: APPLIED (Applied Ecosystems)

Project: RACER Flint West #12990

Initial Preservation Check: 09/17/2024 16:39 PFD

Preservation Recheck (E200.8): N/A

Attention: Rodney Abke

Address: Applied Ecosystems
G4300 S. Saginaw Street
Burton, MI 48529

Phone: 810-715-2525

FAX:

Email: rabke@appliedecosystems.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S66316.01	125ml Plastic HNO3	<2			
S66316.02	125ml Plastic HNO3	<2			
S66316.03	125ml Plastic HNO3	<2			
S66316.04	125ml Plastic HNO3	<2			
S66316.05	125ml Plastic HNO3	<2			
S66316.06	125ml Plastic HNO3	<2			
S66316.07	125ml Plastic HNO3	<2			
S66316.08	125ml Plastic HNO3	<2			
S66316.09	125ml Plastic HNO3	<2			
S66316.10	125ml Plastic HNO3	<2			



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

REPORT TO **CHAIN OF CUSTODY RECORD** **INVOICE TO**

CONTACT NAME Rodney Abke
COMPANY Applied EcoSystems
ADDRESS G-4300 South Saginaw Street
CITY Burton STATE MI ZIP CODE 48529
PHONE NO. 810-715-2525 FAX NO. 810-715-2526 P.O. NO. PO1107477
E-MAIL ADDRESS rabke@appliedecosystems.com QUOTE NO.

CONTACT NAME Monica Wallingford ☐ SAME
COMPANY Revitalizing Auto Communities Environmental Response (RACER) Trust
ADDRESS
CITY STATE ZIP CODE
PHONE NO. 313.486.2978 E-MAIL ADDRESS mwallingford@racertrust.org

PROJECT NO./NAME RACER Flint West #12990
SAMPLER(S) - PLEASE PRINT/SIGN NAME
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER
DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER report to MDLs

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives							VOCs	Metals, dissolved*	Metals, Total*											Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES Project Locations ☐ Detroit ☐ New York ☐ Other _____			
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER																	
66316-01	9/17	11:25	MW-112S-240917	W	5	1	3	1					X	X	X														* - Metals list includes:
-02		12:40	MW-110S-240917	W	5	1	3	1					X	X	X														As, Cr-total, CR-Hex, Cu
03		13:25	MW-108S-240917	W	5	1	3	1					X	X	X														Pb, Se, Zn
04		14:02	MW-114S-240917	W	5	1	3	1					X	X	X														
05		15:00	MW-103S-240917	W	5	1	3	1					X	X	X														Samples for dissolved
06	✓	X	DUP-1-240917	W	5	1	3	1					X	X	X														metals analysis were not
07		15:00	MSRMW-103S-240917)	W	5	1	3	1					X	X	X														field filtered and require
08		15:00	MSD(MW-103S-240917)	W	5	1	3	1					X	X	X														laboratory filtering.
09	✓	15:10	FB-1-240917	W	5	1	3	1					X	X	X														
10	✓	10:05	FB-1-240917	U																									report down to MCLs
11																													

RELINQUISHED BY: *[Signature]* DATE 9/17/24 TIME 15:30
SIGNATURE/ORGANIZATION
RECEIVED BY: *[Signature]* DATE 9/17/24 TIME 15:30
SIGNATURE/ORGANIZATION
RELINQUISHED BY: *[Signature]* DATE 9/17/24 TIME 16:25
SIGNATURE/ORGANIZATION
RECEIVED BY: *[Signature]* DATE 9/17/24 TIME 16:25
SIGNATURE/ORGANIZATION

RELINQUISHED BY: DATE TIME
SIGNATURE/ORGANIZATION
RECEIVED BY: DATE TIME
SIGNATURE/ORGANIZATION
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
NOTES: TEMP. ON ARRIVAL 4.7
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Quality Control Report

Report ID: QC-S66316-01
Generated on 09/24/2024

Report to

Attention: Rodney Abke
Applied Ecosystems
G4300 S. Saginaw Street
Burton, MI 48529

Phone: 810-715-2525 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S66316.01-S66316.11
Project: RACER Flint West #12990
Submitted Date/Time: 09/17/2024 16:25
Sampled by: Unknown
P.O. #: PO1107477

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-12)
Prep Batch Summary (Pages 13-16)
Surrogates per Lab Sample (Pages 17-25)
Surrogates per QC Sample (Pages 26-27)
Batch QC Results (Pages 28-43)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S66316.01

Sample Tag: MW-112S-240917

Collected Date/Time: 09/17/2024 11:25

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:26	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 09:12	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 11:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 11:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 11:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 11:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 11:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 11:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 18:02	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66316.02

Sample Tag: MW-110S-240917

Collected Date/Time: 09/17/2024 12:40

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:40	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 09:33	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 11:58	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 11:58	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 11:58	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 11:58	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 11:58	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 11:58	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 18:26	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66316.03

Sample Tag: MW-108S-240917

Collected Date/Time: 09/17/2024 13:25

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:48	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 09:28	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 12:03	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 12:03	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 12:03	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 12:03	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 12:03	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 12:03	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 18:49	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66316.04

Sample Tag: MW-114S-240917

Collected Date/Time: 09/17/2024 14:02

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:56	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 09:39	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 12:13	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 12:13	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 12:13	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 12:13	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 12:13	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 12:13	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 19:12	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS
Volatile Organics - DEQ List (Replicate 01)	SW5030C/8260C	09/23/24 16:35	240923A7	VF240923W2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S66316.05

Sample Tag: MW-103S-240917

Collected Date/Time: 09/17/2024 15:00

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:02	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 09:45	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 12:21	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 12:21	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 12:21	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 12:21	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 12:21	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 12:21	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 19:35	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66316.06

Sample Tag: DUP-1-240917

Collected Date/Time: 09/17/2024 00:01

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:09	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 09:51	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 12:36	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 12:36	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 12:36	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 12:36	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 12:36	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 12:36	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 19:59	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS
Volatile Organics - DEQ List (Replicate 01)	SW5030C/8260C	09/23/24 16:58	240923A7	VF240923W2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S66316.07

Sample Tag: MS(MW-103S-240917)

Collected Date/Time: 09/17/2024 15:00

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:32	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 09:57	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 12:26	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 12:26	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 12:26	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 12:26	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 12:26	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 12:26	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 20:45	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66316.08

Sample Tag: MSD(MW-103S-240917)

Collected Date/Time: 09/17/2024 15:00

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:38	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 10:02	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 12:27	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 12:27	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 12:27	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 12:27	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 12:27	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 12:27	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 21:08	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66316.09

Sample Tag: EB-1-240917

Collected Date/Time: 09/17/2024 15:10

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:44	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 10:14	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 12:44	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 12:44	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 12:44	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 12:44	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 12:44	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 12:44	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 14:09	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66316.10

Sample Tag: FB-1-240917

Collected Date/Time: 09/17/2024 10:05

Matrix: Water

COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:09	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Chromium VI	SM3500-Cr B	09/18/24 09:06	CHR240918-W1	CHR240918-W1	No	BLK/MS/MSD/DUP
Metals						
Arsenic, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Arsenic	E200.8	09/19/24 12:50	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/19/24 12:50	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Copper	E200.8	09/19/24 12:50	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Lead	E200.8	09/19/24 12:50	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Selenium	E200.8	09/19/24 12:50	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/19/24 12:50	MT4-24-0919A	MTD-091924-3	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 14:33	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66316.11
Sample Tag: Trip Blank
Collected Date/Time: 09/17/2024 00:01
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 14:56	240919A11	VF240919W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Prep Batch Summary

Inorganics, Prep Batch ID: CHR240918-W1

Surrogates: No, QC Types: BLK/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S66316.01	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:26	CHR240918-W1
S66316.01	Chromium VI	SM3500-Cr B	09/18/24 09:12	CHR240918-W1
S66316.02	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:40	CHR240918-W1
S66316.02	Chromium VI	SM3500-Cr B	09/18/24 09:33	CHR240918-W1
S66316.03	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:48	CHR240918-W1
S66316.03	Chromium VI	SM3500-Cr B	09/18/24 09:28	CHR240918-W1
S66316.04	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:56	CHR240918-W1
S66316.04	Chromium VI	SM3500-Cr B	09/18/24 09:39	CHR240918-W1
S66316.05	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:02	CHR240918-W1
S66316.05	Chromium VI	SM3500-Cr B	09/18/24 09:45	CHR240918-W1
S66316.06	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:09	CHR240918-W1
S66316.06	Chromium VI	SM3500-Cr B	09/18/24 09:51	CHR240918-W1
S66316.07	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:32	CHR240918-W1
S66316.07	Chromium VI	SM3500-Cr B	09/18/24 09:57	CHR240918-W1
S66316.08	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:38	CHR240918-W1
S66316.08	Chromium VI	SM3500-Cr B	09/18/24 10:02	CHR240918-W1
S66316.09	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 11:44	CHR240918-W1
S66316.09	Chromium VI	SM3500-Cr B	09/18/24 10:14	CHR240918-W1
S66316.10	Chromium VI, Dissolved	SM3500-Cr B	09/18/24 10:09	CHR240918-W1
S66316.10	Chromium VI	SM3500-Cr B	09/18/24 09:06	CHR240918-W1

Metals, Prep Batch ID: MTD-091924-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S66316.01	Arsenic, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A
S66316.01	Arsenic	E200.8	09/19/24 11:53	MT4-24-0919A
S66316.01	Chromium, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A
S66316.01	Chromium	E200.8	09/19/24 11:53	MT4-24-0919A
S66316.01	Copper, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A
S66316.01	Copper	E200.8	09/19/24 11:53	MT4-24-0919A
S66316.01	Lead, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A
S66316.01	Lead	E200.8	09/19/24 11:53	MT4-24-0919A
S66316.01	Selenium, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A
S66316.01	Selenium	E200.8	09/19/24 11:53	MT4-24-0919A
S66316.01	Zinc, Dissolved	E200.8	09/19/24 11:56	MT4-24-0919A
S66316.01	Zinc	E200.8	09/19/24 11:53	MT4-24-0919A
S66316.02	Arsenic, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A
S66316.02	Arsenic	E200.8	09/19/24 11:58	MT4-24-0919A
S66316.02	Chromium, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A
S66316.02	Chromium	E200.8	09/19/24 11:58	MT4-24-0919A
S66316.02	Copper, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A
S66316.02	Copper	E200.8	09/19/24 11:58	MT4-24-0919A
S66316.02	Lead, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A
S66316.02	Lead	E200.8	09/19/24 11:58	MT4-24-0919A
S66316.02	Selenium, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A
S66316.02	Selenium	E200.8	09/19/24 11:58	MT4-24-0919A
S66316.02	Zinc, Dissolved	E200.8	09/19/24 12:01	MT4-24-0919A
S66316.02	Zinc	E200.8	09/19/24 11:58	MT4-24-0919A
S66316.03	Arsenic, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A
S66316.03	Arsenic	E200.8	09/19/24 12:03	MT4-24-0919A

QC Report - Prep Batch Summary

Metals, Prep Batch ID: MTD-091924-3 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S66316.03	Chromium, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A
S66316.03	Chromium	E200.8	09/19/24 12:03	MT4-24-0919A
S66316.03	Copper, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A
S66316.03	Copper	E200.8	09/19/24 12:03	MT4-24-0919A
S66316.03	Lead, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A
S66316.03	Lead	E200.8	09/19/24 12:03	MT4-24-0919A
S66316.03	Selenium, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A
S66316.03	Selenium	E200.8	09/19/24 12:03	MT4-24-0919A
S66316.03	Zinc, Dissolved	E200.8	09/19/24 12:08	MT4-24-0919A
S66316.03	Zinc	E200.8	09/19/24 12:03	MT4-24-0919A
S66316.04	Arsenic, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A
S66316.04	Arsenic	E200.8	09/19/24 12:13	MT4-24-0919A
S66316.04	Chromium, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A
S66316.04	Chromium	E200.8	09/19/24 12:13	MT4-24-0919A
S66316.04	Copper, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A
S66316.04	Copper	E200.8	09/19/24 12:13	MT4-24-0919A
S66316.04	Lead, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A
S66316.04	Lead	E200.8	09/19/24 12:13	MT4-24-0919A
S66316.04	Selenium, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A
S66316.04	Selenium	E200.8	09/19/24 12:13	MT4-24-0919A
S66316.04	Zinc, Dissolved	E200.8	09/19/24 12:18	MT4-24-0919A
S66316.04	Zinc	E200.8	09/19/24 12:13	MT4-24-0919A
S66316.05	Arsenic, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A
S66316.05	Arsenic	E200.8	09/19/24 12:21	MT4-24-0919A
S66316.05	Chromium, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A
S66316.05	Chromium	E200.8	09/19/24 12:21	MT4-24-0919A
S66316.05	Copper, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A
S66316.05	Copper	E200.8	09/19/24 12:21	MT4-24-0919A
S66316.05	Lead, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A
S66316.05	Lead	E200.8	09/19/24 12:21	MT4-24-0919A
S66316.05	Selenium, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A
S66316.05	Selenium	E200.8	09/19/24 12:21	MT4-24-0919A
S66316.05	Zinc, Dissolved	E200.8	09/19/24 12:34	MT4-24-0919A
S66316.05	Zinc	E200.8	09/19/24 12:21	MT4-24-0919A
S66316.06	Arsenic, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A
S66316.06	Arsenic	E200.8	09/19/24 12:36	MT4-24-0919A
S66316.06	Chromium, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A
S66316.06	Chromium	E200.8	09/19/24 12:36	MT4-24-0919A
S66316.06	Copper, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A
S66316.06	Copper	E200.8	09/19/24 12:36	MT4-24-0919A
S66316.06	Lead, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A
S66316.06	Lead	E200.8	09/19/24 12:36	MT4-24-0919A
S66316.06	Selenium, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A
S66316.06	Selenium	E200.8	09/19/24 12:36	MT4-24-0919A
S66316.06	Zinc, Dissolved	E200.8	09/19/24 12:39	MT4-24-0919A
S66316.06	Zinc	E200.8	09/19/24 12:36	MT4-24-0919A
S66316.07	Arsenic, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A
S66316.07	Arsenic	E200.8	09/19/24 12:26	MT4-24-0919A
S66316.07	Chromium, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A

QC Report - Prep Batch Summary

Metals, Prep Batch ID: MTD-091924-3 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S66316.07	Chromium	E200.8	09/19/24 12:26	MT4-24-0919A
S66316.07	Copper, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A
S66316.07	Copper	E200.8	09/19/24 12:26	MT4-24-0919A
S66316.07	Lead, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A
S66316.07	Lead	E200.8	09/19/24 12:26	MT4-24-0919A
S66316.07	Selenium, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A
S66316.07	Selenium	E200.8	09/19/24 12:26	MT4-24-0919A
S66316.07	Zinc, Dissolved	E200.8	09/19/24 12:54	MT4-24-0919A
S66316.07	Zinc	E200.8	09/19/24 12:26	MT4-24-0919A
S66316.08	Arsenic, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A
S66316.08	Arsenic	E200.8	09/19/24 12:27	MT4-24-0919A
S66316.08	Chromium, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A
S66316.08	Chromium	E200.8	09/19/24 12:27	MT4-24-0919A
S66316.08	Copper, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A
S66316.08	Copper	E200.8	09/19/24 12:27	MT4-24-0919A
S66316.08	Lead, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A
S66316.08	Lead	E200.8	09/19/24 12:27	MT4-24-0919A
S66316.08	Selenium, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A
S66316.08	Selenium	E200.8	09/19/24 12:27	MT4-24-0919A
S66316.08	Zinc, Dissolved	E200.8	09/19/24 12:55	MT4-24-0919A
S66316.08	Zinc	E200.8	09/19/24 12:27	MT4-24-0919A
S66316.09	Arsenic, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A
S66316.09	Arsenic	E200.8	09/19/24 12:44	MT4-24-0919A
S66316.09	Chromium, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A
S66316.09	Chromium	E200.8	09/19/24 12:44	MT4-24-0919A
S66316.09	Copper, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A
S66316.09	Copper	E200.8	09/19/24 12:44	MT4-24-0919A
S66316.09	Lead, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A
S66316.09	Lead	E200.8	09/19/24 12:44	MT4-24-0919A
S66316.09	Selenium, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A
S66316.09	Selenium	E200.8	09/19/24 12:44	MT4-24-0919A
S66316.09	Zinc, Dissolved	E200.8	09/19/24 12:47	MT4-24-0919A
S66316.09	Zinc	E200.8	09/19/24 12:44	MT4-24-0919A
S66316.10	Arsenic, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A
S66316.10	Arsenic	E200.8	09/19/24 12:50	MT4-24-0919A
S66316.10	Chromium, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A
S66316.10	Chromium	E200.8	09/19/24 12:50	MT4-24-0919A
S66316.10	Copper, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A
S66316.10	Copper	E200.8	09/19/24 12:50	MT4-24-0919A
S66316.10	Lead, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A
S66316.10	Lead	E200.8	09/19/24 12:50	MT4-24-0919A
S66316.10	Selenium, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A
S66316.10	Selenium	E200.8	09/19/24 12:50	MT4-24-0919A
S66316.10	Zinc, Dissolved	E200.8	09/19/24 12:53	MT4-24-0919A
S66316.10	Zinc	E200.8	09/19/24 12:50	MT4-24-0919A

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: VF240919W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S66316.01	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 18:02	240919A11
S66316.02	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 18:26	240919A11
S66316.03	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 18:49	240919A11
S66316.04	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 19:12	240919A11
S66316.05	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 19:35	240919A11
S66316.06	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 19:59	240919A11
S66316.07	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 20:45	240919A11
S66316.08	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 21:08	240919A11
S66316.09	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 14:09	240919A11
S66316.10	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 14:33	240919A11
S66316.11	Volatile Organics - DEQ List	SW5030C/8260C	09/19/24 14:56	240919A11

Organics - Volatiles, Prep Batch ID: VF240923W2

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S66316.04	Volatile Organics - DEQ List (Replicate 01)	SW5030C/8260C	09/23/24 16:35	240923A7
S66316.06	Volatile Organics - DEQ List (Replicate 01)	SW5030C/8260C	09/23/24 16:58	240923A7

Lab Sample ID: S66316.01
Sample Tag: MW-112S-240917
Collected Date/Time: 09/17/2024 11:25
Matrix: Water
COC Reference:

Organics - Volatiles, Analysis: Volatile Organics - DEQ List
Run in Batch: 240919A11, Run Date: 09/19/2024 18:02, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		92.5	80.0	124.0
1,2-Dichloroethane-D4		102.6	72.0	125.0
Toluene-D8		98.8	89.0	112.0

Lab Sample ID: S66316.02
Sample Tag: MW-110S-240917
Collected Date/Time: 09/17/2024 12:40
Matrix: Water
COC Reference:

Organics - Volatiles, Analysis: Volatile Organics - DEQ List
Run in Batch: 240919A11, Run Date: 09/19/2024 18:26, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		92.7	80.0	124.0
1,2-Dichloroethane-D4		105.4	72.0	125.0
Toluene-D8		99.3	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S66316.03

Sample Tag: MW-108S-240917

Collected Date/Time: 09/17/2024 13:25

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 240919A11, Run Date: 09/19/2024 18:49, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.8	80.0	124.0
1,2-Dichloroethane-D4		107.3	72.0	125.0
Toluene-D8		98.6	89.0	112.0

Lab Sample ID: S66316.04
Sample Tag: MW-114S-240917
Collected Date/Time: 09/17/2024 14:02
Matrix: Water
COC Reference:

Organics - Volatiles, Analysis: Volatile Organics - DEQ List
Run in Batch: 240919A11, Run Date: 09/19/2024 19:12, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		92.7	80.0	124.0
1,2-Dichloroethane-D4		101.7	72.0	125.0
Toluene-D8		99.6	89.0	112.0

Organics - Volatiles, Analysis: Volatile Organics - DEQ List (Replicate 01)
Run in Batch: 240923A7, Run Date: 09/23/2024 16:35, Matrix: WW, Dilution: 10

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		103.8	80.0	124.0
1,2-Dichloroethane-D4		98.6	72.0	125.0
Toluene-D8		98.6	89.0	112.0

Lab Sample ID: S66316.05
Sample Tag: MW-103S-240917
Collected Date/Time: 09/17/2024 15:00
Matrix: Water
COC Reference:

Organics - Volatiles, Analysis: Volatile Organics - DEQ List
Run in Batch: 240919A11, Run Date: 09/19/2024 19:35, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.6	80.0	124.0
1,2-Dichloroethane-D4		102.0	72.0	125.0
Toluene-D8		98.6	89.0	112.0

Lab Sample ID: S66316.06

Sample Tag: DUP-1-240917

Collected Date/Time: 09/17/2024 00:01

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 240919A11, Run Date: 09/19/2024 19:59, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.0	80.0	124.0
1,2-Dichloroethane-D4		103.4	72.0	125.0
Toluene-D8		99.2	89.0	112.0

Organics - Volatiles, Analysis: Volatile Organics - DEQ List (Replicate 01)

Run in Batch: 240923A7, Run Date: 09/23/2024 16:58, Matrix: WW, Dilution: 10

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		104.6	80.0	124.0
1,2-Dichloroethane-D4		97.8	72.0	125.0
Toluene-D8		98.5	89.0	112.0

Lab Sample ID: S66316.09
Sample Tag: EB-1-240917
Collected Date/Time: 09/17/2024 15:10
Matrix: Water
COC Reference:

Organics - Volatiles, Analysis: Volatile Organics - DEQ List
Run in Batch: 240919A11, Run Date: 09/19/2024 14:09, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.8	80.0	124.0
1,2-Dichloroethane-D4		103.4	72.0	125.0
Toluene-D8		99.1	89.0	112.0

Lab Sample ID: S66316.10
Sample Tag: FB-1-240917
Collected Date/Time: 09/17/2024 10:05
Matrix: Water
COC Reference:

Organics - Volatiles, Analysis: Volatile Organics - DEQ List
Run in Batch: 240919A11, Run Date: 09/19/2024 14:33, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.8	80.0	124.0
1,2-Dichloroethane-D4		102.5	72.0	125.0
Toluene-D8		98.8	89.0	112.0

Lab Sample ID: S66316.11

Sample Tag: Trip Blank

Collected Date/Time: 09/17/2024 00:01

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 240919A11, Run Date: 09/19/2024 14:56, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		92.8	80.0	124.0
1,2-Dichloroethane-D4		102.4	72.0	125.0
Toluene-D8		99.3	89.0	112.0

QC Report - Surrogates per QC Sample

Organics - Volatiles, Prep Batch ID: VF240919W1

QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 240919A11.BLKW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 13:23, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		95.3	80.0	124.0
1,2-Dichloroethane-D4		103.2	72.0	125.0
Toluene-D8		98.8	89.0	112.0

Laboratory Control Sample (LCS)

Lab Sample ID: 240919A11.LCSW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 11:50, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		107.0	80.0	124.0
1,2-Dichloroethane-D4		95.6	72.0	125.0
Toluene-D8		100.1	89.0	112.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 240919A11.LCSDW19A, Parent Sample ID: 240919A11.LCSW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 12:13, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		108.7	80.0	124.0
1,2-Dichloroethane-D4		93.3	72.0	125.0
Toluene-D8		99.3	89.0	112.0

Matrix Spike (MS)

Lab Sample ID: 240919A11.6631607M, Parent Sample ID: S66316.05

Run in Batch: 240919A11, Run Date: 09/19/2024 20:45, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		105.9	80.0	124.0
1,2-Dichloroethane-D4		93.3	72.0	125.0
Toluene-D8		99.0	89.0	112.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 240919A11.6631608N, Parent Sample ID: 240919A11.6631607M

Run in Batch: 240919A11, Run Date: 09/19/2024 21:08, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		104.9	80.0	124.0
1,2-Dichloroethane-D4		91.9	72.0	125.0
Toluene-D8		98.3	89.0	112.0

QC Report - Surrogates per QC Sample

Organics - Volatiles, Prep Batch ID: VF240923W2

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 240923A7.BLKS20A

Run in Batch: 240923A7, Run Date: 09/23/2024 15:47, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		102.9	80.0	124.0
1,2-Dichloroethane-D4		96.0	72.0	125.0
Toluene-D8		98.5	89.0	112.0

Laboratory Control Sample (LCS)

Lab Sample ID: 240923A7.LCSW23A

Run in Batch: 240923A7, Run Date: 09/23/2024 14:13, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		101.5	80.0	124.0
1,2-Dichloroethane-D4		98.1	72.0	125.0
Toluene-D8		99.7	89.0	112.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 240923A7.LCSDW23A, Parent Sample ID: 240923A7.LCSW23A

Run in Batch: 240923A7, Run Date: 09/23/2024 14:36, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		100.4	80.0	124.0
1,2-Dichloroethane-D4		96.6	72.0	125.0
Toluene-D8		98.9	89.0	112.0

QC Report - Batch QC Results

Inorganics, Prep Batch ID: CHR240918-W1

Surrogates: No, QC Types: BLK/MS/MSD/DUP

Blank (BLK)

Lab Sample ID: CHR240918-W1.LRB1

Run in Batch: CHR240918-W1, Run Date: 09/18/2024 08:30, Prep Date: 09/18/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Chromium VI		ND	0.01	mg/L

Matrix Spike (MS)

Lab Sample ID: CHR240918-W1.MS1, Parent Sample ID: S66316.05

Run in Batch: CHR240918-W1, Run Date: 09/18/2024 09:57, Prep Date: 09/18/2024, Matrix: Liquid, Dilution: 25

Analyte	Flags	% Rec	LCL	UCL
Chromium VI		96.4	80	120

Matrix Spike (MS)

Lab Sample ID: CHR240918-W1.MS2, Parent Sample ID: S66316.05

Run in Batch: CHR240918-W1, Run Date: 09/18/2024 11:32, Prep Date: 09/18/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Chromium VI	*	60.5	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: CHR240918-W1.MSD1, Parent Sample ID: CHR240918-W1.MS1

Run in Batch: CHR240918-W1, Run Date: 09/18/2024 10:02, Prep Date: 09/18/2024, Matrix: Liquid, Dilution: 25

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chromium VI		98.0	80	120	2	15

Matrix Spike Duplicate (MSD)

Lab Sample ID: CHR240918-W1.MSD2, Parent Sample ID: CHR240918-W1.MS2

Run in Batch: CHR240918-W1, Run Date: 09/18/2024 11:38, Prep Date: 09/18/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chromium VI	*	65.0	80	120	7	15

Duplicate (DUP)

Lab Sample ID: CHR240918-W1.DP1, Parent Sample ID: S66316.01

Run in Batch: CHR240918-W1, Run Date: 09/18/2024 09:18, Prep Date: 09/18/2024, Matrix: Liquid, Dilution: 25

Analyte	Flags	RPD	RPD CL
Chromium VI		0.0	15

Duplicate (DUP)

Lab Sample ID: CHR240918-W1.DP2, Parent Sample ID: S66316.01

Run in Batch: CHR240918-W1, Run Date: 09/18/2024 10:33, Prep Date: 09/18/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Chromium VI	*	200.0	15

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-091924-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT4-24-0919A.018.LRB

Run in Batch: MT4-24-0919A, Run Date: 09/19/2024 11:51, Prep Date: 09/19/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Arsenic		ND	0.0004	mg/L
Chromium		ND	0.001	mg/L
Copper		ND	0.001	mg/L
Lead		ND	0.0006	mg/L
Selenium		ND	0.001	mg/L
Zinc		ND	0.001	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-24-0919A.017.LCS

Run in Batch: MT4-24-0919A, Run Date: 09/19/2024 11:47, Prep Date: 09/19/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Arsenic		101	85	115
Chromium		100	85	115
Copper		100	85	115
Lead		97	85	115
Selenium		100	85	115
Zinc		98	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-24-0919A.037.MS, Parent Sample ID: S66316.05

Run in Batch: MT4-24-0919A, Run Date: 09/19/2024 12:26, Prep Date: 09/19/2024, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Arsenic		104	75	125
Chromium		101	75	125
Copper		100	75	125
Lead		99	75	125
Selenium		97	75	125
Zinc		100	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-24-0919A.054.MS, Parent Sample ID: S66316.05

Run in Batch: MT4-24-0919A, Run Date: 09/19/2024 12:54, Prep Date: 09/19/2024, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Chromium		101	75	125
Copper		98	75	125
Zinc		95	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-24-0919A.038.MSD, Parent Sample ID: MT4-24-0919A.037.MS

Run in Batch: MT4-24-0919A, Run Date: 09/19/2024 12:27, Prep Date: 09/19/2024, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		106	75	125	2	20
Chromium		101	75	125	0	20
Copper		99	75	125	1	20
Lead		98	75	125	2	20
Selenium		101	75	125	4	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-091924-3 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: MT4-24-0919A.038.MSD, Parent Sample ID: MT4-24-0919A.037.MS

Run in Batch: MT4-24-0919A, Run Date: 09/19/2024 12:27, Prep Date: 09/19/2024, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Zinc		99	75	125	1	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-24-0919A.055.MSD, Parent Sample ID: MT4-24-0919A.054.MS

Run in Batch: MT4-24-0919A, Run Date: 09/19/2024 12:55, Prep Date: 09/19/2024, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chromium		102	75	125	0	20
Copper		100	75	125	2	20
Zinc		96	75	125	1	20

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240919W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 240919A11.BLKW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 13:23, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Diethyl ether		ND	1.00	ug/l
Acetone		ND	10.00	ug/l
Methyl iodide		ND	1.00	ug/l
Carbon disulfide		ND	1.00	ug/l
tert-Methyl butyl ether (MTBE)		ND	1.00	ug/l
Acrylonitrile		ND	1.00	ug/l
2-Butanone (MEK)		ND	10.00	ug/l
Dichlorodifluoromethane		ND	1.00	ug/l
Chloromethane		ND	1.00	ug/l
Vinyl chloride		ND	1.00	ug/l
Bromomethane		ND	1.00	ug/l
Chloroethane		ND	1.00	ug/l
Trichlorofluoromethane		ND	1.00	ug/l
1,1-Dichloroethene		ND	1.00	ug/l
Methylene chloride		ND	1.00	ug/l
trans-1,2-Dichloroethene		ND	1.00	ug/l
1,1-Dichloroethane		ND	1.00	ug/l
cis-1,2-Dichloroethene		ND	1.00	ug/l
Tetrahydrofuran		ND	10.00	ug/l
Chloroform		ND	1.00	ug/l
Bromochloromethane		ND	1.00	ug/l
1,1,1-Trichloroethane		ND	1.00	ug/l
4-Methyl-2-pentanone (MIBK)		ND	10.00	ug/l
2-Hexanone		ND	10.00	ug/l
Carbon tetrachloride		ND	1.00	ug/l
Benzene		ND	1.00	ug/l
1,2-Dichloroethane		ND	1.00	ug/l
Trichloroethene		ND	1.00	ug/l
1,2-Dichloropropane		ND	1.00	ug/l
Bromodichloromethane		ND	1.00	ug/l
Dibromomethane		ND	1.00	ug/l
cis-1,3-Dichloropropene		ND	1.00	ug/l
Toluene		ND	1.00	ug/l
trans-1,3-Dichloropropene		ND	1.00	ug/l
1,1,2-Trichloroethane		ND	1.00	ug/l
Tetrachloroethene		ND	1.00	ug/l
trans-1,4-Dichloro-2-butene		ND	1.00	ug/l
Dibromochloromethane		ND	1.00	ug/l
1,2-Dibromoethane		ND	1.00	ug/l
Chlorobenzene		ND	1.00	ug/l
1,1,1,2-Tetrachloroethane		ND	1.00	ug/l
Ethylbenzene		ND	1.00	ug/l
p,m-Xylene		ND	2.00	ug/l
o-Xylene		ND	1.00	ug/l
Styrene		ND	1.00	ug/l
Isopropylbenzene		ND	1.00	ug/l

Organics - Volatiles, Prep Batch ID: VF240919W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK) (continued)

Lab Sample ID: 240919A11.BLKW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 13:23, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Bromoform		ND	1.00	ug/l
1,1,2,2-Tetrachloroethane		ND	1.00	ug/l
1,2,3-Trichloropropane		ND	1.00	ug/l
n-Propylbenzene		ND	1.00	ug/l
Bromobenzene		ND	1.00	ug/l
1,3,5-Trimethylbenzene		ND	1.00	ug/l
tert-Butylbenzene		ND	1.00	ug/l
1,2,4-Trimethylbenzene		ND	1.00	ug/l
sec-Butylbenzene		ND	1.00	ug/l
p-Isopropyltoluene		ND	1.00	ug/l
1,3-Dichlorobenzene		ND	1.00	ug/l
1,4-Dichlorobenzene		ND	1.00	ug/l
1,2-Dichlorobenzene		ND	1.00	ug/l
1,2,3-Trimethylbenzene		ND	1.00	ug/l
n-Butylbenzene		ND	1.00	ug/l
Hexachloroethane		ND	1.00	ug/l
1,2-Dibromo-3-chloropropane		ND	1.00	ug/l
1,2,4-Trichlorobenzene		ND	1.00	ug/l
1,2,3-Trichlorobenzene		ND	1.00	ug/l
Naphthalene		ND	1.00	ug/l
2-Methylnaphthalene		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 240919A11.LCSW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 11:50, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		104.1	67.4	121.2
Acetone		92.6	29.9	161.5
Methyl iodide		98.1	68.8	116.4
Carbon disulfide		109.7	63.8	137.4
tert-Methyl butyl ether (MTBE)		100.7	73.2	122.4
Acrylonitrile		97.2	69.9	128.9
2-Butanone (MEK)		97.4	44.0	134.4
Dichlorodifluoromethane		142.4	10.0	222.8
Chloromethane		116.9	23.8	166.5
Vinyl chloride		113.8	43.5	149.1
Bromomethane		94.7	56.8	151.3
Chloroethane		104.5	53.4	149.4
Trichlorofluoromethane		116.8	59.7	151.8
1,1-Dichloroethene		101.3	69.6	139.4
Methylene chloride		104.0	73.3	121.1
trans-1,2-Dichloroethene		102.9	73.6	129.3
1,1-Dichloroethane		99.3	71.5	126.2
cis-1,2-Dichloroethene		105.6	76.6	122.1
Tetrahydrofuran		93.2	59.0	117.9
Chloroform		102.7	78.4	124.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240919W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 240919A11.LCSW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 11:50, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Bromochloromethane		105.5	78.2	120.8
1,1,1-Trichloroethane		102.1	79.4	130.9
4-Methyl-2-pentanone (MIBK)		102.1	71.6	125.2
2-Hexanone		101.5	55.4	136.9
Carbon tetrachloride		102.0	72.6	133.0
Benzene		100.7	79.9	124.9
1,2-Dichloroethane		97.5	76.0	126.3
Trichloroethene		101.7	79.7	124.2
1,2-Dichloropropane		99.3	78.6	126.4
Bromodichloromethane		102.7	80.4	128.2
Dibromomethane		106.0	76.9	122.1
cis-1,3-Dichloropropene		106.9	79.8	129.9
Toluene		101.9	79.8	124.5
trans-1,3-Dichloropropene		105.7	74.0	131.3
1,1,2-Trichloroethane		102.7	78.7	123.1
Tetrachloroethene		103.3	74.5	124.5
trans-1,4-Dichloro-2-butene		113.0	68.6	135.4
Dibromochloromethane		109.4	74.6	127.2
1,2-Dibromoethane		109.8	70.3	133.7
Chlorobenzene		106.3	79.2	122.7
1,1,1,2-Tetrachloroethane		107.5	80.3	128.2
Ethylbenzene		105.5	79.5	129.1
p,m-Xylene		106.4	79.4	132.2
o-Xylene		104.5	80.2	131.0
Styrene		107.8	69.5	126.7
Isopropylbenzene		105.7	74.4	121.5
Bromoform		110.3	69.4	128.0
1,1,2,2-Tetrachloroethane		106.0	79.8	126.3
1,2,3-Trichloropropane		102.2	78.3	138.8
n-Propylbenzene		104.9	82.0	130.7
Bromobenzene		109.0	78.7	124.6
1,3,5-Trimethylbenzene		108.3	81.3	128.9
tert-Butylbenzene		101.3	80.7	128.9
1,2,4-Trimethylbenzene		106.6	81.4	130.8
sec-Butylbenzene		97.2	77.4	129.8
p-Isopropyltoluene		99.5	79.8	137.5
1,3-Dichlorobenzene		103.1	77.0	131.3
1,4-Dichlorobenzene		103.6	20.7	137.7
1,2-Dichlorobenzene		104.3	10.0	166.2
1,2,3-Trimethylbenzene		98.1	76.3	124.2
n-Butylbenzene		96.6	80.0	133.3
Hexachloroethane		103.1	23.8	138.1
1,2-Dibromo-3-chloropropane		107.1	21.2	189.4
1,2,4-Trichlorobenzene		104.1	27.4	143.4
1,2,3-Trichlorobenzene		101.6	75.4	131.4
Naphthalene		102.8	32.9	135.8

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240919W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 240919A11.LCSW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 11:50, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
2-Methylnaphthalene		92.3	25.5	165.5

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 240919A11.LCSDW19A, Parent Sample ID: 240919A11.LCSW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 12:13, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		102.4	67.4	121.2	1.6	30.0
Acetone		92.5	29.9	161.5	0.1	30.0
Methyl iodide		93.9	68.8	116.4	4.4	30.0
Carbon disulfide		105.7	63.8	137.4	3.7	30.0
tert-Methyl butyl ether (MTBE)		99.1	73.2	122.4	1.6	30.0
Acrylonitrile		94.7	69.9	128.9	2.6	30.0
2-Butanone (MEK)		95.3	44.0	134.4	2.2	30.0
Dichlorodifluoromethane		135.8	10.0	222.8	4.8	30.0
Chloromethane		112.7	23.8	166.5	3.7	30.0
Vinyl chloride		107.3	43.5	149.1	5.9	30.0
Bromomethane		96.3	56.8	151.3	1.6	30.0
Chloroethane		100.8	53.4	149.4	3.5	30.0
Trichlorofluoromethane		111.7	59.7	151.8	4.4	30.0
1,1-Dichloroethene		95.9	69.6	139.4	5.5	30.0
Methylene chloride		101.2	73.3	121.1	2.7	30.0
trans-1,2-Dichloroethene		97.2	73.6	129.3	5.7	30.0
1,1-Dichloroethane		95.5	71.5	126.2	3.9	30.0
cis-1,2-Dichloroethene		103.6	76.6	122.1	1.9	30.0
Tetrahydrofuran		94.1	59.0	117.9	1.0	30.0
Chloroform		99.9	78.4	124.0	2.8	30.0
Bromochloromethane		104.3	78.2	120.8	1.2	30.0
1,1,1-Trichloroethane		97.1	79.4	130.9	5.0	30.0
4-Methyl-2-pentanone (MIBK)		98.2	71.6	125.2	3.9	30.0
2-Hexanone		100.0	55.4	136.9	1.5	30.0
Carbon tetrachloride		98.1	72.6	133.0	3.9	30.0
Benzene		97.1	79.9	124.9	3.6	30.0
1,2-Dichloroethane		93.7	76.0	126.3	4.0	30.0
Trichloroethene		96.7	79.7	124.2	5.1	30.0
1,2-Dichloropropane		96.3	78.6	126.4	3.1	30.0
Bromodichloromethane		99.5	80.4	128.2	3.2	30.0
Dibromomethane		104.1	76.9	122.1	1.8	30.0
cis-1,3-Dichloropropene		102.8	79.8	129.9	3.9	30.0
Toluene		97.2	79.8	124.5	4.8	30.0
trans-1,3-Dichloropropene		102.6	74.0	131.3	3.0	30.0
1,1,2-Trichloroethane		99.8	78.7	123.1	2.9	30.0
Tetrachloroethene		100.0	74.5	124.5	3.2	30.0
trans-1,4-Dichloro-2-butene		108.7	68.6	135.4	3.9	30.0
Dibromochloromethane		107.6	74.6	127.2	1.6	30.0
1,2-Dibromoethane		107.4	70.3	133.7	2.2	30.0
Chlorobenzene		103.2	79.2	122.7	2.9	30.0

Organics - Volatiles, Prep Batch ID: VF240919W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 240919A11.LCSDW19A, Parent Sample ID: 240919A11.LCSW19A

Run in Batch: 240919A11, Run Date: 09/19/2024 12:13, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,1,1,2-Tetrachloroethane		104.9	80.3	128.2	2.4	30.0
Ethylbenzene		100.9	79.5	129.1	4.5	30.0
p,m-Xylene		102.5	79.4	132.2	3.8	30.0
o-Xylene		100.5	80.2	131.0	4.0	30.0
Styrene		104.6	69.5	126.7	3.0	30.0
Isopropylbenzene		102.2	74.4	121.5	3.4	30.0
Bromoform		110.2	69.4	128.0	0.2	30.0
1,1,2,2-Tetrachloroethane		103.8	79.8	126.3	2.1	30.0
1,2,3-Trichloropropane		100.9	78.3	138.8	1.3	30.0
n-Propylbenzene		103.4	82.0	130.7	1.4	30.0
Bromobenzene		107.1	78.7	124.6	1.7	30.0
1,3,5-Trimethylbenzene		105.0	81.3	128.9	3.1	30.0
tert-Butylbenzene		96.6	80.7	128.9	4.7	30.0
1,2,4-Trimethylbenzene		103.7	81.4	130.8	2.7	30.0
sec-Butylbenzene		93.3	77.4	129.8	4.1	30.0
p-Isopropyltoluene		95.6	79.8	137.5	4.0	30.0
1,3-Dichlorobenzene		100.2	77.0	131.3	2.8	30.0
1,4-Dichlorobenzene		100.8	20.7	137.7	2.7	30.0
1,2-Dichlorobenzene		101.2	10.0	166.2	3.0	30.0
1,2,3-Trimethylbenzene		95.7	76.3	124.2	2.4	30.0
n-Butylbenzene		92.9	80.0	133.3	3.9	30.0
Hexachloroethane		100.4	23.8	138.1	2.7	30.0
1,2-Dibromo-3-chloropropane		106.1	21.2	189.4	1.0	30.0
1,2,4-Trichlorobenzene		101.8	27.4	143.4	2.3	30.0
1,2,3-Trichlorobenzene		99.5	75.4	131.4	2.0	30.0
Naphthalene		101.4	32.9	135.8	1.4	30.0
2-Methylnaphthalene		91.9	25.5	165.5	0.5	30.0

Matrix Spike (MS)

Lab Sample ID: 240919A11.6631607M, Parent Sample ID: S66316.05

Run in Batch: 240919A11, Run Date: 09/19/2024 20:45, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		104.9	67.4	121.2
Acetone		93.4	29.9	161.5
Methyl iodide		73.7	68.8	116.4
Carbon disulfide		113.6	63.8	137.4
tert-Methyl butyl ether (MTBE)		99.6	73.2	122.4
Acrylonitrile		96.4	69.9	128.9
2-Butanone (MEK)		100.4	44.0	134.4
Dichlorodifluoromethane		136.1	10.0	222.8
Chloromethane		114.0	23.8	166.5
Vinyl chloride		115.1	43.5	149.1
Bromomethane		73.4	56.8	151.3
Chloroethane		116.4	53.4	149.4
Trichlorofluoromethane		123.3	59.7	151.8
1,1-Dichloroethene		105.2	69.6	139.4

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240919W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: 240919A11.6631607M, Parent Sample ID: S66316.05

Run in Batch: 240919A11, Run Date: 09/19/2024 20:45, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Methylene chloride		104.5	73.3	121.1
trans-1,2-Dichloroethene		104.5	73.6	129.3
1,1-Dichloroethane		102.1	71.5	126.2
cis-1,2-Dichloroethene		106.7	76.6	122.1
Tetrahydrofuran		94.7	59.0	117.9
Chloroform		104.8	78.4	124.0
Bromochloromethane		104.6	78.2	120.8
1,1,1-Trichloroethane		104.6	79.4	130.9
4-Methyl-2-pentanone (MIBK)		104.0	71.6	125.2
2-Hexanone		107.1	55.4	136.9
Carbon tetrachloride		103.4	72.6	133.0
Benzene		101.5	79.9	124.9
1,2-Dichloroethane		95.8	76.0	126.3
Trichloroethene		102.5	79.7	124.2
1,2-Dichloropropane		98.8	78.6	126.4
Bromodichloromethane		101.2	80.4	128.2
Dibromomethane		102.4	76.9	122.1
cis-1,3-Dichloropropene		101.8	79.8	129.9
Toluene		102.4	79.8	124.5
trans-1,3-Dichloropropene		101.0	74.0	131.3
1,1,2-Trichloroethane		100.7	78.7	123.1
Tetrachloroethene		103.6	74.5	124.5
trans-1,4-Dichloro-2-butene		104.0	68.6	135.4
Dibromochloromethane		106.1	74.6	127.2
1,2-Dibromoethane		106.9	70.3	133.7
Chlorobenzene		105.8	79.2	122.7
1,1,1,2-Tetrachloroethane		107.0	80.3	128.2
Ethylbenzene		106.5	79.5	129.1
p,m-Xylene		107.2	79.4	132.2
o-Xylene		104.5	80.2	131.0
Styrene		105.8	69.5	126.7
Isopropylbenzene		107.7	74.4	121.5
Bromoform		106.6	69.4	128.0
1,1,2,2-Tetrachloroethane		107.0	79.8	126.3
1,2,3-Trichloropropane		101.3	78.3	138.8
n-Propylbenzene		98.6	82.0	130.7
Bromobenzene		107.0	78.7	124.6
1,3,5-Trimethylbenzene		108.0	81.3	128.9
tert-Butylbenzene		102.1	80.7	128.9
1,2,4-Trimethylbenzene		106.8	81.4	130.8
sec-Butylbenzene		99.8	77.4	129.8
p-Isopropyltoluene		101.3	79.8	137.5
1,3-Dichlorobenzene		104.6	77.0	131.3
1,4-Dichlorobenzene		104.4	20.7	137.7
1,2-Dichlorobenzene		104.8	10.0	166.2
1,2,3-Trimethylbenzene		99.8	76.3	124.2

Organics - Volatiles, Prep Batch ID: VF240919W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: 240919A11.6631607M, Parent Sample ID: S66316.05

Run in Batch: 240919A11, Run Date: 09/19/2024 20:45, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
n-Butylbenzene		98.7	80.0	133.3
Hexachloroethane		104.7	23.8	138.1
1,2-Dibromo-3-chloropropane		114.8	21.2	189.4
1,2,4-Trichlorobenzene		107.0	27.4	143.4
1,2,3-Trichlorobenzene		104.0	75.4	131.4
Naphthalene		109.1	32.9	135.8
2-Methylnaphthalene		107.4	25.5	165.5

Matrix Spike Duplicate (MSD)

Lab Sample ID: 240919A11.6631608N, Parent Sample ID: 240919A11.6631607M

Run in Batch: 240919A11, Run Date: 09/19/2024 21:08, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		105.5	67.4	121.2	0.6	30.0
Acetone		95.6	29.9	161.5	2.1	30.0
Methyl iodide		91.1	68.8	116.4	21.1	30.0
Carbon disulfide		111.6	63.8	137.4	1.8	30.0
tert-Methyl butyl ether (MTBE)		100.1	73.2	122.4	0.5	30.0
Acrylonitrile		97.3	69.9	128.9	0.9	30.0
2-Butanone (MEK)		100.4	44.0	134.4	0.1	30.0
Dichlorodifluoromethane		137.4	10.0	222.8	1.0	30.0
Chloromethane		112.5	23.8	166.5	1.3	30.0
Vinyl chloride		112.6	43.5	149.1	2.1	30.0
Bromomethane		91.5	56.8	151.3	22.0	30.0
Chloroethane		109.3	53.4	149.4	6.3	30.0
Trichlorofluoromethane		120.2	59.7	151.8	2.5	30.0
1,1-Dichloroethene		102.1	69.6	139.4	3.0	30.0
Methylene chloride		104.8	73.3	121.1	0.3	30.0
trans-1,2-Dichloroethene		102.2	73.6	129.3	2.2	30.0
1,1-Dichloroethane		100.1	71.5	126.2	2.0	30.0
cis-1,2-Dichloroethene		105.2	76.6	122.1	1.4	30.0
Tetrahydrofuran		94.6	59.0	117.9	0.2	30.0
Chloroform		102.3	78.4	124.0	2.4	30.0
Bromochloromethane		104.7	78.2	120.8	0.1	30.0
1,1,1-Trichloroethane		102.4	79.4	130.9	2.1	30.0
4-Methyl-2-pentanone (MIBK)		106.7	71.6	125.2	2.6	30.0
2-Hexanone		108.3	55.4	136.9	1.1	30.0
Carbon tetrachloride		102.2	72.6	133.0	1.2	30.0
Benzene		100.3	79.9	124.9	1.1	30.0
1,2-Dichloroethane		93.6	76.0	126.3	2.3	30.0
Trichloroethene		100.9	79.7	124.2	1.6	30.0
1,2-Dichloropropane		98.5	78.6	126.4	0.3	30.0
Bromodichloromethane		100.6	80.4	128.2	0.5	30.0
Dibromomethane		104.0	76.9	122.1	1.6	30.0
cis-1,3-Dichloropropene		101.5	79.8	129.9	0.3	30.0
Toluene		99.9	79.8	124.5	2.5	30.0
trans-1,3-Dichloropropene		100.0	74.0	131.3	0.9	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240919W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: 240919A11.6631608N, Parent Sample ID: 240919A11.6631607M

Run in Batch: 240919A11, Run Date: 09/19/2024 21:08, Prep Date: 09/19/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,1,2-Trichloroethane		100.5	78.7	123.1	0.2	30.0
Tetrachloroethene		103.3	74.5	124.5	0.3	30.0
trans-1,4-Dichloro-2-butene		106.1	68.6	135.4	2.0	30.0
Dibromochloromethane		106.7	74.6	127.2	0.6	30.0
1,2-Dibromoethane		106.7	70.3	133.7	0.2	30.0
Chlorobenzene		103.7	79.2	122.7	2.0	30.0
1,1,1,2-Tetrachloroethane		105.3	80.3	128.2	1.6	30.0
Ethylbenzene		103.9	79.5	129.1	2.5	30.0
p,m-Xylene		103.1	79.4	132.2	3.9	30.0
o-Xylene		101.3	80.2	131.0	3.1	30.0
Styrene		103.3	69.5	126.7	2.4	30.0
Isopropylbenzene		104.1	74.4	121.5	3.4	30.0
Bromoform		108.2	69.4	128.0	1.5	30.0
1,1,2,2-Tetrachloroethane		104.3	79.8	126.3	2.5	30.0
1,2,3-Trichloropropane		101.4	78.3	138.8	0.0	30.0
n-Propylbenzene		96.7	82.0	130.7	2.0	30.0
Bromobenzene		106.4	78.7	124.6	0.6	30.0
1,3,5-Trimethylbenzene		105.0	81.3	128.9	2.8	30.0
tert-Butylbenzene		98.5	80.7	128.9	3.6	30.0
1,2,4-Trimethylbenzene		104.3	81.4	130.8	2.4	30.0
sec-Butylbenzene		96.3	77.4	129.8	3.5	30.0
p-Isopropyltoluene		99.4	79.8	137.5	1.9	30.0
1,3-Dichlorobenzene		101.8	77.0	131.3	2.7	30.0
1,4-Dichlorobenzene		103.3	20.7	137.7	1.1	30.0
1,2-Dichlorobenzene		102.9	10.0	166.2	1.9	30.0
1,2,3-Trimethylbenzene		97.4	76.3	124.2	2.5	30.0
n-Butylbenzene		95.5	80.0	133.3	3.3	30.0
Hexachloroethane		105.6	23.8	138.1	0.8	30.0
1,2-Dibromo-3-chloropropane		115.7	21.2	189.4	0.8	30.0
1,2,4-Trichlorobenzene		106.9	27.4	143.4	0.1	30.0
1,2,3-Trichlorobenzene		105.1	75.4	131.4	1.1	30.0
Naphthalene		110.3	32.9	135.8	1.1	30.0
2-Methylnaphthalene		112.3	25.5	165.5	4.5	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240923W2

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 240923A7.BLKS20A

Run in Batch: 240923A7, Run Date: 09/23/2024 15:47, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Diethyl ether		ND	1.00	ug/l
Acetone		ND	10.00	ug/l
Methyl iodide		ND	1.00	ug/l
Carbon disulfide		ND	1.00	ug/l
tert-Methyl butyl ether (MTBE)		ND	1.00	ug/l
Acrylonitrile		ND	1.00	ug/l
2-Butanone (MEK)		ND	10.00	ug/l
Dichlorodifluoromethane		ND	1.00	ug/l
Chloromethane		ND	1.00	ug/l
Vinyl chloride		ND	1.00	ug/l
Bromomethane		ND	1.00	ug/l
Chloroethane		ND	1.00	ug/l
Trichlorofluoromethane		ND	1.00	ug/l
1,1-Dichloroethene		ND	1.00	ug/l
Methylene chloride		ND	1.00	ug/l
trans-1,2-Dichloroethene		ND	1.00	ug/l
1,1-Dichloroethane		ND	1.00	ug/l
cis-1,2-Dichloroethene		ND	1.00	ug/l
Tetrahydrofuran		ND	10.00	ug/l
Chloroform		ND	1.00	ug/l
Bromochloromethane		ND	1.00	ug/l
1,1,1-Trichloroethane		ND	1.00	ug/l
4-Methyl-2-pentanone (MIBK)		ND	10.00	ug/l
2-Hexanone		ND	10.00	ug/l
Carbon tetrachloride		ND	1.00	ug/l
Benzene		ND	1.00	ug/l
1,2-Dichloroethane		ND	1.00	ug/l
Trichloroethene		ND	1.00	ug/l
1,2-Dichloropropane		ND	1.00	ug/l
Bromodichloromethane		ND	1.00	ug/l
Dibromomethane		ND	1.00	ug/l
cis-1,3-Dichloropropene		ND	1.00	ug/l
Toluene		ND	1.00	ug/l
trans-1,3-Dichloropropene		ND	1.00	ug/l
1,1,2-Trichloroethane		ND	1.00	ug/l
Tetrachloroethene		ND	1.00	ug/l
trans-1,4-Dichloro-2-butene		ND	1.00	ug/l
Dibromochloromethane		ND	1.00	ug/l
1,2-Dibromoethane		ND	1.00	ug/l
Chlorobenzene		ND	1.00	ug/l
1,1,1,2-Tetrachloroethane		ND	1.00	ug/l
Ethylbenzene		ND	1.00	ug/l
p,m-Xylene		ND	2.00	ug/l
o-Xylene		ND	1.00	ug/l
Styrene		ND	1.00	ug/l
Isopropylbenzene		ND	1.00	ug/l

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240923W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 240923A7.BLKS20A

Run in Batch: 240923A7, Run Date: 09/23/2024 15:47, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Bromoform		ND	1.00	ug/l
1,1,2,2-Tetrachloroethane		ND	1.00	ug/l
1,2,3-Trichloropropane		ND	1.00	ug/l
n-Propylbenzene		ND	1.00	ug/l
Bromobenzene		ND	1.00	ug/l
1,3,5-Trimethylbenzene		ND	1.00	ug/l
tert-Butylbenzene		ND	1.00	ug/l
1,2,4-Trimethylbenzene		ND	1.00	ug/l
sec-Butylbenzene		ND	1.00	ug/l
p-Isopropyltoluene		ND	1.00	ug/l
1,3-Dichlorobenzene		ND	1.00	ug/l
1,4-Dichlorobenzene		ND	1.00	ug/l
1,2-Dichlorobenzene		ND	1.00	ug/l
1,2,3-Trimethylbenzene		ND	1.00	ug/l
n-Butylbenzene		ND	1.00	ug/l
Hexachloroethane		ND	1.00	ug/l
1,2-Dibromo-3-chloropropane		ND	1.00	ug/l
1,2,4-Trichlorobenzene		ND	1.00	ug/l
1,2,3-Trichlorobenzene		ND	1.00	ug/l
Naphthalene		ND	1.00	ug/l
2-Methylnaphthalene		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 240923A7.LCSW23A

Run in Batch: 240923A7, Run Date: 09/23/2024 14:13, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		99.2	67.4	121.2
Acetone		118.3	29.9	161.5
Methyl iodide		102.0	68.8	116.4
Carbon disulfide		100.0	63.8	137.4
tert-Methyl butyl ether (MTBE)		109.5	73.2	122.4
Acrylonitrile		102.7	69.9	128.9
2-Butanone (MEK)		106.1	44.0	134.4
Dichlorodifluoromethane		94.8	10.0	222.8
Chloromethane		97.1	23.8	166.5
Vinyl chloride		96.8	43.5	149.1
Bromomethane		100.8	56.8	151.3
Chloroethane		98.1	53.4	149.4
Trichlorofluoromethane	*	55.1	59.7	151.8
1,1-Dichloroethene		98.1	69.6	139.4
Methylene chloride		98.3	73.3	121.1
trans-1,2-Dichloroethene		99.2	73.6	129.3
1,1-Dichloroethane		98.1	71.5	126.2
cis-1,2-Dichloroethene		99.5	76.6	122.1
Tetrahydrofuran		101.1	59.0	117.9
Chloroform		98.1	78.4	124.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240923W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 240923A7.LCSW23A

Run in Batch: 240923A7, Run Date: 09/23/2024 14:13, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Bromochloromethane		101.1	78.2	120.8
1,1,1-Trichloroethane		98.6	79.4	130.9
4-Methyl-2-pentanone (MIBK)		106.6	71.6	125.2
2-Hexanone		108.9	55.4	136.9
Carbon tetrachloride		99.2	72.6	133.0
Benzene		99.4	79.9	124.9
1,2-Dichloroethane		96.4	76.0	126.3
Trichloroethene		99.0	79.7	124.2
1,2-Dichloropropane		100.3	78.6	126.4
Bromodichloromethane		105.8	80.4	128.2
Dibromomethane		101.6	76.9	122.1
cis-1,3-Dichloropropene		108.2	79.8	129.9
Toluene		100.1	79.8	124.5
trans-1,3-Dichloropropene		108.7	74.0	131.3
1,1,2-Trichloroethane		98.6	78.7	123.1
Tetrachloroethene		101.0	74.5	124.5
trans-1,4-Dichloro-2-butene		112.9	68.6	135.4
Dibromochloromethane		108.9	74.6	127.2
1,2-Dibromoethane		103.0	70.3	133.7
Chlorobenzene		101.5	79.2	122.7
1,1,1,2-Tetrachloroethane		105.6	80.3	128.2
Ethylbenzene		102.3	79.5	129.1
p,m-Xylene		102.9	79.4	132.2
o-Xylene		103.0	80.2	131.0
Styrene		105.8	69.5	126.7
Isopropylbenzene		104.1	74.4	121.5
Bromoform		111.7	69.4	128.0
1,1,2,2-Tetrachloroethane		101.2	79.8	126.3
1,2,3-Trichloropropane		98.4	78.3	138.8
n-Propylbenzene		104.6	82.0	130.7
Bromobenzene		104.4	78.7	124.6
1,3,5-Trimethylbenzene		104.5	81.3	128.9
tert-Butylbenzene		103.5	80.7	128.9
1,2,4-Trimethylbenzene		104.8	81.4	130.8
sec-Butylbenzene		103.9	77.4	129.8
p-Isopropyltoluene		103.7	79.8	137.5
1,3-Dichlorobenzene		102.6	77.0	131.3
1,4-Dichlorobenzene		102.1	20.7	137.7
1,2-Dichlorobenzene		103.9	10.0	166.2
1,2,3-Trimethylbenzene		110.2	76.3	124.2
n-Butylbenzene		104.6	80.0	133.3
Hexachloroethane		118.3	23.8	138.1
1,2-Dibromo-3-chloropropane		111.2	21.2	189.4
1,2,4-Trichlorobenzene		108.4	27.4	143.4
1,2,3-Trichlorobenzene		107.7	75.4	131.4
Naphthalene		110.3	32.9	135.8

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240923W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 240923A7.LCSW23A

Run in Batch: 240923A7, Run Date: 09/23/2024 14:13, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
2-Methylnaphthalene		109.6	25.5	165.5

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 240923A7.LCSDW23A, Parent Sample ID: 240923A7.LCSW23A

Run in Batch: 240923A7, Run Date: 09/23/2024 14:36, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		98.7	67.4	121.2	0.4	30.0
Acetone		122.0	29.9	161.5	3.1	30.0
Methyl iodide		101.4	68.8	116.4	0.6	30.0
Carbon disulfide		97.9	63.8	137.4	2.1	30.0
tert-Methyl butyl ether (MTBE)		111.6	73.2	122.4	1.9	30.0
Acrylonitrile		104.5	69.9	128.9	1.7	30.0
2-Butanone (MEK)		108.8	44.0	134.4	2.5	30.0
Dichlorodifluoromethane		94.4	10.0	222.8	0.4	30.0
Chloromethane		96.4	23.8	166.5	0.7	30.0
Vinyl chloride		94.4	43.5	149.1	2.6	30.0
Bromomethane		98.6	56.8	151.3	2.2	30.0
Chloroethane		96.5	53.4	149.4	1.7	30.0
Trichlorofluoromethane	*	57.8	59.7	151.8	4.9	30.0
1,1-Dichloroethene		97.7	69.6	139.4	0.5	30.0
Methylene chloride		97.1	73.3	121.1	1.2	30.0
trans-1,2-Dichloroethene		97.1	73.6	129.3	2.1	30.0
1,1-Dichloroethane		97.2	71.5	126.2	0.9	30.0
cis-1,2-Dichloroethene		99.1	76.6	122.1	0.5	30.0
Tetrahydrofuran		105.5	59.0	117.9	4.2	30.0
Chloroform		96.1	78.4	124.0	2.0	30.0
Bromochloromethane		101.1	78.2	120.8	0.0	30.0
1,1,1-Trichloroethane		95.6	79.4	130.9	3.1	30.0
4-Methyl-2-pentanone (MIBK)		107.7	71.6	125.2	1.0	30.0
2-Hexanone		109.8	55.4	136.9	0.8	30.0
Carbon tetrachloride		94.8	72.6	133.0	4.6	30.0
Benzene		95.8	79.9	124.9	3.7	30.0
1,2-Dichloroethane		95.1	76.0	126.3	1.4	30.0
Trichloroethene		96.2	79.7	124.2	2.9	30.0
1,2-Dichloropropane		97.7	78.6	126.4	2.7	30.0
Bromodichloromethane		102.8	80.4	128.2	2.8	30.0
Dibromomethane		99.8	76.9	122.1	1.7	30.0
cis-1,3-Dichloropropene		104.5	79.8	129.9	3.5	30.0
Toluene		96.0	79.8	124.5	4.1	30.0
trans-1,3-Dichloropropene		107.2	74.0	131.3	1.4	30.0
1,1,2-Trichloroethane		97.6	78.7	123.1	1.0	30.0
Tetrachloroethene		96.0	74.5	124.5	5.1	30.0
trans-1,4-Dichloro-2-butene		114.0	68.6	135.4	1.0	30.0
Dibromochloromethane		109.2	74.6	127.2	0.3	30.0
1,2-Dibromoethane		104.9	70.3	133.7	1.9	30.0
Chlorobenzene		100.2	79.2	122.7	1.3	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF240923W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 240923A7.LCSDW23A, Parent Sample ID: 240923A7.LCSW23A

Run in Batch: 240923A7, Run Date: 09/23/2024 14:36, Prep Date: 09/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,1,1,2-Tetrachloroethane		105.6	80.3	128.2	0.1	30.0
Ethylbenzene		99.7	79.5	129.1	2.6	30.0
p,m-Xylene		100.4	79.4	132.2	2.5	30.0
o-Xylene		101.2	80.2	131.0	1.7	30.0
Styrene		104.3	69.5	126.7	1.4	30.0
Isopropylbenzene		101.9	74.4	121.5	2.1	30.0
Bromoform		112.4	69.4	128.0	0.7	30.0
1,1,2,2-Tetrachloroethane		103.3	79.8	126.3	2.1	30.0
1,2,3-Trichloropropane		102.0	78.3	138.8	3.6	30.0
n-Propylbenzene		101.7	82.0	130.7	2.8	30.0
Bromobenzene		102.1	78.7	124.6	2.2	30.0
1,3,5-Trimethylbenzene		102.7	81.3	128.9	1.8	30.0
tert-Butylbenzene		100.4	80.7	128.9	3.1	30.0
1,2,4-Trimethylbenzene		101.8	81.4	130.8	2.9	30.0
sec-Butylbenzene		101.8	77.4	129.8	2.0	30.0
p-Isopropyltoluene		110.2	79.8	137.5	6.1	30.0
1,3-Dichlorobenzene		101.0	77.0	131.3	1.6	30.0
1,4-Dichlorobenzene		100.8	20.7	137.7	1.3	30.0
1,2-Dichlorobenzene		103.3	10.0	166.2	0.5	30.0
1,2,3-Trimethylbenzene		107.1	76.3	124.2	2.8	30.0
n-Butylbenzene		101.3	80.0	133.3	3.2	30.0
Hexachloroethane		113.8	23.8	138.1	3.9	30.0
1,2-Dibromo-3-chloropropane		114.9	21.2	189.4	3.2	30.0
1,2,4-Trichlorobenzene		109.9	27.4	143.4	1.4	30.0
1,2,3-Trichlorobenzene		108.7	75.4	131.4	0.9	30.0
Naphthalene		116.1	32.9	135.8	5.1	30.0
2-Methylnaphthalene		118.0	25.5	165.5	7.4	30.0



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C.O.C. PAGE # 1 OF 1

REPORT TO **CHAIN OF CUSTODY RECORD** **INVOICE TO**

CONTACT NAME Rodney Abke
COMPANY Applied EcoSystems
ADDRESS G-4300 South Saginaw Street
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PHONE NO. 810-715-2525 FAX NO. 810-715-2526 P.O. NO. PO1107477
E-MAIL ADDRESS rabke@appliedecosystems.com QUOTE NO.

CONTACT NAME Monica Wallingford ☐ SAME
COMPANY Revitalizing Auto Communities Environmental Response (RACER) Trust
ADDRESS
CITY STATE ZIP CODE
PHONE NO. 313.486.2978 E-MAIL ADDRESS mwallingford@racertrust.org

PROJECT NO./NAME RACER Flint West #12990
SAMPLER(S) - PLEASE PRINT/SIGN NAME
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER
DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER report to MDLs

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives							VOCs	Metals, dissolved*	Metals, Total*											Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES Project Locations ☐ Detroit ☐ New York ☐ Other _____			
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER																	
66316-01	9/17	11:25	MW-112S-240917	W	5	1	3	1					X	X	X														* - Metals list includes:
-02		12:40	MW-110S-240917	W	5	1	3	1					X	X	X														As, Cr-total, CR-Hex, Cu
03		13:25	MW-108S-240917	W	5	1	3	1					X	X	X														Pb, Se, Zn
04		14:02	MW-114S-240917	W	5	1	3	1					X	X	X														
05		15:00	MW-103S-240917	W	5	1	3	1					X	X	X														Samples for dissolved
06	✓	X	DUP-1-240917	W	5	1	3	1					X	X	X														metals analysis were not
07		15:00	MSR MW-103S-240917)	W	5	1	3	1					X	X	X														field filtered and require
08		15:00	MSD (MW-103S-240917)	W	5	1	3	1					X	X	X														laboratory filtering.
09	✓	15:10	FB-1-240917	W	5	1	3	1					X	X	X														
10	✓	10:05	FB-1-240917	U																									report down to MCLs
11																													

RELINQUISHED BY: *[Signature]* DATE 9/17/24 TIME 15:30
SIGNATURE/ORGANIZATION
RECEIVED BY: *[Signature]* DATE 9/17/24 TIME 15:30
SIGNATURE/ORGANIZATION
RELINQUISHED BY: *[Signature]* DATE 9/17/24 TIME 16:25
SIGNATURE/ORGANIZATION
RECEIVED BY: *[Signature]* DATE 9/17/24 TIME 16:25
SIGNATURE/ORGANIZATION

RELINQUISHED BY: DATE TIME
SIGNATURE/ORGANIZATION
RECEIVED BY: DATE TIME
SIGNATURE/ORGANIZATION
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
NOTES: TEMP. ON ARRIVAL 4.7
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Analytical Laboratory Report

Report ID: S66318.01(01)
Generated on 10/08/2024

Report to
Attention: Rodney Abke
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Burton, MI 48529

Phone: 810-715-2525 FAX:
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John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary
Lab Sample ID(s): S66318.01-S66318.11
Project: RACER Flint West #12990
Collected Date(s): 09/17/2024
Submitted Date/Time: 09/17/2024 16:25
Sampled by: Unknown
P.O. #: PO1107477

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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

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Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Method Summary

Method	Version
ASTMD7979-19M	ASTM Method D7979 - 19 Modified (Isotopic Dilution)

Parameter Summary

Parameter	Synonym	Cas #
PFBA	Perfluorobutanoic Acid	375-22-4
PFPeA	Perfluoropentanoic Acid	2706-90-3
4:2 FTSA	4:2 Fluorotelomer Sulfonic Acid	757124-72-4
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFPeS	Perfluoropentane Sulfonic Acid	2706-91-4
6:2 FTSA	6:2 Fluorotelomer Sulfonic Acid	27619-97-2
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFHxS-LN	Perfluorohexane Sulfonic Acid - LN	355-46-4-LN
PFHxS-BR	Perfluorohexane Sulfonic Acid - BR	355-46-4-BR
PFNA	Perfluorononanoic Acid	375-95-1
8:2 FTSA	8:2 Fluorotelomer Sulfonic Acid	39108-34-4
PFHpS	Perfluoroheptane Sulfonic Acid	375-92-8
PFDA	Perfluorodecanoic Acid	335-76-2
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6
PFOS	Perfluorooctane Sulfonic Acid	1763-23-1
PFOS-LN	Perfluorooctane Sulfonic Acid - LN	1763-23-1-LN
PFOS-BR	Perfluorooctane Sulfonic Acid - BR	1763-23-1-BR
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFNS	Perfluorononane Sulfonic Acid	68259-12-1
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFDS	Perfluorodecane Sulfonic Acid	335-77-3
PFTTrDA	Perfluorotridecanoic Acid	72629-94-8
FOSA	Perfluorooctane Sulfonamide	754-91-6
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6



Analytical Laboratory Report

Sample Summary (11 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S66318.01	MW-112S-240917	Water	09/17/24 11:25
S66318.02	MW-110S-240917	Water	09/17/24 12:40
S66318.03	MW-108S-240917	Water	09/17/24 13:25
S66318.04	MW-114S-240917	Water	09/17/24 14:05
S66318.05	MW-103S-240917	Water	09/17/24 15:00
S66318.06	DUP-1-240917	Water	09/17/24 00:01
S66318.07	MS(MW-103S-240917)	Water	09/17/24 15:00
S66318.08	MSD(MW-103S-240917)	Water	09/17/24 15:00
S66318.09	EB-1-240917	Water	09/17/24 15:10
S66318.10	FB-1-240917	Water	09/17/24 10:05
S66318.11	Trip Blank	Water	09/17/24 00:01



Analytical Laboratory Report

Lab Sample ID: S66318.01
Sample Tag: MW-112S-240917
Collected Date/Time: 09/17/2024 11:25
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.34/6.48/12	ASTMD7979-19M	09/18/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 09/18/24 19:09, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	31	1.6	ng/L	2.05	375-22-4	X
PFPeA*	Not detected	4.1	0.82	ng/L	2.05	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.82	ng/L	2.05	757124-72-4	
PFHxA*	Not detected	2.1	0.41	ng/L	2.05	307-24-4	
PFBS*	1.8	2.1	0.82	ng/L	2.05	375-73-5	J
PFHpA*	Not detected	2.1	1.0	ng/L	2.05	375-85-9	
PFPeS*	Not detected	2.1	0.82	ng/L	2.05	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.2	ng/L	2.05	27619-97-2	
PFOA*	Not detected	2.1	1.6	ng/L	2.05	335-67-1	
PFHxS*	Not detected	2.1	1.2	ng/L	2.05	355-46-4	
PFHxS-LN*	Not detected	2.1	1.2	ng/L	2.05	355-46-4-LN	
PFHxS-BR*	Not detected	2.1	1.2	ng/L	2.05	355-46-4-BR	
PFNA*	Not detected	2.1	0.82	ng/L	2.05	375-95-1	
8:2 FTSA*	Not detected	2.1	1.0	ng/L	2.05	39108-34-4	
PFHpS*	Not detected	2.1	1.2	ng/L	2.05	375-92-8	
PFDA*	Not detected	2.1	0.62	ng/L	2.05	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.4	ng/L	2.05	2355-31-9	
EtFOSAA*	Not detected	4.1	2.1	ng/L	2.05	2991-50-6	
PFOS*	11	2.1	1.2	ng/L	2.05	1763-23-1	
PFOS-LN*	5.2	2.1	1.2	ng/L	2.05	1763-23-1-LN	
PFOS-BR*	4.6	2.1	1.2	ng/L	2.05	1763-23-1-BR	
PFUnDA*	Not detected	2.1	1.0	ng/L	2.05	2058-94-8	
PFNS*	Not detected	2.1	1.0	ng/L	2.05	68259-12-1	
PFDODA*	Not detected	2.1	0.62	ng/L	2.05	307-55-1	
PFDS*	Not detected	2.1	1.2	ng/L	2.05	335-77-3	
PFTTrDA*	Not detected	2.1	1.0	ng/L	2.05	72629-94-8	
FOSA*	Not detected	2.1	0.82	ng/L	2.05	754-91-6	
PFTeDA*	Not detected	4.1	0.41	ng/L	2.05	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	0.82	ng/L	2.05	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	0.82	ng/L	2.05	756426-58-1	
ADONA*	Not detected	2.1	1.0	ng/L	2.05	919005-14-4	
HFPO-DA*	Not detected	10	2.1	ng/L	2.05	13252-13-6	

X-Elevated reporting limit due to matrix interference
J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66318.02
Sample Tag: MW-110S-240917
Collected Date/Time: 09/17/2024 12:40
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.02/6.48/12	ASTMD7979-19M	09/18/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 09/18/24 19:29, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	11	1.7	ng/L	2.17	375-22-4	
PFPeA*	Not detected	4.3	0.87	ng/L	2.17	2706-90-3	
4:2 FTSA*	Not detected	2.2	0.87	ng/L	2.17	757124-72-4	
PFHxA*	1.8	2.2	0.43	ng/L	2.17	307-24-4	J
PFBS*	2.1	2.2	0.87	ng/L	2.17	375-73-5	J
PFHpA*	Not detected	2.2	1.1	ng/L	2.17	375-85-9	
PFPeS*	Not detected	2.2	0.87	ng/L	2.17	2706-91-4	
6:2 FTSA*	Not detected	2.2	1.3	ng/L	2.17	27619-97-2	
PFOA*	2.7	2.2	1.7	ng/L	2.17	335-67-1	
PFHxS*	2.5	2.2	1.3	ng/L	2.17	355-46-4	
PFHxS-LN*	1.7	2.2	1.3	ng/L	2.17	355-46-4-LN	J
PFHxS-BR*	Not detected	2.2	1.3	ng/L	2.17	355-46-4-BR	
PFNA*	Not detected	2.2	0.87	ng/L	2.17	375-95-1	
8:2 FTSA*	Not detected	2.2	1.1	ng/L	2.17	39108-34-4	
PFHpS*	Not detected	2.2	1.3	ng/L	2.17	375-92-8	
PFDA*	Not detected	2.2	0.65	ng/L	2.17	335-76-2	
N-MeFOSAA*	Not detected	2.2	1.5	ng/L	2.17	2355-31-9	
EtFOSAA*	Not detected	4.3	2.2	ng/L	2.17	2991-50-6	
PFOS*	5.9	2.2	1.3	ng/L	2.17	1763-23-1	
PFOS-LN*	1.3	2.2	1.3	ng/L	2.17	1763-23-1-LN	J
PFOS-BR*	3.6	2.2	1.3	ng/L	2.17	1763-23-1-BR	
PFUnDA*	Not detected	2.2	1.1	ng/L	2.17	2058-94-8	
PFNS*	Not detected	2.2	1.1	ng/L	2.17	68259-12-1	
PFDODA*	Not detected	2.2	0.65	ng/L	2.17	307-55-1	
PFDS*	Not detected	2.2	1.3	ng/L	2.17	335-77-3	
PFTTrDA*	Not detected	2.2	1.1	ng/L	2.17	72629-94-8	
FOSA*	Not detected	2.2	0.87	ng/L	2.17	754-91-6	
PFTeDA*	Not detected	4.3	0.43	ng/L	2.17	376-06-7	
11Cl-PF3OUdS*	Not detected	2.2	0.87	ng/L	2.17	763051-92-9	
9Cl-PF3ONS*	Not detected	2.2	0.87	ng/L	2.17	756426-58-1	
ADONA*	Not detected	2.2	1.1	ng/L	2.17	919005-14-4	
HFPO-DA*	Not detected	11	2.2	ng/L	2.17	13252-13-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66318.03
Sample Tag: MW-108S-240917
Collected Date/Time: 09/17/2024 13:25
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.28/6.48/12	ASTMD7979-19M	09/18/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 09/18/24 19:49, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10	1.7	ng/L	2.07	375-22-4	
PFPeA*	Not detected	4.1	0.83	ng/L	2.07	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.83	ng/L	2.07	757124-72-4	
PFHxA*	Not detected	2.1	0.41	ng/L	2.07	307-24-4	
PFBS*	1.8	2.1	0.83	ng/L	2.07	375-73-5	J
PFHpA*	Not detected	2.1	1.0	ng/L	2.07	375-85-9	
PFPeS*	Not detected	2.1	0.83	ng/L	2.07	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.2	ng/L	2.07	27619-97-2	
PFOA*	Not detected	2.1	1.7	ng/L	2.07	335-67-1	
PFHxS*	Not detected	2.1	1.2	ng/L	2.07	355-46-4	
PFHxS-LN*	Not detected	2.1	1.2	ng/L	2.07	355-46-4-LN	
PFHxS-BR*	Not detected	2.1	1.2	ng/L	2.07	355-46-4-BR	
PFNA*	Not detected	2.1	0.83	ng/L	2.07	375-95-1	
8:2 FTSA*	Not detected	2.1	1.0	ng/L	2.07	39108-34-4	
PFHpS*	Not detected	2.1	1.2	ng/L	2.07	375-92-8	
PFDA*	Not detected	2.1	0.62	ng/L	2.07	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.4	ng/L	2.07	2355-31-9	
EtFOSAA*	Not detected	4.1	2.1	ng/L	2.07	2991-50-6	
PFOS*	3.9	2.1	1.2	ng/L	2.07	1763-23-1	
PFOS-LN*	Not detected	2.1	1.2	ng/L	2.07	1763-23-1-LN	
PFOS-BR*	2.2	2.1	1.2	ng/L	2.07	1763-23-1-BR	
PFUnDA*	Not detected	2.1	1.0	ng/L	2.07	2058-94-8	
PFNS*	Not detected	2.1	1.0	ng/L	2.07	68259-12-1	
PFDODA*	Not detected	2.1	0.62	ng/L	2.07	307-55-1	
PFDS*	Not detected	2.1	1.2	ng/L	2.07	335-77-3	
PFTTrDA*	Not detected	2.1	1.0	ng/L	2.07	72629-94-8	
FOSA*	Not detected	2.1	0.83	ng/L	2.07	754-91-6	
PFTeDA*	Not detected	4.1	0.41	ng/L	2.07	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	0.83	ng/L	2.07	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	0.83	ng/L	2.07	756426-58-1	
ADONA*	Not detected	2.1	1.0	ng/L	2.07	919005-14-4	
HFPO-DA*	Not detected	10	2.1	ng/L	2.07	13252-13-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66318.04
Sample Tag: MW-114S-240917
Collected Date/Time: 09/17/2024 14:05
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.44/6.48/12	ASTMD7979-19M	09/18/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 09/18/24 20:09, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10	1.6	ng/L	2.01	375-22-4	
PFPeA*	Not detected	4.0	0.80	ng/L	2.01	2706-90-3	
4:2 FTSA*	Not detected	2.0	0.80	ng/L	2.01	757124-72-4	
PFHxA*	2.2	2.0	0.40	ng/L	2.01	307-24-4	
PFBS*	1.8	2.0	0.80	ng/L	2.01	375-73-5	J
PFHpA*	Not detected	2.0	1.0	ng/L	2.01	375-85-9	
PFPeS*	Not detected	2.0	0.80	ng/L	2.01	2706-91-4	
6:2 FTSA*	Not detected	2.0	1.2	ng/L	2.01	27619-97-2	
PFOA*	2.1	2.0	1.6	ng/L	2.01	335-67-1	
PFHxS*	1.5	2.0	1.2	ng/L	2.01	355-46-4	J
PFHxS-LN*	1.5	2.0	1.2	ng/L	2.01	355-46-4-LN	J
PFHxS-BR*	Not detected	2.0	1.2	ng/L	2.01	355-46-4-BR	
PFNA*	Not detected	2.0	0.80	ng/L	2.01	375-95-1	
8:2 FTSA*	Not detected	2.0	1.0	ng/L	2.01	39108-34-4	
PFHpS*	Not detected	2.0	1.2	ng/L	2.01	375-92-8	
PFDA*	Not detected	2.0	0.60	ng/L	2.01	335-76-2	
N-MeFOSAA*	Not detected	2.0	1.4	ng/L	2.01	2355-31-9	
EtFOSAA*	Not detected	4.0	2.0	ng/L	2.01	2991-50-6	
PFOS*	28	2.0	1.2	ng/L	2.01	1763-23-1	
PFOS-LN*	14	2.0	1.2	ng/L	2.01	1763-23-1-LN	
PFOS-BR*	13	2.0	1.2	ng/L	2.01	1763-23-1-BR	
PFUnDA*	Not detected	2.0	1.0	ng/L	2.01	2058-94-8	
PFNS*	Not detected	2.0	1.0	ng/L	2.01	68259-12-1	
PFDODA*	Not detected	2.0	0.60	ng/L	2.01	307-55-1	
PFDS*	Not detected	2.0	1.2	ng/L	2.01	335-77-3	
PFTTrDA*	Not detected	2.0	1.0	ng/L	2.01	72629-94-8	
FOSA*	Not detected	2.0	0.80	ng/L	2.01	754-91-6	
PFTeDA*	Not detected	4.0	0.40	ng/L	2.01	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0	0.80	ng/L	2.01	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0	0.80	ng/L	2.01	756426-58-1	
ADONA*	Not detected	2.0	1.0	ng/L	2.01	919005-14-4	
HFPO-DA*	Not detected	10	2.0	ng/L	2.01	13252-13-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66318.05
Sample Tag: MW-103S-240917
Collected Date/Time: 09/17/2024 15:00
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.51/6.48/10	ASTMD7979-19M	09/18/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 09/19/24 11:53, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	22	1.6	ng/L	1.99	375-22-4	X
PFPeA*	Not detected	4.0	0.80	ng/L	1.99	2706-90-3	
4:2 FTSA*	Not detected	2.0	0.80	ng/L	1.99	757124-72-4	
PFHxA*	Not detected	2.0	0.40	ng/L	1.99	307-24-4	
PFBS*	Not detected	2.0	0.80	ng/L	1.99	375-73-5	
PFHpA*	Not detected	2.0	1.00	ng/L	1.99	375-85-9	
PFPeS*	Not detected	2.0	0.80	ng/L	1.99	2706-91-4	
6:2 FTSA*	Not detected	2.0	1.2	ng/L	1.99	27619-97-2	
PFOA*	2.1	2.0	1.6	ng/L	1.99	335-67-1	
PFHxS*	Not detected	2.0	1.2	ng/L	1.99	355-46-4	
PFHxS-LN*	Not detected	2.0	1.2	ng/L	1.99	355-46-4-LN	
PFHxS-BR*	Not detected	2.0	1.2	ng/L	1.99	355-46-4-BR	
PFNA*	Not detected	2.0	0.80	ng/L	1.99	375-95-1	
8:2 FTSA*	Not detected	2.0	1.00	ng/L	1.99	39108-34-4	
PFHpS*	Not detected	2.0	1.2	ng/L	1.99	375-92-8	
PFDA*	Not detected	2.0	0.60	ng/L	1.99	335-76-2	
N-MeFOSAA*	Not detected	2.0	1.4	ng/L	1.99	2355-31-9	
EtFOSAA*	Not detected	4.0	2.0	ng/L	1.99	2991-50-6	
PFOS*	92	2.0	1.2	ng/L	1.99	1763-23-1	
PFOS-LN*	59	2.0	1.2	ng/L	1.99	1763-23-1-LN	
PFOS-BR*	31	2.0	1.2	ng/L	1.99	1763-23-1-BR	
PFUnDA*	Not detected	2.0	1.00	ng/L	1.99	2058-94-8	
PFNS*	Not detected	2.0	1.00	ng/L	1.99	68259-12-1	
PFDODA*	Not detected	2.0	0.60	ng/L	1.99	307-55-1	
PFDS*	Not detected	2.0	1.2	ng/L	1.99	335-77-3	
PFTTrDA*	Not detected	2.0	1.00	ng/L	1.99	72629-94-8	
FOSA*	Not detected	2.0	0.80	ng/L	1.99	754-91-6	
PFTeDA*	Not detected	4.0	0.40	ng/L	1.99	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0	0.80	ng/L	1.99	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0	0.80	ng/L	1.99	756426-58-1	
ADONA*	Not detected	2.0	1.00	ng/L	1.99	919005-14-4	
HFPO-DA*	Not detected	10.0	2.0	ng/L	1.99	13252-13-6	

X-Elevated reporting limit due to matrix interference



Analytical Laboratory Report

Lab Sample ID: S66318.06
Sample Tag: DUP-1-240917
Collected Date/Time: 09/17/2024 00:01
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.21/6.48/12	ASTMD7979-19M	09/18/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 09/18/24 20:49, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10	1.7	ng/L	2.09	375-22-4	
PFPeA*	Not detected	4.2	0.84	ng/L	2.09	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.84	ng/L	2.09	757124-72-4	
PFHxA*	1.7	2.1	0.42	ng/L	2.09	307-24-4	J
PFBS*	1.9	2.1	0.84	ng/L	2.09	375-73-5	J
PFHpA*	Not detected	2.1	1.0	ng/L	2.09	375-85-9	
PFPeS*	Not detected	2.1	0.84	ng/L	2.09	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.3	ng/L	2.09	27619-97-2	
PFOA*	2.0	2.1	1.7	ng/L	2.09	335-67-1	J
PFHxS*	1.6	2.1	1.3	ng/L	2.09	355-46-4	J
PFHxS-LN*	1.6	2.1	1.3	ng/L	2.09	355-46-4-LN	J
PFHxS-BR*	Not detected	2.1	1.3	ng/L	2.09	355-46-4-BR	
PFNA*	Not detected	2.1	0.84	ng/L	2.09	375-95-1	
8:2 FTSA*	Not detected	2.1	1.0	ng/L	2.09	39108-34-4	
PFHpS*	Not detected	2.1	1.3	ng/L	2.09	375-92-8	
PFDA*	Not detected	2.1	0.63	ng/L	2.09	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.5	ng/L	2.09	2355-31-9	
EtFOSAA*	Not detected	4.2	2.1	ng/L	2.09	2991-50-6	
PFOS*	33	2.1	1.3	ng/L	2.09	1763-23-1	
PFOS-LN*	18	2.1	1.3	ng/L	2.09	1763-23-1-LN	
PFOS-BR*	14	2.1	1.3	ng/L	2.09	1763-23-1-BR	
PFUnDA*	Not detected	2.1	1.0	ng/L	2.09	2058-94-8	
PFNS*	Not detected	2.1	1.0	ng/L	2.09	68259-12-1	
PFDODA*	Not detected	2.1	0.63	ng/L	2.09	307-55-1	
PFDS*	Not detected	2.1	1.3	ng/L	2.09	335-77-3	
PFTTrDA*	Not detected	2.1	1.0	ng/L	2.09	72629-94-8	
FOSA*	Not detected	2.1	0.84	ng/L	2.09	754-91-6	
PFTeDA*	Not detected	4.2	0.42	ng/L	2.09	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	0.84	ng/L	2.09	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	0.84	ng/L	2.09	756426-58-1	
ADONA*	Not detected	2.1	1.0	ng/L	2.09	919005-14-4	
HFPO-DA*	Not detected	10	2.1	ng/L	2.09	13252-13-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S66318.07
Sample Tag: MS(MW-103S-240917)
Collected Date/Time: 09/17/2024 15:00
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.46/6.48/10	ASTMD7979-19M	09/18/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 09/19/24 12:13, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	120	10	1.6	ng/L	2.01	375-22-4	1
PFPeA*	110	4.0	0.80	ng/L	2.01	2706-90-3	1
4:2 FTSA*	99	2.0	0.80	ng/L	2.01	757124-72-4	1
PFHxA*	110	2.0	0.40	ng/L	2.01	307-24-4	1
PFBS*	97	2.0	0.80	ng/L	2.01	375-73-5	1
PFHpA*	120	2.0	1.0	ng/L	2.01	375-85-9	1
PFPeS*	110	2.0	0.80	ng/L	2.01	2706-91-4	1
6:2 FTSA*	140	2.0	1.2	ng/L	2.01	27619-97-2	1
PFOA*	91	2.0	1.6	ng/L	2.01	335-67-1	1
PFHxS*	120	2.0	1.2	ng/L	2.01	355-46-4	1
PFHxS-LN*	96	2.0	1.2	ng/L	2.01	355-46-4-LN	1
PFHxS-BR*	16	2.0	1.2	ng/L	2.01	355-46-4-BR	1
PFNA*	110	2.0	0.80	ng/L	2.01	375-95-1	1
8:2 FTSA*	92	2.0	1.0	ng/L	2.01	39108-34-4	1
PFHpS*	100	2.0	1.2	ng/L	2.01	375-92-8	1
PFDA*	120	2.0	0.60	ng/L	2.01	335-76-2	1
N-MeFOSAA*	120	2.0	1.4	ng/L	2.01	2355-31-9	1
EtFOSAA*	120	4.0	2.0	ng/L	2.01	2991-50-6	1
PFOS*	230	2.0	1.2	ng/L	2.01	1763-23-1	1
PFOS-LN*	160	2.0	1.2	ng/L	2.01	1763-23-1-LN	1
PFOS-BR*	66	2.0	1.2	ng/L	2.01	1763-23-1-BR	1
PFUnDA*	130	2.0	1.0	ng/L	2.01	2058-94-8	1
PFNS*	110	2.0	1.0	ng/L	2.01	68259-12-1	1
PFDODA*	120	2.0	0.60	ng/L	2.01	307-55-1	1
PFDS*	130	2.0	1.2	ng/L	2.01	335-77-3	1
PFTTrDA*	120	2.0	1.0	ng/L	2.01	72629-94-8	1
FOSA*	97	2.0	0.80	ng/L	2.01	754-91-6	1
PFTeDA*	100	4.0	0.40	ng/L	2.01	376-06-7	1
11Cl-PF3OUdS*	120	2.0	0.80	ng/L	2.01	763051-92-9	1
9Cl-PF3ONS*	120	2.0	0.80	ng/L	2.01	756426-58-1	1
ADONA*	76	2.0	1.0	ng/L	2.01	919005-14-4	1
HFPO-DA*	100	10	2.0	ng/L	2.01	13252-13-6	1

1-spiked @ 101 ng/L



Analytical Laboratory Report

Lab Sample ID: S66318.08
Sample Tag: MSD(MW-103S-240917)
Collected Date/Time: 09/17/2024 15:00
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.44/6.48/10	ASTMD7979-19M	09/18/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 09/18/24 21:29, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	130	10	1.6	ng/L	2.02	375-22-4	1
PFPeA*	120	4.0	0.81	ng/L	2.02	2706-90-3	1
4:2 FTSA*	110	2.0	0.81	ng/L	2.02	757124-72-4	1
PFHxA*	120	2.0	0.40	ng/L	2.02	307-24-4	1
PFBS*	100	2.0	0.81	ng/L	2.02	375-73-5	1
PFHpA*	110	2.0	1.0	ng/L	2.02	375-85-9	1
PFPeS*	120	2.0	0.81	ng/L	2.02	2706-91-4	1
6:2 FTSA*	130	2.0	1.2	ng/L	2.02	27619-97-2	1
PFOA*	88	2.0	1.6	ng/L	2.02	335-67-1	1
PFHxS*	120	2.0	1.2	ng/L	2.02	355-46-4	1
PFHxS-LN*	99	2.0	1.2	ng/L	2.02	355-46-4-LN	1
PFHxS-BR*	18	2.0	1.2	ng/L	2.02	355-46-4-BR	1
PFNA*	110	2.0	0.81	ng/L	2.02	375-95-1	1
8:2 FTSA*	110	2.0	1.0	ng/L	2.02	39108-34-4	1
PFHpS*	110	2.0	1.2	ng/L	2.02	375-92-8	1
PFDA*	120	2.0	0.61	ng/L	2.02	335-76-2	1
N-MeFOSAA*	130	2.0	1.4	ng/L	2.02	2355-31-9	1
EtFOSAA*	120	4.0	2.0	ng/L	2.02	2991-50-6	1
PFOS*	210	2.0	1.2	ng/L	2.02	1763-23-1	1
PFOS-LN*	140	2.0	1.2	ng/L	2.02	1763-23-1-LN	1
PFOS-BR*	66	2.0	1.2	ng/L	2.02	1763-23-1-BR	1
PFUnDA*	130	2.0	1.0	ng/L	2.02	2058-94-8	1
PFNS*	120	2.0	1.0	ng/L	2.02	68259-12-1	1
PFDODA*	130	2.0	0.61	ng/L	2.02	307-55-1	1
PFDS*	130	2.0	1.2	ng/L	2.02	335-77-3	1
PFTTrDA*	130	2.0	1.0	ng/L	2.02	72629-94-8	1
FOSA*	110	2.0	0.81	ng/L	2.02	754-91-6	1
PFTeDA*	100	4.0	0.40	ng/L	2.02	376-06-7	1
11Cl-PF3OUdS*	130	2.0	0.81	ng/L	2.02	763051-92-9	1
9Cl-PF3ONS*	110	2.0	0.81	ng/L	2.02	756426-58-1	1
ADONA*	95	2.0	1.0	ng/L	2.02	919005-14-4	1
HFPO-DA*	120	10	2.0	ng/L	2.02	13252-13-6	1

1-spiked @ 101 ng/L



Analytical Laboratory Report

Lab Sample ID: S66318.09
Sample Tag: EB-1-240917
Collected Date/Time: 09/17/2024 15:10
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.58/6.48/10	ASTMD7979-19M	09/18/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 09/18/24 21:49, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.8	1.6	ng/L	1.96	375-22-4	
PFPeA*	Not detected	3.9	0.78	ng/L	1.96	2706-90-3	
4:2 FTSA*	Not detected	2.0	0.78	ng/L	1.96	757124-72-4	
PFHxA*	Not detected	2.0	0.39	ng/L	1.96	307-24-4	
PFBS*	Not detected	2.0	0.78	ng/L	1.96	375-73-5	
PFHpA*	Not detected	2.0	0.98	ng/L	1.96	375-85-9	
PFPeS*	Not detected	2.0	0.78	ng/L	1.96	2706-91-4	
6:2 FTSA*	Not detected	2.0	1.2	ng/L	1.96	27619-97-2	
PFOA*	Not detected	2.0	1.6	ng/L	1.96	335-67-1	
PFHxS*	Not detected	2.0	1.2	ng/L	1.96	355-46-4	
PFHxS-LN*	Not detected	2.0	1.2	ng/L	1.96	355-46-4-LN	
PFHxS-BR*	Not detected	2.0	1.2	ng/L	1.96	355-46-4-BR	
PFNA*	Not detected	2.0	0.78	ng/L	1.96	375-95-1	
8:2 FTSA*	Not detected	2.0	0.98	ng/L	1.96	39108-34-4	
PFHpS*	Not detected	2.0	1.2	ng/L	1.96	375-92-8	
PFDA*	Not detected	2.0	0.59	ng/L	1.96	335-76-2	
N-MeFOSAA*	Not detected	2.0	1.4	ng/L	1.96	2355-31-9	
EtFOSAA*	Not detected	3.9	2.0	ng/L	1.96	2991-50-6	
PFOS*	Not detected	2.0	1.2	ng/L	1.96	1763-23-1	
PFOS-LN*	Not detected	2.0	1.2	ng/L	1.96	1763-23-1-LN	
PFOS-BR*	Not detected	2.0	1.2	ng/L	1.96	1763-23-1-BR	
PFUnDA*	Not detected	2.0	0.98	ng/L	1.96	2058-94-8	
PFNS*	Not detected	2.0	0.98	ng/L	1.96	68259-12-1	
PFDODA*	Not detected	2.0	0.59	ng/L	1.96	307-55-1	
PFDS*	Not detected	2.0	1.2	ng/L	1.96	335-77-3	
PFTTrDA*	Not detected	2.0	0.98	ng/L	1.96	72629-94-8	
FOSA*	Not detected	2.0	0.78	ng/L	1.96	754-91-6	
PFTeDA*	Not detected	3.9	0.39	ng/L	1.96	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0	0.78	ng/L	1.96	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0	0.78	ng/L	1.96	756426-58-1	
ADONA*	Not detected	2.0	0.98	ng/L	1.96	919005-14-4	
HFPO-DA*	Not detected	9.8	2.0	ng/L	1.96	13252-13-6	



Analytical Laboratory Report

Lab Sample ID: S66318.10
Sample Tag: FB-1-240917
Collected Date/Time: 09/17/2024 10:05
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Other / Misc.

Method: , Run Date: 09/18/24 09:47, Analyst: JRM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hold until notified*	Completed				1		



Analytical Laboratory Report

Lab Sample ID: S66318.11
Sample Tag: Trip Blank
Collected Date/Time: 09/17/2024 00:01
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.7	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.18/6.42/10	ASTMD7979-19M	09/18/24 11:00	CED	
Initial wt. (g) / Final wt. (g) / Volume (ml) (Rep1)	11.71/6.49/10	ASTMD7979-19M	10/04/24 11:00	CED	

Organics

28 PFAs, Method: ASTMD7979-19M, Run Date: 10/04/24 18:45, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	11	2.1	ng/L	2.1	375-22-4	
PFPeA*	Not detected	4.2	1.3	ng/L	2.1	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.21	ng/L	2.1	757124-72-4	
PFHxA*	Not detected	2.1	1.3	ng/L	2.1	307-24-4	
PFBS*	Not detected	2.1	0.63	ng/L	2.1	375-73-5	
PFHpA*	Not detected	2.1	0.84	ng/L	2.1	375-85-9	
PFPeS*	Not detected	2.1	1.9	ng/L	2.1	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.1	ng/L	2.1	27619-97-2	
PFOA*	Not detected	2.1	0.84	ng/L	2.1	335-67-1	
PFHxS*	Not detected	2.1	1.1	ng/L	2.1	355-46-4	
PFHxS-LN*	Not detected	2.1	1.1	ng/L	2.1	355-46-4-LN	
PFHxS-BR*	Not detected	2.1	1.1	ng/L	2.1	355-46-4-BR	
PFNA*	Not detected	2.1	1.1	ng/L	2.1	375-95-1	
8:2 FTSA*	Not detected	2.1	1.3	ng/L	2.1	39108-34-4	
PFHpS*	Not detected	2.1	0.84	ng/L	2.1	375-92-8	
PFDA*	Not detected	2.1	1.3	ng/L	2.1	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.1	ng/L	2.1	2355-31-9	
EtFOSAA*	Not detected	4.2	1.1	ng/L	2.1	2991-50-6	
PFOS*	Not detected	2.1	0.84	ng/L	2.1	1763-23-1	
PFOS-LN*	Not detected	2.1	0.84	ng/L	2.1	1763-23-1-LN	
PFOS-BR*	Not detected	2.1	0.84	ng/L	2.1	1763-23-1-BR	
PFUnDA*	Not detected	2.1	0.84	ng/L	2.1	2058-94-8	
PFNS*	Not detected	2.1	1.1	ng/L	2.1	68259-12-1	
PFDODA*	Not detected	2.1	0.63	ng/L	2.1	307-55-1	
PFDS*	Not detected	2.1	1.1	ng/L	2.1	335-77-3	
PFTTrDA*	Not detected	2.1	0.84	ng/L	2.1	72629-94-8	
FOSA*	Not detected	2.1	0.84	ng/L	2.1	754-91-6	
PFTeDA*	Not detected	4.2	0.63	ng/L	2.1	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	1.1	ng/L	2.1	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	1.1	ng/L	2.1	756426-58-1	
ADONA*	Not detected	2.1	0.63	ng/L	2.1	919005-14-4	
HFPO-DA*	Not detected	11	2.1	ng/L	2.1	13252-13-6	

Merit Laboratories Login Checklist

Lab Set ID:S66318

Client:APPLIED (Applied Ecosystems)

Project: RACER Flint West #12990

Submitted:09/17/2024 16:25 Login User: PFD

Attention: Rodney Abke

Address: Applied Ecosystems
G4300 S. Saginaw Street
Burton, MI 48529

Phone: 810-715-2525

FAX:

Email: rabke@appliedecosystems.com

Selection	Description	Note
Sample Receiving		
01.	☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # IR 4.7
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☐ Yes ☒ No ☐ N/A	Samples shipped
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☐ Yes ☒ No ☐ N/A	Subcontracting needed? Subcontacted to:
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☐ Yes ☐ No ☒ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☐ No ☒ N/A	Do water VOC, TOX, DO or Alkalinity bottles contain

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME Rodney Abke			
COMPANY Applied EcoSystems			
ADDRESS G-4300 South Saginaw Street			
CITY Burton		STATE MI	ZIP CODE 48529
PHONE NO. 810-715-2525	FAX NO. 810-715-2526	P.O. NO. PO1107477	
E-MAIL ADDRESS rabke@appliedecosystems.com		QUOTE NO.	

CONTACT NAME Monica Wallingford			☐ SAME
COMPANY Revitalizing Auto Communities Environmental Response (RACER) Trust			
ADDRESS			
CITY		STATE	ZIP CODE
PHONE NO. 313.486.2978	E-MAIL ADDRESS mwallingford@racertrust.org		

PROJECT NO./NAME RACER Flint West #12990	SAMPLER(S) - PLEASE PRINT/SIGN NAME
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER	
DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER report to MDLs	

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR W=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives							
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	
66318.01	9/11/17	11:25	MW-1125-240917	W	3								X
02		12:40	MW-1105-240917	W	3								X
03		13:25	MW-1085-240917	W	3								X
04		14:05	MW-1145-240917	W	3								X
05		15:00	MW-1035-240917	W	3								X
06		X	DVP-1-240917	W	3								X
07		15:00	MS(MW-1035-240917)	W	3								X
08		5:00	MSD(MW-1035-240917)	W	3								X
09		15:10	FB-1-240917	W	3								X
10		10:4	FB-1-240917										
11													

PFAS/PFOS **

Certifications	
☐ OHIO VAP	☐ Drinking Water
☐ DoD	☐ NPDES
Project Locations	
☐ Detroit	☐ New York
☐ Other	
Special Instructions	

** - 28 Compound List

report down to MDLs

RELINQUISHED BY: <i>D&P</i>	DATE 9/17/17	TIME 15:30
SIGNATURE/ORGANIZATION		
RECEIVED BY: <i>[Signature]</i>	DATE 9/17/17	TIME 15:10
SIGNATURE/ORGANIZATION		
RELINQUISHED BY: <i>[Signature]</i>	DATE 9/17/17	TIME 16:25
SIGNATURE/ORGANIZATION		

RELINQUISHED BY: <i>[Signature]</i>	DATE	TIME
SIGNATURE/ORGANIZATION		
RECEIVED BY: <i>[Signature]</i>	DATE	TIME
SIGNATURE/ORGANIZATION		
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
NOTES: TEMP. ON ARRIVAL 4.7		

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Quality Control Report

Report ID: QC-S66318-01
Generated on 10/09/2024

Report to

Attention: Rodney Abke
Applied Ecosystems
G4300 S. Saginaw Street
Burton, MI 48529

Phone: 810-715-2525 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S66318.01-S66318.09, S66318.11
Project: RACER Flint West #12990
Submitted Date/Time: 09/17/2024 16:25
Sampled by: Unknown
P.O. #: PO1107493

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-11)
Prep Batch Summary (Page 12)
Internal Standards per Lab Sample (Pages 13-20)
Internal Standards per QC Sample (Pages 21-28)
Batch QC Results (Pages 29-37)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S66318.01
Sample Tag: MW-112S-240917
Collected Date/Time: 09/17/2024 11:25
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	09/18/24 19:09	AK240918	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66318.02
Sample Tag: MW-110S-240917
Collected Date/Time: 09/17/2024 12:40
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	09/18/24 19:29	AK240918	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66318.03
Sample Tag: MW-108S-240917
Collected Date/Time: 09/17/2024 13:25
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	09/18/24 19:49	AK240918	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66318.04
Sample Tag: MW-114S-240917
Collected Date/Time: 09/17/2024 14:05
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	09/18/24 20:09	AK240918	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66318.05
Sample Tag: MW-103S-240917
Collected Date/Time: 09/17/2024 15:00
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	09/19/24 11:53	AK240918	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66318.06
Sample Tag: DUP-1-240917
Collected Date/Time: 09/17/2024 00:01
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	09/18/24 20:49	AK240918	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66318.07
Sample Tag: MS(MW-103S-240917)
Collected Date/Time: 09/17/2024 15:00
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	09/19/24 12:13	AK240918	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66318.08
Sample Tag: MSD(MW-103S-240917)
Collected Date/Time: 09/17/2024 15:00
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	09/18/24 21:29	AK240918	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66318.09
Sample Tag: EB-1-240917
Collected Date/Time: 09/17/2024 15:10
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	09/18/24 21:49	AK240918	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S66318.11
Sample Tag: Trip Blank
Collected Date/Time: 09/17/2024 00:01
Matrix: Water
COC Reference:

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
28 PFAs	ASTMD7979-19M	10/04/24 18:45	AK241004W	PF240918W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: PF240918W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S66318.01	28 PFAs	ASTMD7979-19M	09/18/24 19:09	AK240918
S66318.02	28 PFAs	ASTMD7979-19M	09/18/24 19:29	AK240918
S66318.03	28 PFAs	ASTMD7979-19M	09/18/24 19:49	AK240918
S66318.04	28 PFAs	ASTMD7979-19M	09/18/24 20:09	AK240918
S66318.05	28 PFAs	ASTMD7979-19M	09/19/24 11:53	AK240918
S66318.06	28 PFAs	ASTMD7979-19M	09/18/24 20:49	AK240918
S66318.07	28 PFAs	ASTMD7979-19M	09/19/24 12:13	AK240918
S66318.08	28 PFAs	ASTMD7979-19M	09/18/24 21:29	AK240918
S66318.09	28 PFAs	ASTMD7979-19M	09/18/24 21:49	AK240918
S66318.11	28 PFAs	ASTMD7979-19M	10/04/24 18:45	AK241004W

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S66318.01

Sample Tag: MW-112S-240917

Collected Date/Time: 09/17/2024 11:25

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: 28 PFAs

Run in Batch: AK240918, Run Date: 09/18/2024 19:09, Matrix: WW, Dilution: 2.05

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		145.4	50.0	150.0
M2-6:2FTSA		145.8	50.0	150.0
M2-8:2FTSA		134.8	50.0	150.0
M2PFTeDA		124.2	12.0	218.0
M3PFBS		110.9	50.0	150.0
M3PFHxS		90.7	50.0	150.0
M4PFHpA		101.8	50.0	150.0
M5PFHxA		100.7	50.0	150.0
M5PFPeA		102.5	50.0	150.0
M6PFDA		103.6	50.0	150.0
M7PFUnDA		102.3	50.0	150.0
M8FOSA		102.9	50.0	150.0
M8PFOA		96.1	50.0	150.0
M8PFOS		101.9	50.0	150.0
M9-PFNA		90.8	50.0	150.0
MPFBA		104.0	50.0	150.0
MPFDoDA		105.6	50.0	150.0
d3N-MeFOSAA		96.6	50.0	150.0
d5EtFOSAA		101.3	50.0	150.0
MHFPO-DA		97.1	50.0	150.0
d-N-EtFOSA-M		109.2	50.0	150.0
d-N-MeFOSA-M		105.3	50.0	150.0
d7-N-MeFOSE-M		131.4	50.0	150.0
d9-N-EtFOSE-M		118.2	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S66318.02

Sample Tag: MW-110S-240917

Collected Date/Time: 09/17/2024 12:40

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: 28 PFAs

Run in Batch: AK240918, Run Date: 09/18/2024 19:29, Matrix: WW, Dilution: 2.17

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		112.0	50.0	150.0
M2-6:2FTSA		122.8	50.0	150.0
M2-8:2FTSA		96.5	50.0	150.0
M2PFTeDA		129.6	12.0	218.0
M3PFBS		104.3	50.0	150.0
M3PFHxS		96.9	50.0	150.0
M4PFHpA		109.6	50.0	150.0
M5PFHxA		94.4	50.0	150.0
M5PFPeA		104.0	50.0	150.0
M6PFDA		111.0	50.0	150.0
M7PFUnDA		101.7	50.0	150.0
M8FOSA		107.0	50.0	150.0
M8PFOA		103.6	50.0	150.0
M8PFOS		96.4	50.0	150.0
M9-PFNA		103.2	50.0	150.0
MPFBA		107.5	50.0	150.0
MPFDoDA		100.4	50.0	150.0
d3N-MeFOSAA		92.1	50.0	150.0
d5EtFOSAA		103.7	50.0	150.0
MHFPO-DA		95.2	50.0	150.0
d-N-EtFOSA-M		115.1	50.0	150.0
d-N-MeFOSA-M		108.1	50.0	150.0
d7-N-MeFOSE-M		118.6	50.0	150.0
d9-N-EtFOSE-M		114.8	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S66318.03

Sample Tag: MW-108S-240917

Collected Date/Time: 09/17/2024 13:25

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: 28 PFAs

Run in Batch: AK240918, Run Date: 09/18/2024 19:49, Matrix: WW, Dilution: 2.07

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		106.1	50.0	150.0
M2-6:2FTSA		120.9	50.0	150.0
M2-8:2FTSA		100.4	50.0	150.0
M2PFTeDA		116.5	12.0	218.0
M3PFBS		104.4	50.0	150.0
M3PFHxS		102.6	50.0	150.0
M4PFHpA		103.1	50.0	150.0
M5PFHxA		96.0	50.0	150.0
M5PFPeA		98.5	50.0	150.0
M6PFDA		106.6	50.0	150.0
M7PFUnDA		101.1	50.0	150.0
M8FOSA		110.8	50.0	150.0
M8PFOA		97.4	50.0	150.0
M8PFOS		97.7	50.0	150.0
M9-PFNA		100.4	50.0	150.0
MPFBA		104.2	50.0	150.0
MPFDoDA		94.0	50.0	150.0
d3N-MeFOSAA		94.1	50.0	150.0
d5EtFOSAA		101.6	50.0	150.0
MHFPO-DA		98.8	50.0	150.0
d-N-EtFOSA-M		103.5	50.0	150.0
d-N-MeFOSA-M		102.1	50.0	150.0
d7-N-MeFOSE-M		126.8	50.0	150.0
d9-N-EtFOSE-M		109.5	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S66318.04

Sample Tag: MW-114S-240917

Collected Date/Time: 09/17/2024 14:05

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: 28 PFAs

Run in Batch: AK240918, Run Date: 09/18/2024 20:09, Matrix: WW, Dilution: 2.01

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		124.0	50.0	150.0
M2-6:2FTSA		135.1	50.0	150.0
M2-8:2FTSA		108.5	50.0	150.0
M2PFTeDA		124.0	12.0	218.0
M3PFBS		117.1	50.0	150.0
M3PFHxS		94.7	50.0	150.0
M4PFHpA		104.7	50.0	150.0
M5PFHxA		106.2	50.0	150.0
M5PFPeA		106.0	50.0	150.0
M6PFDA		104.7	50.0	150.0
M7PFUnDA		101.0	50.0	150.0
M8FOSA		107.2	50.0	150.0
M8PFOA		94.8	50.0	150.0
M8PFOS		101.1	50.0	150.0
M9-PFNA		109.7	50.0	150.0
MPFBA		106.2	50.0	150.0
MPFDoDA		98.6	50.0	150.0
d3N-MeFOSAA		95.2	50.0	150.0
d5EtFOSAA		106.0	50.0	150.0
MHFPO-DA		91.7	50.0	150.0
d-N-EtFOSA-M		114.7	50.0	150.0
d-N-MeFOSA-M		103.9	50.0	150.0
d7-N-MeFOSE-M		123.9	50.0	150.0
d9-N-EtFOSE-M		110.0	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S66318.05

Sample Tag: MW-103S-240917

Collected Date/Time: 09/17/2024 15:00

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: 28 PFAs

Run in Batch: AK240918, Run Date: 09/19/2024 11:53, Matrix: WW, Dilution: 1.99

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		111.3	50.0	150.0
M2-6:2FTSA		116.5	50.0	150.0
M2-8:2FTSA		120.1	50.0	150.0
M2PFTeDA		89.5	12.0	218.0
M3PFBS		73.1	50.0	150.0
M3PFHxS		78.4	50.0	150.0
M4PFHpA		79.9	50.0	150.0
M5PFHxA		64.3	50.0	150.0
M5PFPeA		76.4	50.0	150.0
M6PFDA		78.7	50.0	150.0
M7PFUnDA		82.4	50.0	150.0
M8FOSA		78.4	50.0	150.0
M8PFOA		85.3	50.0	150.0
M8PFOS		78.8	50.0	150.0
M9-PFNA		81.3	50.0	150.0
MPFBA		80.2	50.0	150.0
MPFDoDA		87.0	50.0	150.0
d3N-MeFOSAA		94.6	50.0	150.0
d5EtFOSAA		95.3	50.0	150.0
MHFPO-DA		74.4	50.0	150.0
d-N-EtFOSA-M		90.0	50.0	150.0
d-N-MeFOSA-M		85.8	50.0	150.0
d7-N-MeFOSE-M		92.7	50.0	150.0
d9-N-EtFOSE-M		88.6	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S66318.06

Sample Tag: DUP-1-240917

Collected Date/Time: 09/17/2024 00:01

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: 28 PFAs

Run in Batch: AK240918, Run Date: 09/18/2024 20:49, Matrix: WW, Dilution: 2.09

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		110.3	50.0	150.0
M2-6:2FTSA		122.4	50.0	150.0
M2-8:2FTSA		92.8	50.0	150.0
M2PFTeDA		125.2	12.0	218.0
M3PFBS		107.4	50.0	150.0
M3PFHxS		94.5	50.0	150.0
M4PFHpA		103.3	50.0	150.0
M5PFHxA		88.4	50.0	150.0
M5PFPeA		112.1	50.0	150.0
M6PFDA		103.1	50.0	150.0
M7PFUnDA		98.6	50.0	150.0
M8FOSA		108.2	50.0	150.0
M8PFOA		99.8	50.0	150.0
M8PFOS		88.1	50.0	150.0
M9-PFNA		113.5	50.0	150.0
MPFBA		104.7	50.0	150.0
MPFDoDA		102.6	50.0	150.0
d3N-MeFOSAA		96.4	50.0	150.0
d5EtFOSAA		107.5	50.0	150.0
MHFPO-DA		99.1	50.0	150.0
d-N-EtFOSA-M		110.9	50.0	150.0
d-N-MeFOSA-M		101.6	50.0	150.0
d7-N-MeFOSE-M		121.2	50.0	150.0
d9-N-EtFOSE-M		101.4	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S66318.09

Sample Tag: EB-1-240917

Collected Date/Time: 09/17/2024 15:10

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: 28 PFAs

Run in Batch: AK240918, Run Date: 09/18/2024 21:49, Matrix: WW, Dilution: 1.96

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		105.0	50.0	150.0
M2-6:2FTSA		114.0	50.0	150.0
M2-8:2FTSA		90.6	50.0	150.0
M2PFTeDA		88.0	12.0	218.0
M3PFBS		106.4	50.0	150.0
M3PFHxS		83.4	50.0	150.0
M4PFHpA		94.6	50.0	150.0
M5PFHxA		91.9	50.0	150.0
M5PFPeA		97.2	50.0	150.0
M6PFDA		88.2	50.0	150.0
M7PFUnDA		89.5	50.0	150.0
M8FOSA		95.5	50.0	150.0
M8PFOA		98.5	50.0	150.0
M8PFOS		92.7	50.0	150.0
M9-PFNA		91.6	50.0	150.0
MPFBA		99.0	50.0	150.0
MPFDoDA		86.7	50.0	150.0
d3N-MeFOSAA		88.0	50.0	150.0
d5EtFOSAA		95.9	50.0	150.0
MHFPO-DA		88.5	50.0	150.0
d-N-EtFOSA-M		98.6	50.0	150.0
d-N-MeFOSA-M		88.4	50.0	150.0
d7-N-MeFOSE-M		111.0	50.0	150.0
d9-N-EtFOSE-M		93.8	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S66318.11

Sample Tag: Trip Blank

Collected Date/Time: 09/17/2024 00:01

Matrix: Water

COC Reference:

Organics - Volatiles, Analysis: 28 PFAs

Run in Batch: AK241004W, Run Date: 10/04/2024 18:45, Matrix: WW, Dilution: 2.1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		107.0	50.0	150.0
M2-6:2FTSA		103.2	50.0	150.0
M2-8:2FTSA		113.7	50.0	150.0
M2PFTeDA		126.6	12.0	218.0
M3PFBS		104.7	50.0	150.0
M3PFHxS		100.6	50.0	150.0
M4PFHpA		110.5	50.0	150.0
M5PFHxA		101.1	50.0	150.0
M5PFPeA		99.9	50.0	150.0
M6PFDA		88.1	50.0	150.0
M7PFUnDA		108.2	50.0	150.0
M8FOSA		141.3	50.0	150.0
M8PFOA		101.2	50.0	150.0
M8PFOS		117.1	50.0	150.0
M9-PFNA		93.8	50.0	150.0
MPFBA		111.3	50.0	150.0
MPFDoDA		108.0	50.0	150.0
d3N-MeFOSAA		87.1	50.0	150.0
d5EtFOSAA		125.2	50.0	150.0
MHFPO-DA		90.9	50.0	150.0
d-N-EtFOSA-M		105.7	50.0	150.0
d-N-MeFOSA-M		147.7	50.0	150.0
d7-N-MeFOSE-M	*	163.9	50.0	150.0
d9-N-EtFOSE-M	*	152.4	50.0	150.0

QC Report - Internal Standards per QC Sample

Organics - Volatiles, Prep Batch ID: PF240918W1

QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: AK240918.BLK240918

Run in Batch: AK240918, Run Date: 09/18/2024 16:29, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		93.7	50.0	150.0
M2-6:2FTSA		99.8	50.0	150.0
M2-8:2FTSA		69.5	50.0	150.0
M2PFTeDA		97.9	12.0	218.0
M3PFBS		92.8	50.0	150.0
M3PFHxS		84.9	50.0	150.0
M4PFHpA		94.6	50.0	150.0
M5PFHxA		88.8	50.0	150.0
M5PFPeA		92.0	50.0	150.0
M6PFDA		90.0	50.0	150.0
M7PFUnDA		85.8	50.0	150.0
M8FOSA		87.4	50.0	150.0
M8PFOA		86.2	50.0	150.0
M8PFOS		84.1	50.0	150.0
M9-PFNA		84.6	50.0	150.0
MPFBA		91.9	50.0	150.0
MPFDoDA		86.9	50.0	150.0
d3N-MeFOSAA		88.6	50.0	150.0
d5EtFOSAA		83.2	50.0	150.0
MHFPO-DA		89.9	50.0	150.0
d-N-EtFOSA-M		88.0	50.0	150.0
d-N-MeFOSA-M		82.9	50.0	150.0
d7-N-MeFOSE-M		92.3	50.0	150.0
d9-N-EtFOSE-M		91.0	50.0	150.0

QC Report - Internal Standards per QC Sample

Blank (BLK)

Lab Sample ID: AK240918_46LIST.BLK240918

Run in Batch: AK240918_46LIST, Run Date: 09/18/2024 16:29, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		93.5	50.0	150.0
M2-6:2FTSA		99.8	50.0	150.0
M2-8:2FTSA		69.4	50.0	150.0
M2PFTeDA		97.9	12.0	218.0
M3PFBS		92.8	50.0	150.0
M3PFHxS		84.9	50.0	150.0
M4PFHpA		94.6	50.0	150.0
M5PFHxA		88.4	50.0	150.0
M5PFPeA		92.0	50.0	150.0
M6PFDA		90.0	50.0	150.0
M7PFUnDA		85.8	50.0	150.0
M8FOSA		87.4	50.0	150.0
M8PFOA		86.2	50.0	150.0
M8PFOS		84.2	50.0	150.0
M9-PFNA		84.6	50.0	150.0
MPFBA		91.9	50.0	150.0
MPFDoDA		86.9	50.0	150.0
d3N-MeFOSAA		88.6	50.0	150.0
d5EtFOSAA		83.2	50.0	150.0
MHFPO-DA		89.9	50.0	150.0
d-N-EtFOSA-M		88.0	50.0	150.0
d-N-MeFOSA-M		82.9	50.0	150.0
d7-N-MeFOSE-M		92.3	50.0	150.0
d9-N-EtFOSE-M		91.0	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample (LCS)

Lab Sample ID: AK240918.LCS240918

Run in Batch: AK240918, Run Date: 09/18/2024 15:49, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		89.4	50.0	150.0
M2-6:2FTSA		89.3	50.0	150.0
M2-8:2FTSA		83.4	50.0	150.0
M2PFTeDA		102.9	12.0	218.0
M3PFBS		97.2	50.0	150.0
M3PFHxS		76.3	50.0	150.0
M4PFHpA		81.1	50.0	150.0
M5PFHxA		86.1	50.0	150.0
M5PFPeA		87.4	50.0	150.0
M6PFDA		87.8	50.0	150.0
M7PFUnDA		88.8	50.0	150.0
M8FOSA		79.7	50.0	150.0
M8PFOA		89.4	50.0	150.0
M8PFOS		86.0	50.0	150.0
M9-PFNA		84.8	50.0	150.0
MPFBA		89.1	50.0	150.0
MPFDoDA		83.4	50.0	150.0
d3N-MeFOSAA		85.7	50.0	150.0
d5EtFOSAA		91.1	50.0	150.0
MHFPO-DA		81.4	50.0	150.0
d-N-EtFOSA-M		86.2	50.0	150.0
d-N-MeFOSA-M		86.6	50.0	150.0
d7-N-MeFOSE-M		96.0	50.0	150.0
d9-N-EtFOSE-M		86.2	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample (LCS)

Lab Sample ID: AK240918_46LIST.LCS240918

Run in Batch: AK240918_46LIST, Run Date: 09/18/2024 15:49, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		88.6	50.0	150.0
M2-6:2FTSA		89.3	50.0	150.0
M2-8:2FTSA		83.4	50.0	150.0
M2PFTeDA		102.9	12.0	218.0
M3PFBS		97.2	50.0	150.0
M3PFHxS		76.4	50.0	150.0
M4PFHpA		81.1	50.0	150.0
M5PFHxA		85.7	50.0	150.0
M5PFPeA		87.3	50.0	150.0
M6PFDA		87.8	50.0	150.0
M7PFUnDA		88.8	50.0	150.0
M8FOSA		79.7	50.0	150.0
M8PFOA		89.4	50.0	150.0
M8PFOS		86.2	50.0	150.0
M9-PFNA		84.9	50.0	150.0
MPFBA		89.1	50.0	150.0
MPFDoDA		83.4	50.0	150.0
d3N-MeFOSAA		85.7	50.0	150.0
d5EtFOSAA		91.1	50.0	150.0
MHFPO-DA		81.4	50.0	150.0
d-N-EtFOSA-M		86.2	50.0	150.0
d-N-MeFOSA-M		86.6	50.0	150.0
d7-N-MeFOSE-M		96.0	50.0	150.0
d9-N-EtFOSE-M		86.2	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK240918.LCSD240918, Parent Sample ID: AK240918.LCS240918

Run in Batch: AK240918, Run Date: 09/18/2024 16:09, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		90.6	50.0	150.0
M2-6:2FTSA		100.4	50.0	150.0
M2-8:2FTSA		82.9	50.0	150.0
M2PFTeDA		90.7	12.0	218.0
M3PFBS		94.0	50.0	150.0
M3PFHxS		78.6	50.0	150.0
M4PFHpA		90.4	50.0	150.0
M5PFHxA		82.0	50.0	150.0
M5PFPeA		93.0	50.0	150.0
M6PFDA		93.2	50.0	150.0
M7PFUnDA		87.6	50.0	150.0
M8FOSA		87.4	50.0	150.0
M8PFOA		89.5	50.0	150.0
M8PFOS		82.5	50.0	150.0
M9-PFNA		93.1	50.0	150.0
MPFBA		91.6	50.0	150.0
MPFDoDA		90.8	50.0	150.0
d3N-MeFOSAA		88.3	50.0	150.0
d5EtFOSAA		83.4	50.0	150.0
MHFPO-DA		90.1	50.0	150.0
d-N-EtFOSA-M		84.9	50.0	150.0
d-N-MeFOSA-M		84.1	50.0	150.0
d7-N-MeFOSE-M		97.8	50.0	150.0
d9-N-EtFOSE-M		87.8	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK240918_46LIST.LCSD24091, Parent Sample ID: AK240918_46LIST.LCS240918

Run in Batch: AK240918_46LIST, Run Date: 09/18/2024 16:09, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		90.4	50.0	150.0
M2-6:2FTSA		100.4	50.0	150.0
M2-8:2FTSA		84.3	50.0	150.0
M2PFTeDA		90.6	12.0	218.0
M3PFBS		94.0	50.0	150.0
M3PFHxS		78.6	50.0	150.0
M4PFHpA		90.4	50.0	150.0
M5PFHxA		81.6	50.0	150.0
M5PFPeA		92.9	50.0	150.0
M6PFDA		93.2	50.0	150.0
M7PFUnDA		87.6	50.0	150.0
M8FOSA		87.4	50.0	150.0
M8PFOA		89.5	50.0	150.0
M8PFOS		82.7	50.0	150.0
M9-PFNA		93.2	50.0	150.0
MPFBA		91.6	50.0	150.0
MPFDoDA		90.8	50.0	150.0
d3N-MeFOSAA		88.3	50.0	150.0
d5EtFOSAA		83.4	50.0	150.0
MHFPO-DA		90.1	50.0	150.0
d-N-EtFOSA-M		84.9	50.0	150.0
d-N-MeFOSA-M		84.1	50.0	150.0
d7-N-MeFOSE-M		97.8	50.0	150.0
d9-N-EtFOSE-M		87.8	50.0	150.0

QC Report - Internal Standards per QC Sample

Matrix Spike (MS)

Lab Sample ID: AK240918.6631807R, Parent Sample ID: S66318.05

Run in Batch: AK240918, Run Date: 09/19/2024 12:13, Prep Date: 09/18/2024, Matrix: WW, Dilution: 2.01

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		113.4	50.0	150.0
M2-6:2FTSA		94.2	50.0	150.0
M2-8:2FTSA		119.5	50.0	150.0
M2PFTeDA		88.5	12.0	218.0
M3PFBS		75.0	50.0	150.0
M3PFHxS		78.0	50.0	150.0
M4PFHpA		72.2	50.0	150.0
M5PFHxA		61.0	50.0	150.0
M5PFPeA		75.9	50.0	150.0
M6PFDA		75.8	50.0	150.0
M7PFUnDA		85.6	50.0	150.0
M8FOSA		80.3	50.0	150.0
M8PFOA		90.6	50.0	150.0
M8PFOS		71.2	50.0	150.0
M9-PFNA		83.4	50.0	150.0
MPFBA		78.7	50.0	150.0
MPFDoDA		87.9	50.0	150.0
d3N-MeFOSAA		93.6	50.0	150.0
d5EtFOSAA		95.8	50.0	150.0
MHFPO-DA		80.3	50.0	150.0
d-N-EtFOSA-M		95.4	50.0	150.0
d-N-MeFOSA-M		87.3	50.0	150.0
d7-N-MeFOSE-M		85.3	50.0	150.0
d9-N-EtFOSE-M		91.6	50.0	150.0

QC Report - Internal Standards per QC Sample

Matrix Spike Duplicate (MSD)

Lab Sample ID: AK240918.6631808, Parent Sample ID: AK240918.6631807R

Run in Batch: AK240918, Run Date: 09/18/2024 21:29, Prep Date: 09/18/2024, Matrix: WW, Dilution: 2.02

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		144.3	50.0	150.0
M2-6:2FTSA		127.1	50.0	150.0
M2-8:2FTSA		108.1	50.0	150.0
M2PFTeDA		115.4	12.0	218.0
M3PFBS		95.2	50.0	150.0
M3PFHxS		84.0	50.0	150.0
M4PFHpA		101.4	50.0	150.0
M5PFHxA		93.7	50.0	150.0
M5PFPeA		99.1	50.0	150.0
M6PFDA		90.6	50.0	150.0
M7PFUnDA		95.7	50.0	150.0
M8FOSA		96.8	50.0	150.0
M8PFOA		99.0	50.0	150.0
M8PFOS		87.8	50.0	150.0
M9-PFNA		99.5	50.0	150.0
MPFBA		99.0	50.0	150.0
MPFDoDA		89.0	50.0	150.0
d3N-MeFOSAA		100.6	50.0	150.0
d5EtFOSAA		101.8	50.0	150.0
MHFPO-DA		89.1	50.0	150.0
d-N-EtFOSA-M		102.1	50.0	150.0
d-N-MeFOSA-M		88.2	50.0	150.0
d7-N-MeFOSE-M		104.5	50.0	150.0
d9-N-EtFOSE-M		95.2	50.0	150.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240918W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: AK240918.BLK240918

Run in Batch: AK240918, Run Date: 09/18/2024 16:29, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFBA		ND	10	ng/l
PFMPA		ND	2	ng/l
FPrPA (3:3 FTCA)		ND	10	ng/l
PFPPrS		ND	2	ng/l
PFPeA		ND	4	ng/l
PFMBA		ND	2	ng/l
4:2 FTSA		ND	2	ng/l
NFDHA		ND	2	ng/l
PFHxA		ND	2	ng/l
PFBS		ND	2	ng/l
HFPO-DA		ND	10	ng/l
FPePA (5:3 FTCA)		ND	10	ng/l
PFEESA		ND	2	ng/l
PFFHpA		ND	2	ng/l
ADONA		ND	2	ng/l
PFPeS		ND	2	ng/l
6:2 FTSA		ND	2	ng/l
PFBSA		ND	2	ng/l
PFOA		ND	2	ng/l
PFHxS-BR		ND	2	ng/l
PFHxS		ND	2	ng/l
PFHxS-LN		ND	2	ng/l
FHpPA (7:3 FTCA)		ND	10	ng/l
PFNA		ND	2	ng/l
8:2 FTSA		ND	2	ng/l
PFECHS		ND	2	ng/l
PFFHpS		ND	2	ng/l
N-MeFOSAA		ND	2	ng/l
PFDA		ND	2	ng/l
EtFOSAA		ND	4	ng/l
PFOS		ND	2	ng/l
PFOS-BR		ND	2	ng/l
PFHxSA		ND	2	ng/l
PFOS-LN		ND	2	ng/l
PFOuDA		ND	2	ng/l
9CL-PF3ONS		ND	2	ng/l
PFNS		ND	2	ng/l
PFDoDA		ND	2	ng/l
PFDS		ND	2	ng/l
PFTTrDA		ND	2	ng/l
FOSA		ND	2	ng/l
11CL-PF3OUdS		ND	2	ng/l
PFTeDA		ND	4	ng/l
PFDOS		ND	6	ng/l
NMeFOSE		ND	4	ng/l
NMeFOSAM		ND	2	ng/l

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240918W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK) (continued)

Lab Sample ID: AK240918.BLK240918

Run in Batch: AK240918, Run Date: 09/18/2024 16:29, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
NEtFOSE		ND	4	ng/l
NEtFOSAM		ND	2	ng/l

Blank (BLK)

Lab Sample ID: AK240918_46LIST.BLK240918

Run in Batch: AK240918_46LIST, Run Date: 09/18/2024 16:29, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFPPrA		ND	100	ng/l
PFBA		ND	10	ng/l
PFMPA		ND	2	ng/l
FPrPA (3:3 FTCA)		ND	10	ng/l
PFPPrS		ND	2	ng/l
PFPpA		ND	4	ng/l
PFMBA		ND	2	ng/l
4:2 FTSA		ND	2	ng/l
NFDHA		ND	4	ng/l
PFHxA		ND	2	ng/l
PFBS		ND	2	ng/l
HFPO-DA		ND	10	ng/l
FPePA (5:3 FTCA)		ND	10	ng/l
PFEESA		ND	2	ng/l
PFFHpA		ND	2	ng/l
ADONA		ND	2	ng/l
PFPpS		ND	2	ng/l
6:2 FTSA		ND	2	ng/l
PFBSA		ND	2	ng/l
HQ-115		ND	2	ng/l
PFOA		ND	2	ng/l
PFHxS-BR		ND	2	ng/l
PFHxS		ND	2	ng/l
PFHxS-LN		ND	2	ng/l
FHpPA (7:3 FTCA)		ND	10	ng/l
PFNA		ND	2	ng/l
8:2 FTSA		ND	2	ng/l
PFECHS		ND	2	ng/l
PFFHpS		ND	2	ng/l
N-MeFOSAA		ND	4	ng/l
PFDA		ND	4	ng/l
EtFOSAA		ND	10	ng/l
PFOS		ND	2	ng/l
PFOS-BR		ND	2	ng/l
PFHxSA		ND	2	ng/l
PFOS-LN		ND	2	ng/l
PFUnDA		ND	2	ng/l
9CL-PF3ONS		ND	2	ng/l
PFNS		ND	2	ng/l

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240918W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK) (continued)

Lab Sample ID: AK240918_46LIST.BLK240918

Run in Batch: AK240918_46LIST, Run Date: 09/18/2024 16:29, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PfDoDA		ND	2	ng/l
PFDS		ND	2	ng/l
PfTrDA		ND	2	ng/l
FOSA		ND	2	ng/l
11CL-PF3OUdS		ND	2	ng/l
PFTeDA		ND	4	ng/l
PFDOS		ND	6	ng/l
NMeFOSE	J*	1.6	4	ng/l
NMeFOSAM		ND	2	ng/l
NEtFOSE		ND	4	ng/l
NEtFOSAM		ND	2	ng/l

Laboratory Control Sample (LCS)

Lab Sample ID: AK240918.LCS240918

Run in Batch: AK240918, Run Date: 09/18/2024 15:49, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFBA		121.6	70.0	130.0
PFMPA		80.6	70.0	130.0
FPrPA (3:3 FTCA)		94.8	70.0	130.0
PFPPrS		108.0	70.0	130.0
PFPeA		119.6	70.0	130.0
PFMBA		82.4	70.0	130.0
4:2 FTSA		116.4	70.0	130.0
NFDHA		88.2	70.0	130.0
PFHxA		109.4	70.0	130.0
PFBS		95.4	70.0	130.0
HFPO-DA		116.2	70.0	130.0
FPePA (5:3 FTCA)		81.0	70.0	130.0
PFEESA		90.2	70.0	130.0
PFHpA		126.6	70.0	130.0
ADONA		93.0	70.0	130.0
PFPeS		109.8	70.0	130.0
6:2 FTSA		129.8	70.0	130.0
PFBSA		103.2	70.0	130.0
PFOA		86.8	70.0	130.0
PFHxS		111.4	70.0	130.0
FHpPA (7:3 FTCA)		81.8	70.0	130.0
PFNA		112.4	70.0	130.0
8:2 FTSA		94.8	70.0	130.0
PFECHS		112.8	70.0	130.0
PFHpS		108.6	70.0	130.0
N-MeFOSAA	*	137.6	70.0	130.0
PFDA		123.6	70.0	130.0
EtFOSAA		123.6	70.0	130.0
PFOS		121.2	70.0	130.0
PFHxSA		103.0	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240918W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK240918.LCS240918

Run in Batch: AK240918, Run Date: 09/18/2024 15:49, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFUnDA		119.2	70.0	130.0
9CL-PF3ONS		121.8	70.0	130.0
PFNS		107.2	70.0	130.0
PFDODA		118.8	70.0	130.0
PFDS		117.0	70.0	130.0
PFTTrDA		128.0	70.0	130.0
FOSA		114.8	70.0	130.0
11CL-PF3OUdS		119.2	70.0	130.0
PFTeDA		107.0	70.0	130.0
PFDOS		122.0	70.0	130.0
NMeFOSE		118.4	70.0	130.0
NMeFOSAM		105.2	70.0	130.0
NEtFOSE		112.6	70.0	130.0
NEtFOSAM		104.0	70.0	130.0

Laboratory Control Sample (LCS)

Lab Sample ID: AK240918_46LIST.LCS240918

Run in Batch: AK240918_46LIST, Run Date: 09/18/2024 15:49, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFPrA		119.8	70.0	130.0
PFBA		121.6	70.0	130.0
PFMPA		80.6	70.0	130.0
FPrPA (3:3 FTCA)		94.8	70.0	130.0
PFPrS		108.0	70.0	130.0
PFPeA		119.8	70.0	130.0
PFMBA		82.4	70.0	130.0
4:2 FTSA		117.2	70.0	130.0
NFDHA		88.2	70.0	130.0
PFHxA		109.4	70.0	130.0
PFBS		95.4	70.0	130.0
HFPO-DA		116.2	70.0	130.0
FPePA (5:3 FTCA)		81.4	70.0	130.0
PFEESA		90.2	70.0	130.0
PFHpA		126.6	70.0	130.0
ADONA		93.0	70.0	130.0
PFPeS		109.8	70.0	130.0
6:2 FTSA		129.8	70.0	130.0
PFBSA		103.4	70.0	130.0
HQ-115		99.6	70.0	130.0
PFOA		88.0	70.0	130.0
PFHxS		111.6	70.0	130.0
FHpPA (7:3 FTCA)		81.8	70.0	130.0
PFNA		112.6	70.0	130.0
8:2 FTSA		94.8	70.0	130.0
PFECHS		112.8	70.0	130.0
PFHpS		108.6	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240918W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK240918_46LIST.LCS240918

Run in Batch: AK240918_46LIST, Run Date: 09/18/2024 15:49, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
N-MeFOSAA	*	137.4	70.0	130.0
PFDA		123.6	70.0	130.0
EtFOSAA		125.0	70.0	130.0
PFOS		121.4	70.0	130.0
PFHxSA		103.0	70.0	130.0
PFUnDA		119.2	70.0	130.0
9CL-PF3ONS		121.8	70.0	130.0
PFNS		107.2	70.0	130.0
PFDoDA		118.8	70.0	130.0
PFDS		117.0	70.0	130.0
PFTTrDA		128.0	70.0	130.0
FOSA		114.8	70.0	130.0
11CL-PF3OUdS		119.2	70.0	130.0
PFTeDA		107.0	70.0	130.0
PFDOS		122.0	70.0	130.0
NMeFOSE		117.2	70.0	130.0
NMeFOSAM		105.0	70.0	130.0
NEtFOSE		110.8	70.0	130.0
NEtFOSAM		103.6	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK240918.LCSD240918, Parent Sample ID: AK240918.LCS240918

Run in Batch: AK240918, Run Date: 09/18/2024 16:09, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		113.2	70.0	130.0	7.2	30.0
PFMPA		80.8	70.0	130.0	0.2	30.0
FPrPA (3:3 FTCA)		85.4	70.0	130.0	10.4	30.0
PFPPrS		106.2	70.0	130.0	1.7	30.0
PFPeA		109.4	70.0	130.0	8.9	30.0
PFMBA		86.8	70.0	130.0	5.2	30.0
4:2 FTSA		112.0	70.0	130.0	3.9	30.0
NFDHA		87.8	70.0	130.0	0.5	30.0
PFHxA		114.6	70.0	130.0	4.6	30.0
PFBS		106.0	70.0	130.0	10.5	30.0
HFPO-DA		107.2	70.0	130.0	8.1	30.0
FPePA (5:3 FTCA)		101.8	70.0	130.0	22.8	30.0
PFEESA		96.4	70.0	130.0	6.6	30.0
PFHpA		117.0	70.0	130.0	7.9	30.0
ADONA		83.8	70.0	130.0	10.4	30.0
PFPeS		104.8	70.0	130.0	4.7	30.0
6:2 FTSA		115.8	70.0	130.0	11.4	30.0
PFBSA		93.8	70.0	130.0	9.5	30.0
PFOA		85.6	70.0	130.0	1.4	30.0
PFHxS		109.4	70.0	130.0	1.8	30.0
FHpPA (7:3 FTCA)		77.8	70.0	130.0	5.0	30.0
PFNA		102.6	70.0	130.0	9.1	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240918W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK240918.LCSD240918, Parent Sample ID: AK240918.LCS240918

Run in Batch: AK240918, Run Date: 09/18/2024 16:09, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
8:2 FTSA		98.4	70.0	130.0	3.7	30.0
PFECHS		106.8	70.0	130.0	5.5	30.0
PFHpS		117.4	70.0	130.0	7.8	30.0
N-MeFOSAA		124.4	70.0	130.0	10.1	30.0
PFDA		107.8	70.0	130.0	13.7	30.0
EtFOSAA	*	140.2	70.0	130.0	12.6	30.0
PFOS		113.8	70.0	130.0	6.3	30.0
PFHxSA		92.0	70.0	130.0	11.3	30.0
PFUnDA		123.8	70.0	130.0	3.8	30.0
9CL-PF3ONS		114.0	70.0	130.0	6.6	30.0
PFNS		121.4	70.0	130.0	12.4	30.0
PFDoDA		109.2	70.0	130.0	8.4	30.0
PFDS		119.0	70.0	130.0	1.7	30.0
PFTTrDA		103.6	70.0	130.0	21.1	30.0
FOSA		97.8	70.0	130.0	16.0	30.0
11CL-PF3OUdS		121.6	70.0	130.0	2.0	30.0
PFTeDA		101.6	70.0	130.0	5.2	30.0
PFDOS		99.0	70.0	130.0	20.8	30.0
NMeFOSE		121.2	70.0	130.0	2.3	30.0
NMeFOSAM		105.0	70.0	130.0	0.2	30.0
NEtFOSE		110.0	70.0	130.0	2.3	30.0
NEtFOSAM		107.6	70.0	130.0	3.4	30.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK240918_46LIST.LCSD24091, Parent Sample ID: AK240918_46LIST.LCS240918

Run in Batch: AK240918_46LIST, Run Date: 09/18/2024 16:09, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFPrA		113.4	70.0	130.0	5.5	30.0
PFBA		113.2	70.0	130.0	7.2	30.0
PFMPA		80.8	70.0	130.0	0.2	30.0
FPrPA (3:3 FTCA)		85.4	70.0	130.0	10.4	30.0
PFPrS		106.2	70.0	130.0	1.7	30.0
PFPeA		109.4	70.0	130.0	9.1	30.0
PFMBA		86.2	70.0	130.0	4.5	30.0
4:2 FTSA		112.0	70.0	130.0	4.5	30.0
NFDHA		87.8	70.0	130.0	0.5	30.0
PFHxA		114.6	70.0	130.0	4.6	30.0
PFBS		106.0	70.0	130.0	10.5	30.0
HFPO-DA		107.2	70.0	130.0	8.1	30.0
FPePA (5:3 FTCA)		101.8	70.0	130.0	22.3	30.0
PFEESA		96.4	70.0	130.0	6.6	30.0
PFHpA		117.0	70.0	130.0	7.9	30.0
ADONA		83.8	70.0	130.0	10.4	30.0
PFPeS		104.8	70.0	130.0	4.7	30.0
6:2 FTSA		115.8	70.0	130.0	11.4	30.0
PFBSA		93.6	70.0	130.0	9.9	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240918W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK240918_46LIST.LCSD24091, Parent Sample ID: AK240918_46LIST.LCS240918

Run in Batch: AK240918_46LIST, Run Date: 09/18/2024 16:09, Prep Date: 09/18/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
HQ-115		109.6	70.0	130.0	9.6	30.0
PFOA		85.0	70.0	130.0	3.5	30.0
PFHxS		109.6	70.0	130.0	1.8	30.0
FHpPA (7:3 FTCA)		77.8	70.0	130.0	5.0	30.0
PFNA		102.6	70.0	130.0	9.3	30.0
8:2 FTSA		96.8	70.0	130.0	2.1	30.0
PFECHS		106.8	70.0	130.0	5.5	30.0
PFHpS		117.4	70.0	130.0	7.8	30.0
N-MeFOSAA		124.4	70.0	130.0	9.9	30.0
PFDA		107.8	70.0	130.0	13.7	30.0
EtFOSAA	*	141.6	70.0	130.0	12.5	30.0
PFOS		114.0	70.0	130.0	6.3	30.0
PFHxSA		92.0	70.0	130.0	11.3	30.0
PFUnDA		123.8	70.0	130.0	3.8	30.0
9CL-PF3ONS		114.0	70.0	130.0	6.6	30.0
PFNS		121.4	70.0	130.0	12.4	30.0
PFDoDA		109.2	70.0	130.0	8.4	30.0
PFDS		119.0	70.0	130.0	1.7	30.0
PFTrDA		103.6	70.0	130.0	21.1	30.0
FOSA		97.8	70.0	130.0	16.0	30.0
11CL-PF3OUdS		121.6	70.0	130.0	2.0	30.0
PFTeDA		101.8	70.0	130.0	5.0	30.0
PFDOS		99.0	70.0	130.0	20.8	30.0
NMeFOSE		119.8	70.0	130.0	2.2	30.0
NMeFOSAM		104.8	70.0	130.0	0.2	30.0
NEtFOSE		105.6	70.0	130.0	4.8	30.0
NEtFOSAM		107.4	70.0	130.0	3.6	30.0

Matrix Spike (MS)

Lab Sample ID: AK240918.6631807R, Parent Sample ID: S66318.05

Run in Batch: AK240918, Run Date: 09/19/2024 12:13, Prep Date: 09/18/2024, Matrix: WW, Dilution: 2.01

Analyte	Flags	% Rec	LCL	UCL
PFBA		118.8	70.0	130.0
PFPeA		108.9	70.0	130.0
4:2 FTSA		98.0	70.0	130.0
PFHxA		108.9	70.0	130.0
PFBS		96.0	70.0	130.0
PFHpA		118.8	70.0	130.0
PFPeS		108.9	70.0	130.0
6:2 FTSA	*	138.6	70.0	130.0
PFOA		88.0	70.0	130.0
PFHxS		118.8	70.0	130.0
PFNA		108.9	70.0	130.0
8:2 FTSA		91.1	70.0	130.0
PFHpS		99.0	70.0	130.0
PFDA		118.8	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240918W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: AK240918.6631807R, Parent Sample ID: S66318.05

Run in Batch: AK240918, Run Date: 09/19/2024 12:13, Prep Date: 09/18/2024, Matrix: WW, Dilution: 2.01

Analyte	Flags	% Rec	LCL	UCL
N-MeFOSAA		118.8	70.0	130.0
EtFOSAA		118.8	70.0	130.0
PFOS	*	136.6	70.0	130.0
PFUnDA		128.7	70.0	130.0
PFNS		108.9	70.0	130.0
PFDoDA		118.8	70.0	130.0
PFDS		128.7	70.0	130.0
PFTTrDA		118.8	70.0	130.0
FOSA		96.0	70.0	130.0
PFTeDA		99.0	70.0	130.0
11CL-PF3OUdS		118.8	70.0	130.0
9CL-PF3ONS		118.8	70.0	130.0
ADONA		75.2	70.0	130.0
HFPO-DA		99.0	70.0	130.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: AK240918.6631808, Parent Sample ID: AK240918.6631807R

Run in Batch: AK240918, Run Date: 09/18/2024 21:29, Prep Date: 09/18/2024, Matrix: WW, Dilution: 2.02

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		128.7	70.0	130.0	8.0	30.0
PFPeA		118.8	70.0	130.0	8.7	30.0
4:2 FTSA		108.9	70.0	130.0	10.5	30.0
PFHxA		118.8	70.0	130.0	8.7	30.0
PFBS		99.0	70.0	130.0	3.0	30.0
PFHpA		108.9	70.0	130.0	8.7	30.0
PFPeS		118.8	70.0	130.0	8.7	30.0
6:2 FTSA		128.7	70.0	130.0	7.4	30.0
PFOA		85.0	70.0	130.0	3.4	30.0
PFHxS		118.8	70.0	130.0	0.0	30.0
PFNA		108.9	70.0	130.0	0.0	30.0
8:2 FTSA		108.9	70.0	130.0	17.8	30.0
PFHpS		108.9	70.0	130.0	9.5	30.0
PFDA		118.8	70.0	130.0	0.0	30.0
N-MeFOSAA		128.7	70.0	130.0	8.0	30.0
EtFOSAA		118.8	70.0	130.0	0.0	30.0
PFOS		116.8	70.0	130.0	9.1	30.0
PFUnDA		128.7	70.0	130.0	0.0	30.0
PFNS		118.8	70.0	130.0	8.7	30.0
PFDoDA		128.7	70.0	130.0	8.0	30.0
PFDS		128.7	70.0	130.0	0.0	30.0
PFTTrDA		128.7	70.0	130.0	8.0	30.0
FOSA		108.9	70.0	130.0	12.6	30.0
PFTeDA		99.0	70.0	130.0	0.0	30.0
11CL-PF3OUdS		128.7	70.0	130.0	8.0	30.0
9CL-PF3ONS		108.9	70.0	130.0	8.7	30.0
ADONA		94.1	70.0	130.0	22.2	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240918W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: AK240918.6631808, Parent Sample ID: AK240918.6631807R

Run in Batch: AK240918, Run Date: 09/18/2024 21:29, Prep Date: 09/18/2024, Matrix: WW, Dilution: 2.02

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
HFPO-DA		118.8	70.0	130.0	18.2	30.0

REPORT TO

CONTACT NAME				Rodney Abke			
COMPANY				Applied EcoSystems			
ADDRESS				G-4300 South Saginaw Street			
CITY			STATE		MI		ZIP CODE
Burton							48529
PHONE NO.		FAX NO.		P.O. NO.			
810-715-2525		810-715-2526		PO1107477			
E-MAIL ADDRESS				QUOTE NO.			
rabke@appliedecosystems.com							

CHAIN OF CUSTODY RECORD

CONTACT NAME		Monica Wallingford		☐ SAME	
COMPANY					
Revitalizing Auto Communities Environmental Response (RACER) Trust					
ADDRESS					
CITY				STATE	ZIP CODE
PHONE NO.		E-MAIL ADDRESS			
313.486.2978		mwallingford@racertrust.org			

INVOICE TO

PROJECT NO./NAME	RACER Flint West #12990	SAMPLER(S) - PLEASE PRINT/SIGN NAME	
TURNAROUND TIME REQUIRED	☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____		
DELIVERABLES REQUIRED	☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER <u>report to MDLs</u>		

MATRIX CODE:	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID
	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR
					W=WASTE

Containers & Preservatives

PFAS/PFOS **

Certifications

☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations

☐ Detroit ☐ New York
☐ Other _____

Special Instructions

** - 28 Compound List

report down to MDLs

[illegible]

RELINQUISHED BY:	<i>[Signature]</i>	<i>[Signature]</i>	DATE	TIME
SIGNATURE/ORGANIZATION			9/17/24	15:30
RECEIVED BY:	<i>[Signature]</i>		DATE	TIME
SIGNATURE/ORGANIZATION			9/17/24	15:10
RELINQUISHED BY:	<i>[Signature]</i>		DATE	TIME
SIGNATURE/ORGANIZATION			9/17/24	16:45
RECEIVED BY:	<i>[Signature]</i>		DATE	TIME
SIGNATURE/ORGANIZATION			9/17/24	16:25

RELINQUISHED BY:				DATE	TIME
SIGNATURE/ORGANIZATION					
RECEIVED BY:				DATE	TIME
SIGNATURE/ORGANIZATION					
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL	4.7
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

TABLE 2
SOIL ANALYTICAL DATA (Metals and Detected VOCs)
RACER - Flint West #12990

Sample ID:				SB-122	SB-123	SB124-4	SB124-10	SB124-21	SB125-4	SB125-13	SB125-19	SB126-4	SB126-11	SB126-15	SB127-4	SB127-8	SB127-15	SB127-20	SB128-3	SB128-7	SB128-10
Date Collected:				4/30/2013	4/30/2013	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14	4/21/14
Depth:				15-16	5-6	4	10	21	4	13	19	4	11	15	4	8	15	20	3	7	10
ANALYTE (ug/kg)	DW	GSI																			
Arsenic	5,800	5,800	D&G=B			1,130	1,100	1,830	570	1,440	1,410	1,300	1,250	1,180	410	1,630	2,060	1,780	500	1,550	1,150
Chromium	18,000	18,000	D&G=B			1,220	1,460	3,350	2,050	3,260	4,240	1,220	2,920	2,870	1,980	2,560	4,540	610	1,460	2,860	5,890
Copper	5,800,000	120,000	GX			1,700	2,300	8,200	7,400	6,100	11,400	3,400	3,100	5,600	1,600	3,000	5,800	1,200	3,900	5,600	5,300
Lead	700,000	5,000,000	GX			2,510	3,120	7,580	13,800	5,100	8,590	2,280	3,790	5,470	4,710	5,740	7,330	950	6,250	11,400	6,950
Selenium	4,000	410	G=B					210			210			160							
Zinc	2,400,000	2,600,000	G=B			4,600	5,100	19,000	11,400	12,200	20,800	5,900	8,600	14,700	3,700	10,300	20,300	2,400	6,000	13,200	9,900
ANALYTE (ug/kg)	DW	GSI																			
2 Butanone (MEK)	260,000	44,000				45	71	56		165	79	82	150	75	46	66	148	126	44	123	127
Acetone	15,000	NC																			
Vinyl Chloride	40	260								23											
1,1-Dichloroethene	140	2,600																			
trans-1,2-Dichloroethene	2,000	30,000																			
1,1-Dichloroethane	18,000	15,000																			
Methylene chloride	5	1,500		100	18																
cis-1,2-Dichloroethene	1,400	12,000		1,600				58			350										
Tetrahydrofuran	1,900	220,000				170	190	190	150	180	180	140	190	210	190	190	170	190	150	150	140
Chloroform	1,600	7,000									16										
1,1,1-Trichloroethane	4,000	1,800									11										
Benzene	100	4,000																			
Trichloroethene	100	4,000		14,400	41			1,420			3,650										
Tetrachloroethene	100	1,200			18																
Toluene	16,000	5,400				11															
Ethylbenzene	1,500	360																			
Total Xylenes	5,600	820			39																
Isopropylbenzene	91,000	3,200			65															16	
n-Propylbenzene	1,600	NC																			
1,2 -Dichlorobenzene	14,000	280																		21	
1,2,4-Trimethylbenzene	2,100	570			37																
1,2,3-Trimethylbenzene	NC	NC			42.1															13.5	
1,3,5-Trimethylbenzene	72	45			29																
p-isopropyltoluene	NC	NC			93																
1,2,3-Trichlorobenzene	NC	NC																			
Naphthalene	35,000	730			210	10.8			14.4	17		13.7			12.9		14.3			345.7	46.9
2-Methylnaphthalene	57,000	4,200			345	10.2			14	39		13	19			30		10	820		46

NOTES:

	Blank cells indicate no detectable concentration
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated groundwater
NC	Insufficient data to develop criterion
GX	Interface Criteria - calculated based on 257ppm total hardness

TABLE 2
SOIL ANALYTICAL DATA (Metals and Detected VOCs)
RACER - Flint West #12990

Sample ID:				SB129-4	SB129-8	SB129-18	SB130-4	SB130-10	SB130-18	SB131-4	SB131-10	SB131-18	SB132-12	SB132-15	SB133-17	SB133-19	SB133-20	SB134-18	SB134-20	SB135-19	SB135-21
Date Collected:				4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	4/22/14	7/10/14	7/10/14	7/10/14	7/10/14	7/10/14	12/22/14	12/22/14	12/22/14	12/22/14
Depth:				4	8	18	4	10	18	4	10	18	12	15	17	19	20	18	20	19	21
ANALYTE (ug/kg)		DW	GSI																		
Arsenic	5,800	5,800	D&G=B	2,790	1,740	1,460	3,580	1,700	1,980	1,630	1,300	2,080						380	1,690	1,900	2,080
Chromium	18,000	18,000	D&G=B	2,550	4,080	4,730	3,090	1,150	2,770	1,640	2,800	2,620									
Copper	5,800,000	120,000	GX	13,000	3,600	7,200	17,700	1,700	9,800	8,500	3,100	7,900						4,500	3,000	4,000	3,900
Lead	700,000	5,000,000	GX	104,000	6,100	7,420	123,000	2,110	6,510	36,400	4,740	6,020						5,690	3,380	2,850	2,890
Selenium	4,000	410	G=B	130		150	140														
Zinc	2,400,000	2,600,000	G=B	21,300	13,100	19,200	51,800	5,800	18,000	16,800	13,600	18,600						5,900	19,500	17,500	15,300
ANALYTE (ug/kg)		DW	GSI																		
2 Butanone (MEK)	260,000	44,000		40	53	82	69	68	70	79	65	164									
Acetone	15,000	NC																			
Vinyl Chloride	40	260							73			90	180	89	46					14	
1,1-Dichloroethene	140	2,600							34			18									
trans-1,2-Dichloroethene	2,000	30,000							100			62			18					11	
1,1-Dichloroethane	18,000	15,000							69			35			13						
Methylene chloride	5	1,500																			
cis-1,2-Dichloroethene	1,400	12,000				300			6,380			2,820	2,200	1,200	1,990	530	270		120	1,100	800
Tetrahydrofuran	1,900	220,000		150	180	180	180	170	160	150	180	160	1,500	300	150	160	117				
Chloroform	1,600	7,000																			
1,1,1-Trichloroethane	4,000	1,800				33.40										25	35	18			8.7
Benzene	100	4,000							36												
Trichloroethene	100	4,000				6,170			6,080	28		12,160	29,500	13,700	11,680	10,860	7,520		2,040	7,890	6,540
Tetrachloroethene	100	1,200														17					
Toluene	16,000	5,400		13		19	31			45								70			
Ethylbenzene	1,500	360					15											16			
Total Xylenes	5,600	820		21			92			91								85			
Isopropylbenzene	91,000	3,200					13														
n-Propylbenzene	1,600	NC					16											14			
1,2 -Dichlorobenzene	14,000	280																			
1,2,4-Trimethylbenzene	2,100	570		14			24			22											
1,2,3-Trimethylbenzene	NC	NC					13.4			11.8											
1,3,5-Trimethylbenzene	72	45																			
p-isopropyltoluene	NC	NC																			
1,2,3-Trichlorobenzene	NC	NC																			
Naphthalene	35,000	730		39.5	12.5		51.5			100.3								36.6			
2-Methylnaphthalene	57,000	4,200		43			54.1			71.8					15	12	9.2	29			

NOTES:	
	Blank cells indicate no detectable concentration
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated groundwater
NC	Insufficient data to develop criterion
GX	Interface Criteria - calculated based on 257ppm total hardness

TABLE 2
SOIL ANALYTICAL DATA (Metals and Detected VOCs)
RACER - Flint West #12990

Sample ID:				SB136-19	SB136-21	SB137-18	SB137-20.5	SB138-15	SB138-18	SB139-16	DUP-1	SB139-18	SB140-16	SB140-19	SB141-16	SB141-18	SB141-19
Date Collected:				12/22/14	12/22/14	12/22/14	12/22/14	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019
Depth:				19	21	18	20.5	15	18	16	(SB139-16)	18	16	19	16	18	19
ANALYTE (ug/kg)	DW	GSI															
Arsenic	5,800	5,800	D&G=B	1,870	3,350	1,660	3,040										
Chromium	18,000	18,000	D&G=B														
Copper	5,800,000	120,000	GX	4,600	4,300	4,200	4,500										
Lead	700,000	5,000,000	GX	3,060	3,740	2,810	3,240										
Selenium	4,000	410	G=B														
Zinc	2,400,000	2,600,000	G=B	13,600	18,800	13,500	27,300										
ANALYTE (ug/kg)	DW	GSI															
2 Butanone (MEK)	260,000	44,000											2,300				
Acetone	15,000	NC										430					360
Vinyl Chloride	40	260					56					42					
1,1-Dichloroethene	140	2,600										63					
trans-1,2-Dichloroethene	2,000	30,000				14			13			200					
1,1-Dichloroethane	18,000	15,000										90					
Methylene chloride	5	1,500						22	25.7	230	210	32	260	30	27	25	26
cis-1,2-Dichloroethene	1,400	12,000		340	450	670	290	470	550	1,800	1000	8,850	3,500	150	15	2,900	860
Tetrahydrofuran	1,900	220,000						174	121	1,800	1750	180	1,800	155	161	170	155
Chloroform	1,600	7,000															
1,1,1-Trichloroethane	4,000	1,800		12.5		20.5			7.4					14.8			
Benzene	100	4,000										20					
Trichloroethene	100	4,000		8,760	9,390	4,250		2,880	2,300	21,000	16,300	3,440	13,100	2,870	180	6,150	3,370
Tetrachloroethene	100	1,200												11.9			
Toluene	16,000	5,400															
Ethylbenzene	1,500	360															
Total Xylenes	5,600	820															
Isopropylbenzene	91,000	3,200															
n-Propylbenzene	1,600	NC															
1,2 -Dichlorobenzene	14,000	280								136							
1,2,4-Trimethylbenzene	2,100	570															
1,2,3-Trimethylbenzene	NC	NC															
1,3,5-Trimethylbenzene	72	45															
p-isopropyltoluene	NC	NC															
1,2,3-Trichlorobenzene	NC	NC											130				
Naphthalene	35,000	730															
2-Methylnaphthalene	57,000	4,200															

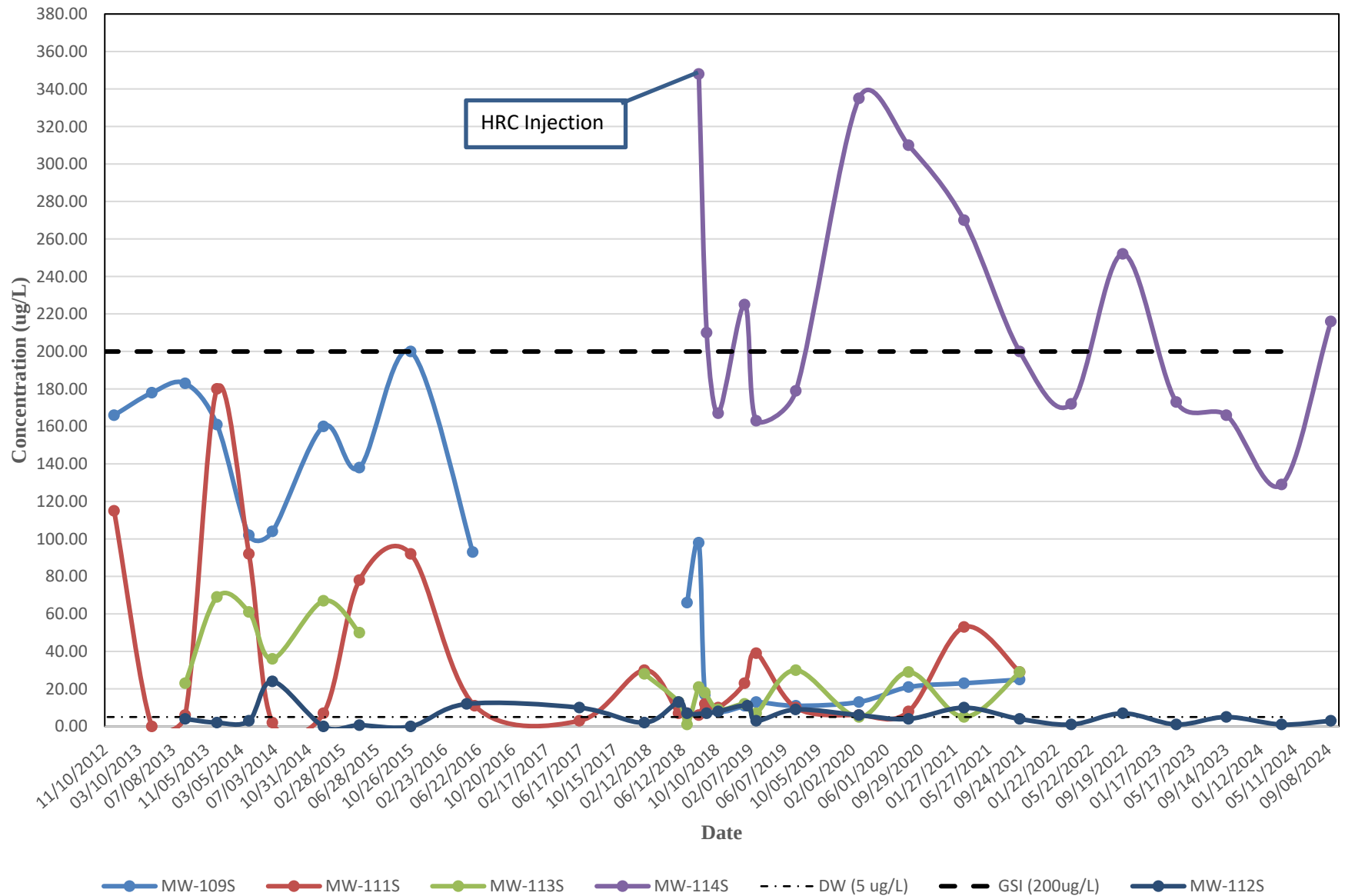
NOTES:	
	Blank cells indicate no detectable concentration
X	Exceeds DW criteria
X	Exceeds GSI criteria
X	Exceeds both DW and GSI criteria
X	Compound also found in associated groundwater
NC	Insufficient data to develop criterion
GX	Interface Criteria - calculated based on 257ppm total hardness



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TCE in MW-109S, MW-111S, MW-112S, MW-113S, MW-114S (downgradient wells)





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Environmental Management, Consulting & Field Services

Low-Flow Test Report:

Test Date / Time: 9/17/2024 2:29:17 PM
Project: Low-Flow Test 1 (41)
Operator Name:

Location Name: MW-103S Latitude: 43.01259947242412 Longitude: -83.7029490797493	Flow Cell Volume: 130 ml	Instrument Used: Aqua TROLL 500 Serial Number: 927914
---	--------------------------	--

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10 %	+/- 5
9/17/2024 2:29 PM	00:00	5.92 pH	20.77 °C	84.94 µS/cm	8.05 mg/L	2.32 NTU	51.0 mV	
9/17/2024 2:32 PM	03:00	6.15 pH	20.61 °C	84.57 µS/cm	7.99 mg/L	2.42 NTU	53.1 mV	
9/17/2024 2:35 PM	06:00	6.08 pH	20.54 °C	84.03 µS/cm	7.96 mg/L	2.27 NTU	56.9 mV	
9/17/2024 2:38 PM	09:00	6.21 pH	20.50 °C	84.46 µS/cm	7.93 mg/L	2.27 NTU	61.6 mV	
9/17/2024 2:41 PM	12:00	6.25 pH	20.43 °C	83.95 µS/cm	7.92 mg/L	2.12 NTU	66.2 mV	
9/17/2024 2:44 PM	15:00	6.27 pH	20.38 °C	83.90 µS/cm	7.91 mg/L	2.14 NTU	70.4 mV	
9/17/2024 2:47 PM	18:00	6.29 pH	20.37 °C	83.18 µS/cm	7.88 mg/L	2.08 NTU	73.8 mV	
9/17/2024 2:50 PM	21:00	6.30 pH	20.35 °C	83.04 µS/cm	7.88 mg/L	2.00 NTU	77.0 mV	
9/17/2024 2:53 PM	24:00	6.28 pH	20.28 °C	83.89 µS/cm	7.89 mg/L	1.93 NTU	80.3 mV	
9/17/2024 2:56 PM	27:00	6.27 pH	20.16 °C	83.38 µS/cm	7.90 mg/L	1.89 NTU	83.4 mV	

Samples

Sample ID:	Description:
------------	--------------

Low-Flow Test Report:

Test Date / Time: 9/17/2024 12:54:37 PM
Project: Low-Flow Test 1 (38)
Operator Name:

Location Name: MW-108S Latitude: 43.01286406801352 Longitude: -83.7031405604657	Flow Cell Volume: 130 ml	Instrument Used: Aqua TROLL 500 Serial Number: 927914
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10 %	+/- 5
9/17/2024 12:54 PM	00:00	6.50 pH	23.05 °C	1.35 µS/cm	7.85 mg/L	5.28 NTU	-56.4 mV	
9/17/2024 12:57 PM	03:00	6.44 pH	20.93 °C		8.25 mg/L	2.96 NTU	-40.6 mV	
9/17/2024 1:00 PM	06:00	6.38 pH	20.53 °C		8.31 mg/L	2.33 NTU	-27.8 mV	
9/17/2024 1:03 PM	09:00	6.47 pH	20.35 °C		8.31 mg/L	2.06 NTU	-16.0 mV	
9/17/2024 1:06 PM	12:00	6.52 pH	20.27 °C		8.31 mg/L	1.78 NTU	-4.8 mV	
9/17/2024 1:09 PM	15:00	6.54 pH	20.11 °C		8.34 mg/L	1.73 NTU	5.9 mV	
9/17/2024 1:12 PM	18:00	6.56 pH	20.04 °C		8.33 mg/L	1.75 NTU	15.3 mV	
9/17/2024 1:15 PM	21:00	6.53 pH	19.96 °C		8.34 mg/L	1.60 NTU	24.1 mV	
9/17/2024 1:18 PM	24:00	4.32 pH	19.92 °C		8.34 mg/L	1.49 NTU	32.7 mV	
9/17/2024 1:21 PM	27:00	6.54 pH	19.84 °C		8.36 mg/L	1.64 NTU	40.2 mV	
9/17/2024 1:24 PM	30:00	6.61 pH	19.86 °C		8.34 mg/L	1.74 NTU	47.7 mV	

Samples

Sample ID:	Description:
------------	--------------

Low-Flow Test Report:

Test Date / Time: 9/17/2024 12:09:24 PM
Project: Low-Flow Test 1 (37)
Operator Name:

Location Name: MW-110S Latitude: 43.01175355005438 Longitude: -83.70383909964339	Flow Cell Volume: 130 ml	Instrument Used: Aqua TROLL 500 Serial Number: 927914
--	--------------------------	--

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10 %	+/- 5
9/17/2024 12:09 PM	00:00	7.99 pH	19.64 °C	598.39 µS/cm	9.26 mg/L	1.05 NTU	79.0 mV	
9/17/2024 12:12 PM	03:00	8.77 pH	18.83 °C	647.91 µS/cm	9.22 mg/L	0.82 NTU	98.4 mV	
9/17/2024 12:15 PM	06:00	8.17 pH	18.29 °C	586.11 µS/cm	9.21 mg/L	0.81 NTU	104.4 mV	
9/17/2024 12:18 PM	09:00	7.59 pH	18.03 °C	540.72 µS/cm	9.18 mg/L	0.73 NTU	104.8 mV	
9/17/2024 12:21 PM	12:00	7.23 pH	18.10 °C	544.18 µS/cm	9.07 mg/L	0.78 NTU	102.5 mV	
9/17/2024 12:24 PM	15:00	7.03 pH	17.80 °C	533.92 µS/cm	9.08 mg/L	0.71 NTU	99.1 mV	
9/17/2024 12:27 PM	18:00	6.86 pH	17.86 °C	527.24 µS/cm	8.99 mg/L	0.71 NTU	89.2 mV	
9/17/2024 12:30 PM	21:00	6.74 pH	17.77 °C	534.73 µS/cm	8.97 mg/L	0.76 NTU	78.7 mV	
9/17/2024 12:33 PM	24:00	6.66 pH	17.78 °C	519.60 µS/cm	8.92 mg/L	0.75 NTU	68.8 mV	
9/17/2024 12:36 PM	27:00	6.60 pH	17.75 °C	516.64 µS/cm	8.88 mg/L	0.77 NTU	60.0 mV	
9/17/2024 12:39 PM	30:00	6.56 pH	17.74 °C	505.19 µS/cm	8.84 mg/L	0.81 NTU	53.0 mV	

Samples

Sample ID:	Description:
ME-110S-240917	PFAS, VOCs, Metals

Low-Flow Test Report:

Test Date / Time: 9/17/2024 10:55:48 AM
Project: Low-Flow Test 1 (35)
Operator Name:

Location Name: MW-112S Latitude: 43.01231026190274 Longitude: -83.70326125174374	Flow Cell Volume: 130 ml	Instrument Used: Aqua TROLL 500 Serial Number: 927914
--	--------------------------	--

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10 %	+/- 5
9/17/2024 10:55 AM	00:00	6.44 pH	24.11 °C	1.62 µS/cm	8.54 mg/L	36.91 NTU	174.5 mV	
9/17/2024 10:58 AM	03:00	6.51 pH	22.56 °C	96.64 µS/cm	8.74 mg/L	35.14 NTU	156.5 mV	
9/17/2024 11:01 AM	06:00	6.55 pH	22.03 °C	99.73 µS/cm	8.74 mg/L	36.83 NTU	138.1 mV	
9/17/2024 11:04 AM	09:00	6.60 pH	21.55 °C	102.60 µS/cm	8.78 mg/L	39.46 NTU	122.8 mV	
9/17/2024 11:07 AM	12:00	6.64 pH	21.28 °C	194.21 µS/cm	8.79 mg/L	41.31 NTU	111.7 mV	
9/17/2024 11:10 AM	15:00	6.69 pH	21.11 °C	186.77 µS/cm	8.80 mg/L	43.88 NTU	103.5 mV	
9/17/2024 11:13 AM	18:00	6.71 pH	21.08 °C	185.48 µS/cm	8.79 mg/L	44.71 NTU	97.4 mV	
9/17/2024 11:16 AM	21:00	6.74 pH	21.02 °C	184.51 µS/cm	8.78 mg/L	46.42 NTU	93.2 mV	
9/17/2024 11:19 AM	24:00	6.76 pH	20.93 °C	181.94 µS/cm	8.76 mg/L	47.25 NTU	90.2 mV	
9/17/2024 11:22 AM	27:00	6.77 pH	20.90 °C	188.29 µS/cm	8.76 mg/L	45.70 NTU	87.5 mV	
9/17/2024 11:25 AM	30:00	6.78 pH	20.80 °C	184.26 µS/cm	8.77 mg/L	44.58 NTU	85.5 mV	

Samples

Sample ID:	Description:
MW-112S-240917	PFAS, VOCs, Total and dissolved metals

Low-Flow Test Report:

Test Date / Time: 9/17/2024 1:35:41 PM
Project: Low-Flow Test 1 (39)
Operator Name:

Location Name: MW-114S Latitude: 43.01232943781 Longitude: -83.70352976031946	Flow Cell Volume: 130 ml	Instrument Used: Aqua TROLL 500 Serial Number: 927914
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10 %	+/- 5
9/17/2024 1:35 PM	00:00	6.57 pH	21.66 °C	0.19 µS/cm	7.87 mg/L	2.27 NTU	64.9 mV	
9/17/2024 1:38 PM	03:00	6.35 pH	20.74 °C	0.20 µS/cm	8.01 mg/L	1.95 NTU	69.6 mV	
9/17/2024 1:41 PM	06:00	6.42 pH	20.59 °C	0.06 µS/cm	8.02 mg/L	1.99 NTU	74.8 mV	
9/17/2024 1:44 PM	09:00	6.42 pH	20.69 °C		7.97 mg/L	2.03 NTU	79.9 mV	
9/17/2024 1:47 PM	12:00	6.41 pH	20.71 °C		7.97 mg/L	2.09 NTU	83.9 mV	
9/17/2024 1:50 PM	15:00	6.53 pH	20.75 °C		7.93 mg/L	2.08 NTU	89.4 mV	
9/17/2024 1:52 PM	17:06	6.37 pH	20.73 °C	0.06 µS/cm	8.02 mg/L	2.03 NTU	92.5 mV	
9/17/2024 1:55 PM	20:06	5.74 pH	20.71 °C	0.06 µS/cm	7.96 mg/L	1.89 NTU	96.4 mV	
9/17/2024 1:58 PM	23:06	6.50 pH	20.74 °C	0.06 µS/cm	7.95 mg/L	2.06 NTU	100.4 mV	
9/17/2024 2:01 PM	26:06	6.50 pH	20.65 °C	0.06 µS/cm	7.98 mg/L	1.96 NTU	104.5 mV	
9/17/2024 2:04 PM	29:06	6.33 pH	20.76 °C	0.06 µS/cm	7.96 mg/L	1.99 NTU	109.3 mV	

Samples

Sample ID:	Description:
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Applied *Eco*Systems, Inc.

Environmental Management, Consulting & Field Services

**LABORATORY DATA VALIDATION
SEPTEMBER 2024 BIENNIAL GROUNDWATER
SAMPLING EVENT**

**RACER Trust
Flint West Industrial Land (#12990)
Glenwood Avenue and Stevenson Street
Flint, Michigan**

December 18, 2024
Project # 11-4317-102

Applied EcoSystems, Inc.
G-4300 South Saginaw Street, Burton, Michigan 48529
Phone: (810) 715-2525 Fax: (810) 715-2526
www.AppliedEcoSystems.com

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Appendix A.....Figures

Figure 1: Site Location Map

Figure 2: Site Map with Sample Locations

Appendix B.....Tables

Table 1: Sample Collection and Analysis Summary

Table 2: Sample Analytical Results

Table 3: Analytical Methods and Holding Time Criteria

Table 4: Qualified Sample Results Due to Outlying MS/MSD Results

Table 5: Field Sample Duplicate Results and Relative Percent Differences (RPD)

Appendix C.....Laboratory Reports

Laboratory Analytical Reports

Laboratory Quality Control Reports

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Acronyms and Abbreviations

Æ	Applied EcoSystems, Inc.
ASTM International (ASTM)	
AAI	All Appropriate Inquiry
BER	Business Environmental Risk
CREC	Controlled Recognized Environmental Condition
DMC	De Minimis Condition(s)
ESA	Environmental Site Assessment
HREC	Historical Recognized Environmental Condition
PEC	Potential Environmental Concern
REC	Recognized Environmental Condition
VEC	Vapor Encroachment Condition
Buildings, Structures, and Materials	
ACBM	Asbestos Containing Building Material
ACM	Asbestos Containing Materials
AST	Aboveground Storage Tank
HVAC	Heating, Ventilation, and Air Conditioning Systems
LUST	Leaking Underground Storage Tank
ROW	Right-of-Way
UST	Underground Storage Tank
Federal Agencies	
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
NRCS	Natural Resources Conservation Service
OSHA	Occupational Health and Safety Administration
SBA	Small Business Administration
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
Federal Environmental Regulations, Programs, and Databases	
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	CERCLA Information System
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CORRACTS	Resource Conservation and Recovery Act Corrective Action
CWA	Clean Water Act
ERNS	Emergency Response Notification System
FOIA	Freedom of Information Act
LQG	Large Quantity Generator
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFRAP	No Further Remedial Action Planned
NPL	National Priority List
NRCS	Natural Resources Conservation Service
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SEMS	Superfund Enterprise Management System
SQG	Small Quantity Generator
TSCA	Toxic Substances Control Act
TSD	Treatment, Storage and Disposal Facility

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Hazardous Substances and Petroleum Products	
BTEX	Benzene, Toluene, Ethyl Benzene, Xylenes
CVOCs	Chlorinated Volatile Organic Compounds
MTBE	Methyl Tertiary Butyl Ether
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene, Tetrachloroethylene, Perchloroethene, Perchloroethylene, PERC
PFAS	Per- and Polyfluoroalkyl Substances, including PFOS, PFOA, and GenX
PNAs	Polynuclear Aromatics - also known as Polycyclic Aromatic Hydrocarbons (PAHs)
SVOCs	Semi-Volatile Organic Compounds
TCE	Trichloroethene, Trichloroethylene
TMBs	Trimethylbenzenes
VOCs	Volatile Organic Compounds
Mapping, Instruments and Units of Measurement	
bgs	Below Ground Surface
GIS	Geographic Information System
msl	Mean Sea Level
PID	Photoionization Detector
ppb	Parts Per Billion
ppb(v)	Parts Per Billion by Volume
ppm	Parts Per Million
ppm(v)	Parts Per Million by Volume
T/R/S	Township, Range, Section
µg/Kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
ng/Kg	Nanograms per Kilogram
ng/L	Nanograms per Liter
Michigan-Specific	
BEA	Baseline Environmental Assessment
NREPA	Natural Resources and Environmental Protection Act
EGLE	Michigan Department of Environment, Great Lakes and Energy and its predecessors below:
MDEQ	Michigan Department of Environmental Quality
MDNRE	Michigan Department of Natural Resources and Environment
MDNR	Michigan Department of Natural Resources
LARA	Michigan Department of Licensing and Regulatory Affairs
GRCC	Generic Residential Cleanup Criteria (or Criterion)
DW/DWP	Drinking Water/Drinking Water Protection
DC	Direct Contact
F/E	Flammability/Explosivity Limit
GS/ISIP	Groundwater to Surface Water Interface/Groundwater to Surface Water Interface Protection
PI	Particulate Inhalation
VIA	Volatilization to Indoor Air
VOA	Volatilization to Outdoor Air
MI 10 Metals	Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Mercury, Selenium, Silver, and Zinc
LGP	Leaded Gasoline Indicator Parameters (includes BTEX, TMBs and other compounds)
ULGP	Unleaded Gasoline Indicator Parameters (includes BTEX, MTBE, TMBs and other compounds)

1. INTRODUCTION

Applied EcoSystems, Inc. (Æ) was retained to conduct a validation review of the laboratory analytical data collected in support of the September 2024 bi-annual groundwater sampling event at the RACER Flint West #12990 Site in the City of Flint, Michigan. The sampling was performed in accordance with the requirements of the September 29, 2011 RCRA Administrative Order on Consent between the U.S. Environmental Protection Agency (USEPA) and RACER for the Flint West Site; and the Laboratory Data Validation was performed as part of the requirements of the April 1, 2021 project Quality Assurance Project Plan (QAPP).

Groundwater samples were submitted to Merit Laboratories, Inc., of East Lansing, Michigan. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. Samples were prepared at the laboratory in accordance with their standard operating procedures for groundwater processing. A summary of the analytical methodology is presented in Table 3.

Standard report deliverables were submitted by the laboratory to Æ. The final results and supporting quality assurance/quality control (QA/QC) data were assessed by Æ, as documented herein. Data evaluation was based on information obtained from the chain of custody forms, field notes, finished report forms, method blank data, duplicate data, and recovery data from surrogate spikes and laboratory control spikes (LCS) and matrix spikes (MS)/matrix spike duplicates (MSD).

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods reference in Table 3 in the April 1, 2021 project QAPP and in applicable guidance documents (hereafter identified as “Guidelines”), including:

- Michigan Department of Environment, Great Lakes, and Energy (EGLE) *Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) Minimum Laboratory Analyte List*, updated March 8, 2021;
- Michigan Department of Environmental Quality (MDEQ), now EGLE, *Application of Target Detection Limits and Designated Analytical Methods*, dated March 2016 and modified April 2024;
- MDEQ, *General PFAS Sampling Guidance*, revised January 2024;
- USEPA, Superfund Contract Laboratory Program, National Functional Guidelines for Organic Superfund Methods Data Review (SOM02.4), EPA-540-R-2017-002, dated January 2017;
- USEPA, Superfund Contract Laboratory Program, National Functional Guidelines for Inorganic Superfund Methods Data Review (ISM02.4), EPA-540-R-2017-001, January 2017;
- USEPA, PFAS Methods and Guidance for Sampling and Analyzing Water and Other Environmental Media-Technical Brief, EPA/600/F-17-022h; and
- USEPA, Region 9, Laboratory Data Review for the Non-Chemist, dated October 2014.

1.1 Property Location and Description

Property Address:	Glenwood Avenue and Stephenson Street	
Municipality:	City of Flint, Michigan	
County:	Genesee	
T/R/S	T7N, R6E, S12	
Parcel ID:	40-13-177-002	
Land Area:	3.17 acres, per tax records.	

2. LABORATORY DELIVERABLES

Two (2) laboratory reports were received from Merit Laboratories for chains-of-custody prepared for groundwater samples collected by AÆ on September 17, 2024 – one for analysis of VOCs and dissolved and total metals (arsenic, chromium, chromium-hexavalent, copper, lead, selenium, and zinc) and one for analysis of PFAS. All laboratory reports were identified as Merit Laboratories' Level II deliverables, appropriate under USEPA guidelines for desktop review. Raw laboratory data (including GC/MS scans, instrument calibration data, etc.) were not included in the deliverables.

Deliverables included the Merit Laboratories Analytical Laboratory Reports and Quality Control Reports IDs listed following and included in Appendix C:

S66316.01,
S66318.01,
QC-S66316-01, and
QC-S66318-01.

3. DESKTOP LABORATORY DATA REVIEW

Deliverables were reviewed to verify that the following reporting information was documented fully. Where concerns were identified, limitations on data validity were evaluated based on the identified concerns.

All Analytical Laboratory Report cover sheets were signed by Maya Murshak, Technical Director of Merit Laboratories, Inc.

All Quality Control Report cover sheets were signed by Barbara Ball, Quality Assurance Manager of Merit Laboratories, Inc.

3.1 Case Narratives

The case narrative typically is a short summary statement about the analyses that commonly documents any significant concerns with the condition of received samples, analytical problems, or QA/QC concerns. All deliverables identified no conditions warranting narrative beyond general laboratory reporting information.

3.2 Laboratory Accreditation/Certification Information

The following laboratory certifications were identified on each Analytical Laboratory Report:

Authority	Certification ID
Michigan DEQ (EGLE)	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENA	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Details of laboratory certifications and accreditations are appended to the Project QAPP.

3.3 Laboratory Contact Information

Each Analytical Laboratory Report identifies the following laboratory contact information:

Merit Laboratories, Inc., 2680 East Lansing Drive, East Lansing, MI 48823
Phone: (517) 332-0167 Fax: (517) 332-6333

Contacts for Report questions:

John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

3.4 Times Samples Collected, Received, Prepared, and Analyzed

Sample collection dates and times were tabulated in the Sample Summary of each Analytical Laboratory Report, identified in the header of each sample data report, and written on the chain of custody appended to each Report.

Times and dates of sample receipt were documented on the chain of custody appended to each Report but were not documented in the Sample Container/Preservation/Temperature summary for each sample data report.

Times and dates of sample extraction and preparation were documented in the Extraction/Prep. Summary for each sample data report.

Dates and times of sample analyses for each analytical method were documented in each sample data report.

No deviations from Guidelines were identified, except analyses of dissolved and total Cr VI for DUP-1 and dissolved CrVI for FB-1 were completed by the laboratory outside acceptable holding times. It is noted that all analytical results were “Not Detected”, including sample MW-114S for which DUP-1 was a duplicate.

3.5 Laboratory Analytical Methods

Laboratory analytical methods were summarized in the Method Summary of each Analytical Laboratory Report and for each analyte group documented in each sample data report. Analytical methods used for this project were as follow:

Method	Version	Analytes
E200.8	EPA Method 200.8 Revision 5.4	Arsenic, chromium, copper, lead, selenium, zinc
SM3500-Cr B	Standard Method 3500 Cr B 2011	Chromium VI
SW3015A	SW 846 Method 3015A Revision 1 February 2007	Metals digestion
SW5030C/8260C	SW 846 8260C Revision 3 August 2006 5030C Revision 3 May 2003	VOCs
ASTMD7979-19M	ASTM Method D7979-19 Modified (Isotopic Dilution)	PFAS, EGLE 28 Parameters

3.6 Analyte Reporting

Analytes were reported to significant figures established by Method Detection Limits (MDLs).

Results not detected at or above the laboratory’s MDL and Reporting Limit (RL) were identified as “Not Detected.”

The laboratory reports identified detected results down to the laboratory’s MDL for each analyte adjusted for specific sample dilutions, weights, and volumes. For metals, positive analyte detections less than the RL but greater than the MDL were indicated by “b” in Merit Analytical

Laboratory Reports. For organic analytes, positive analyte detections less than the RL but greater than the MDL were qualified as estimates, indicated by “J” in in Merit Analytical Laboratory Reports unless qualified otherwise in this report.

3.7 Holding Times and Sample Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

The samples were properly preserved, delivered on ice, and received and stored at the laboratory at the required temperature (0-6° Celsius). Acid-preserved samples for total metals analysis were received at pH levels less than 2. Samples for dissolved metals analysis (including chromium VI) were filtered and preserved in the laboratory immediately upon receipt at the laboratory to limit potential for metals to be deposited to or leached from suspended solids in the samples. Laboratory filtration was documented on Analytical Laboratory Reports; however, the Login Checklist for Analytical Laboratory Report S66316.01(01) erroneously indicated that no samples need laboratory preservation or filtration, when that was not true for samples analyzed for dissolved metals.

3.8 Units of Measurement

Units of measurement are identified on each sample report of the Analytical Laboratory Reports. Units for each analyte group are as follow:

Analyte Group	Units
Metals (including Cr VI)	milligrams per liter (mg/L)
VOCs	micrograms per liter (µg/L)
PFAS	nanograms per liter (ng/L)

Individual tables in project reports may identify concentrations equivalently in different units of measurement. Table 2 of this report identifies metals concentrations (including Cr VI) in micrograms per liter (µg/L) and identifies PFAS compounds in nanograms per liter (ng/L).

3.9 Detection/Reporting Limits

Each sample report of the Analytical Laboratory Reports individually tabulates the sample analytical result, Reporting Limit (RL), Method Detection Limit (MDL), and dilution factor. On Table 2, analytical results less than MDLs are identified as less than (<) the specified RL. Concentrations detected less than the RL but greater than the MDL are identified as the detected concentration qualified with a “b” flag, and estimated concentrations less than RL but greater than MDL are qualified with a “J” flag in the Merit Laboratory Analytical Reports.

3.10 Data Qualifiers

The Analytical Laboratory Reports tabulate the following qualifying flags:

Qualifier/Flag	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDLL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory, with separately attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
f	Filtered and preserved in lab
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Of these qualifiers, the following were determined to be applicable to one or more sample laboratory results in Table 2:

Qualifier/Flag	Applicable Samples
E	MW-114S – Trichloroethene Dup-1 (MW-114S) - Trichloroethene
F	DUP-1 – dissolved Cr VI, Total Cr VI FB-1 - dissolved Cr VI
J	MW-103S – Benzene, cis-1,2-Dichloroethene MW-108S – Chloroform, PFBS MW-110S – PFHxA, PFBS, PFHxS-LN, PFOS-LN MW-112S - 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichlorobenzene, PFBS MW-114S – 1,1-Dichloroethene, trans-1,2-Dichloroethene, PFBS, PFHxS, PFHxS-LN DUP-1 (MW-114S) - 1,1-Dichloroethene, trans-1,2-Dichloroethene, PFHxA, PFBS, PFOA, PFHxS, PFHxS-LN FB-1 – Acetone MW-103S MS – Tetrahydrofuran MW-103S MDS - Tetrahydrofuran
X	MW-103S – PFBA

Qualifier/Flag	Applicable Samples
	MW-112S – PFBA
b	MW-103S – Dissolved Cr VI MW-108S – Total Lead MW-114S – Total Copper and Total Lead DUP-1 (MW-114S) – Total Copper and Total Lead, Dissolved Copper
f	MW-103S, MW-108S, MW-110S, MW-112S, MW-114S (and DUP-1) for dissolved metals and dissolved Cr VI

The qualifiers should be used by all data users to understand and appropriately apply the data.

3.11 Surrogate Recoveries

Surrogates are chemicals similar to the target analyte(s) in chemical composition and behavior that are not expected to be present in the sample(s). Surrogates are added to all environmental samples, blanks, and other QC samples in an analytical batch during the preparation stage for some organic analyses (including VOCs and PFAS in the subject laboratory analytical reports). Surrogates monitor analytical performance, especially extraction efficiency, purging efficiency (for volatiles), and possible matrix effects that MS/MSD spikes, which are added only to one sample per batch, cannot.

All surrogate recoveries identified in the laboratory analytical reports were within the percent recovery and allowable range listed for each surrogate compound, except the following:

Sample / Batch	Analyte	Recovery of Internal Standard
Trip Bank Internal Standards Batch AK241004W	d7_N-MeFOSE-M D9-N-EtFOSE-M	Elevated (163.9%) Elevated (152.4%)

3.12 Blank Analyses

Blanks are designated to measure cross-contamination in different parts of the sampling and analytical process.

3.12.1 Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All Method Blank (Trip Blank) analyses were non-detect (including PFAS).

3.12.2 Equipment Blank Analyses

Equipment blanks are designed to monitor the cleanliness of field equipment and the effectiveness of decontamination procedures if equipment is used for multiple sample collections.

For this study, laboratory equipment blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per batch.

All equipment blank analyses were non-detect (including for PFAS).

3.12.3 Field Blank Analyses

Field Blanks are designated to measure cross-contamination that may occur during sample handling and transport, such as from a broken bottle in the sample ice chest.

All field blank analyses were non-detect, except as noted following:

Laboratory Report	Field Blank	Detected Analytes
S66316.01(01)	FB-1-240917 (09/19/24 14:33)	Acetone <RL but >MDL

Based on the field blanks, sample handling was not considered to result in detectable concentrations greater than RLs and not likely to affect sample result comparisons to cleanup criteria.

3.13 Laboratory Control Sample Spike Analyses

Laboratory Control Samples (LCS) are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS contained all analytes of interest. LCS recoveries were assessed per the “Guidelines.” All LCS recoveries were within the control limits demonstrating acceptable analytical accuracy except the following:

Sample / Batch	Analyte	Recovery of Internal Standard
Laboratory Control Sample (LCS) Lab Sample ID: 240923A7.LCSW23A	Trichlorofluoromethane	Low (55.1%)
Laboratory Control Sample Duplicate (LCSD) Lab Sample ID: 240923A7.LCSW23A	Trichlorofluoromethane	Low (57.8%)
Laboratory Control Sample (LCS) Lab Sample ID: AK240918.LCS240918	N-MeFOSAA	Elevated (137.6%)
Laboratory Control Sample (LCS) Lab Sample ID: AK240918_46LIST.LCS240918	N-MeFOSAA	Elevated (137.4%)
Laboratory Control Sample Duplicate (LCSD) Lab Sample ID: AK240918.LCSD240918	EtFOSAA	Elevated (140.2%)
Laboratory Control Sample Duplicate (LCSD) Lab Sample ID: Aks40918_46LIST.LCSD24091	EtFOSAA	Elevated (141.6%)

Of the analytes detected with elevated LCS results, only low concentrations have been detected historically at the Site since June 2014, with none exceeding EGLE cleanup criteria.

3.14 Matrix Spike and Matrix Spike Duplicate Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, selected field samples are spiked with a known concentration of the analyte of concern and analyzed as Matrix Spike (MS)/Matrix Spike Duplicate (MSD) samples. The Relative Percent Difference (RPD) between the MS and MSD is used to assess analytical precision.

If the original sample concentration is significantly greater than the spike concentration, or if sample is diluted five times or greater, the recovery is not assessed.

If only the MS or MSD recovery was outside of control limits, no qualification of the data was performed based on the acceptable recovery of the companion spike and the acceptable RPD.

MS/MSD analyses were performed as specified in Table 1.

The MS/MSD samples were spiked with analytes of interest, and the results were evaluated using the “Guidelines.” Table 4 presents the outlying matrix spike results. The associated sample data were qualified as estimated in the Merit Laboratory Analytical Reports. The remaining percent recoveries and RPD values were within the control limits criteria.

All of the matrix spikes and matrix spike duplicates were identified as falling within Control Limits, assuming a standard RPD limit of 30. A stricter RPD limit of 20 sometimes is applied to water samples. RPDs greater than 20 but less than 30 were identified for FPpPA (5:3 FTCA), PFTrDA, and PFDOS associated with LCS/LCSD for AK240918.LCSD240918; however, none of these PFAS compounds were detected in groundwater samples collected at the Site. RPDs greater than 20 but less than 30 also were identified for ADONA, methyl iodide, and bromomethane associated with MS/MSD for AK240919A11.6631608N; however, none of these PFAS or VOC compounds were detected in groundwater samples collected at the Site.

The inferred associated matrix interferences were not considered to affect report conclusions.

3.15 Interferences

Interference is bias that is introduced because something in the sample interferes with the analytical system’s ability to provide an accurate measurement. The interference may be physical (such as turbidity that could block light transmission in an analysis based on UV absorbance), chemical (a chemical similar to the analyte of interest may react with that analyte and affect instrument response), or spectroscopic (with the detector receiving an enhanced or suppressed signal due to an emission or absorbance by some other chemical or material in the matrix). Interferences can be possible or negative. Significant analytical interferences and their effects on the data are identified in the laboratory’s case narrative.

No significant interferences were reported in the laboratory’s case narratives.

Matrix interference was identified in the Analytical Laboratory Reports only for concentrations of PFBA in the groundwater samples from MW-103S and MW-112S. Because the elevated detection levels for these samples were less than applicable GRCC for DW and because no detectable concentrations of PFBA were identified, the interferences were not considered to affect report conclusions or interpretations.

3.16 Field Duplicate Sample Analyses

One field duplicate sample was collected for purposes of evaluating field QA/QC. The field duplicate sample was submitted “blind” to the laboratory, as specified in Table 1 and on chains of custody. The RPDs associated with the duplicate sample must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one times the RL value for water samples.

The field duplicate results shown in Table 5 were within acceptable agreement less than 50%, demonstrating acceptable sampling and analytical precision.

3.18 Chain-of-Custody Forms

Each Merit Analytical Laboratory Report and Quality Control Report was accompanied by a copy of the appropriately executed chain of custody.

3.19 Laboratory Sample Receipt Checklist

Each Merit Analytical Laboratory Report is accompanied by a Merit Laboratories Login Checklist that documented sample conditions on receipt, chain of custody, preservation, and bottle conditions.

All samples were identified as received via courier pickup on ice at temperatures within 2-6 degrees Celsius and transferred to appropriate refrigeration.

All chains of custody were reported to be adequately filled out, signed, and matched sample labels provided.

No requirement for subcontract laboratory analyses was identified.

All bottles were identified as appropriate and supplied by Merit, intact, filled appropriately, and submitted within holding times.

All samples were received with appropriate preservation, except:

- Samples submitted for dissolved metals (including chromium VI) analyses on chains of custody for Merit Analytical Laboratory Report S66316.01 required laboratory filtration and preservation, and the chain of custody specified such. The Merit Laboratories Login Checklist for S66316.01 did not specify filtration and preservation for dissolved metals analysis.

Laboratory records indicate that samples received under the chains of custody, however, were appropriately filtered and preserved immediately upon receipt at the laboratory.

4. FINDINGS, CONCLUSIONS, AND DATA LIMITATIONS

On September 17, 2024, AEC collected groundwater samples from five monitoring wells at the RACER Flint West Industrial Land Site using USEPA low-stress sampling protocols. One duplicate sample, one field blank, and one matrix spike and duplicate were collected. Samples were collected in appropriate laboratory-provided bottles with laboratory-provided preservatives and were maintained on ice until delivery under complete chain-of-custody protocols to Merit Laboratories within appropriate holding times. No sample condition issues were identified in the field or upon laboratory receipt. Samples were analyzed by specified standard methods for VOCs, EGLE 28 PFAS, six total and dissolved metals, and total and dissolved chromium VI. Filtration and preservation for dissolved metals including dissolved chromium VI were performed immediately upon laboratory receipt instead of during field collection.

Laboratory deliverables include two analytical laboratory reports, two quality control reports, and chains-of-custody for each -- one group of laboratory analytical and quality-control reports each for PFAS and for VOCs and metals. Each laboratory report contained a case narrative, laboratory accreditation/certification information, laboratory contact information, analytical methods, and analyte reporting relative to method detection limits (MDLs) and reporting limits (RLs). Data qualifiers were identified and evaluated in this Laboratory Data Validation report. No samples were extracted or analyzed beyond their holding times, except analyses for dissolved Cr VI in the field blank (FB-1) and in the field duplicate (DUP-1 for MW-114S). Because no Cr VI was detected in MW-114S or its duplicate and because the field blank also was determined to contain no detectable Cr VI (as would be expected), analysis beyond the appropriate holding times for these samples is not considered to have affected interpretations.

All surrogate recoveries were within their allowable ranges for each surrogate compound, except MeFOSE-M and D9-N-EtFOSE-M (both elevated), neither of which substitutes for PFAS compounds commonly present in groundwater at the Site and neither of which was detected in any of the field samples -- indicating satisfactory laboratory performance overall. Analysis of laboratory blank samples identified no indications of significant cross-contamination indicated. The equipment blank identified no detectable analytes greater than RLs. The field blank was determined to contain no detectable analytes except acetone at a concentration less than its RL. The trip blank was identified with no detectable analytes. Accordingly, no significant indications of cross-contamination were identified. Laboratory Control Spike (LCS) and LCS Duplicate analyses indicated the potential for Trichlorofluoromethane to be reported low and for N-MeFOSAA to be reported high; however, because these analytes were not detected contaminants at the Site, these conditions are not considered to have affected report conclusions. Matrix spikes and their duplicates indicated potential for PFAS analytes ADONA, PFPeA (5:3 FTCA), PFTrDA, and PFDOS to be variably identified high or low; however, none of these PFAS compounds were identified in groundwater samples collected at the Site. Matrix spikes and their duplicates also indicated potential for VOCs methyl iodide and bromomethane to be underestimated; however, neither is an identified contaminant in groundwater at the Site. No significant data qualifiers were identified in relation to the detected analyte concentrations.

Based on the assessment detailed in the foregoing QA/QC summary, the laboratory data summarized in Table 2 are considered acceptable within the specific qualifications noted herein.

5. SIGNATURES

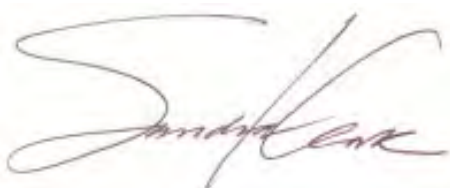
This report was prepared under the supervision of the following Environmental Professionals as defined in §312.10 of 40 CFR 312.



December 18, 2024

Michael D. Smith, Environmental Professional
Senior Technical Manager of Æ.

Date



December 18, 2024

Sandra K. Clark, Environmental Professional
President of Æ.

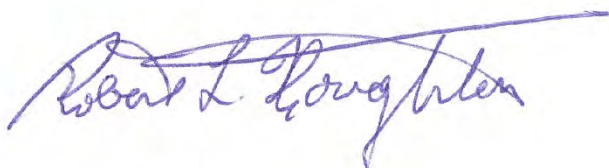
Date



December 18, 2024

Rodney Abke, CPG, LPG, Environmental Professional,
Æ Senior Geologist

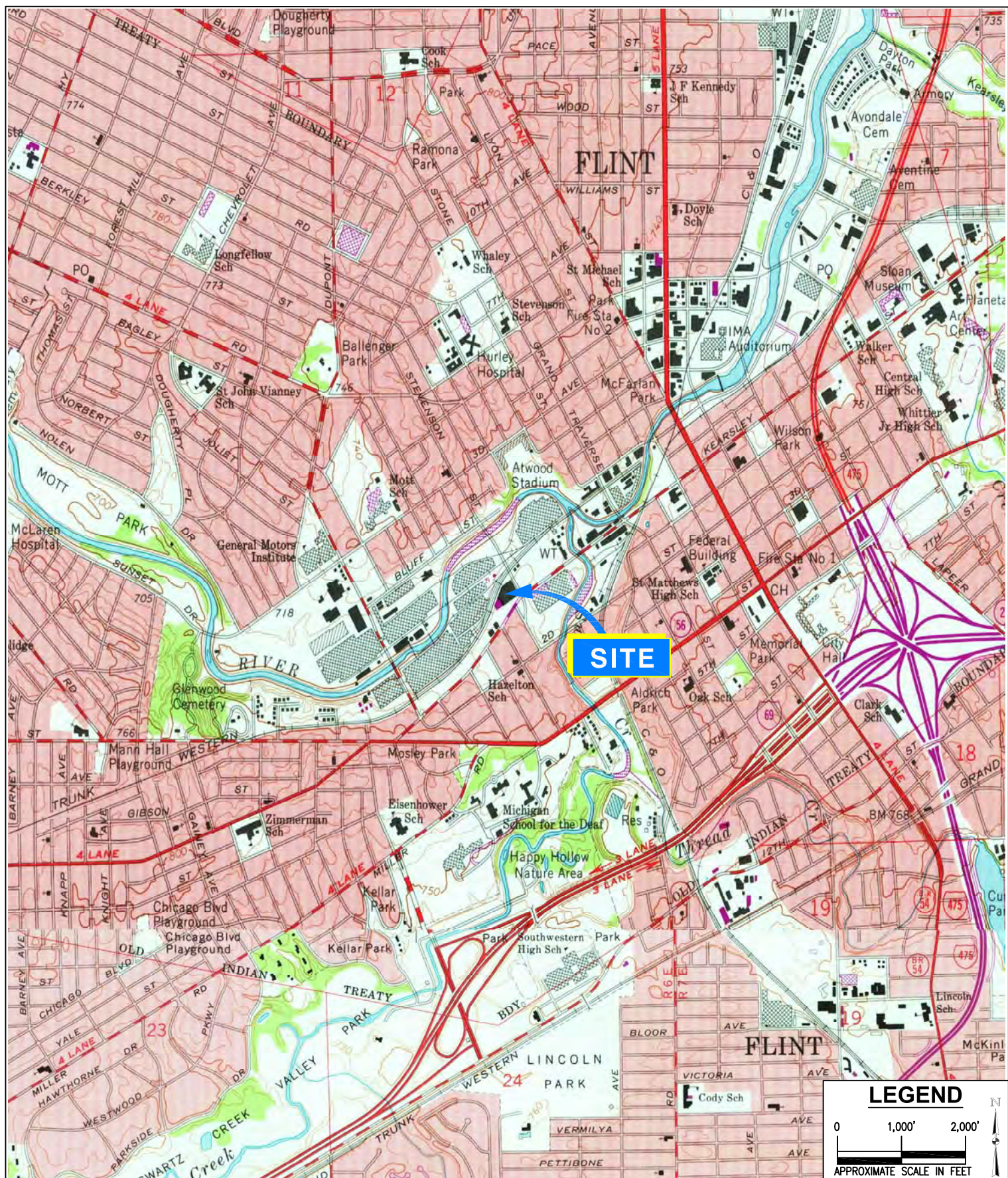
Date



December 18, 2024

Robert L. Houghton, Environmental Professional,
Æ Senior Technical Advisor,
Æ Quality Assurance Officer

Date



Applied EcoSystems, Inc.

Environmental Management, Consulting & Field Services
G-4300 South Saginaw Street, Burton, Michigan 48529
Phone: 810.715.2525; Fax: 810.715.2526

Site Location Map

RACER Flint West #12990

Glenwood Avenue & Stevenson Street
Flint, Michigan

SOURCE: USGS FLINT SOUTH QUADRANGLE
(PROVISIONAL EDITION 1975)

DRAWING DATE:

04/06/2020

CHECKED BY:

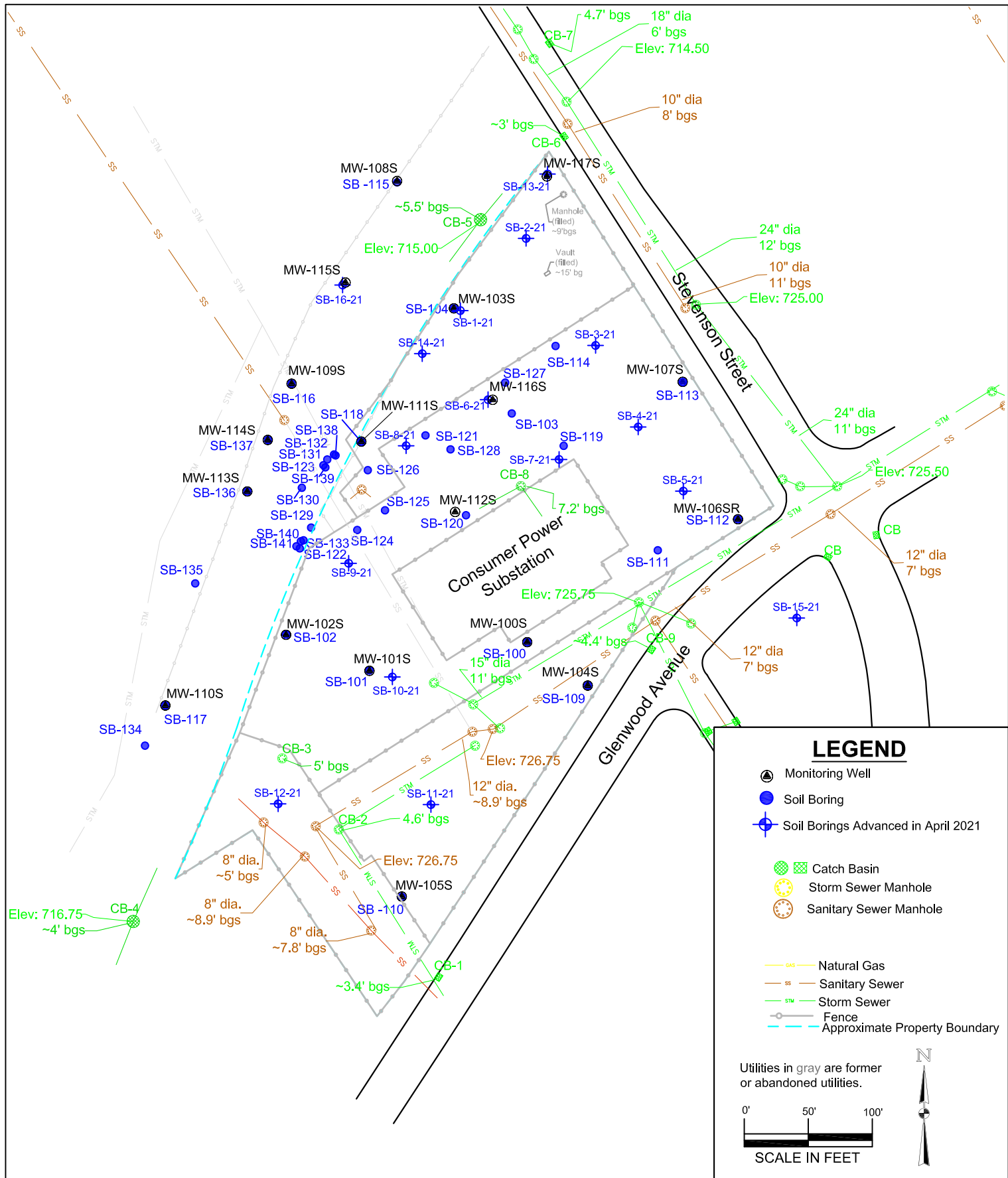
MDS

PROJECT:

11-4317-102

FIGURE:

1



Applied *Eco*Systems, Inc.

Environmental Management, Consulting & Field Services
G-4300 South Saginaw Street, Burton, Michigan 48529
Phone: 810.715.2525; Fax: 810.715.2526

Site Map

Racer Flint West -12990
Flint West Industrial Land, Flint, Michigan

DATE:

01/20/2022

CHECKED BY:

MDS

PROJECT:

11-4317-102

FIGURE:

2



Table 1
Sample Collection and Analysis Summary
September 2024 Biannual Groundwater Sampling Event

Lab Sample ID	Field Sample ID (Location)	Matrix	Collection		Analytical Parameters			
			Date (mm/dd/yyyy)	Time (hr:min)	VOCs	Total Metals	Dissolved Metals	PFAS
S66316.01	MW-112S-240917	Groundwater	09/17/2024	11:25	X	X	X	
S66316.02	MW-110S-240917	Groundwater	09/17/2024	12:40	X	X	X	
S66316.03	MW-108S-240917	Groundwater	09/17/2024	13:25	X	X	X	
S66316.04	MW-114S-240917	Groundwater	09/17/2024	14:02	X	X	X	
S66316.05	MW-103S-240917	Groundwater	09/17/2024	15:00	X	X	X	
S66316.06	DUP-1-240917	Groundwater	09/17/2024	0:01	X	X	X	
S66316.07	MS(MW-103S-240917)	Groundwater	09/17/2024	15:00	X	X	X	
S66316.08	MSD(MW-103S-240917)	Groundwater	09/17/2024	15:00	X	X	X	
S66316.09	EB-1-240917	Groundwater	09/17/2024	15:10	X	X	X	
S66316.10	FB-1-240917	Groundwater	09/17/2024	10:05	X	X	X	
S66316.11	Trip Blank	Groundwater	09/17/2024	0:01	X	X	X	
S66318.01	MW-112S-240917	Groundwater	09/17/2024	11:25				X
S66318.02	MW-110S-240917	Groundwater	09/17/2024	12:40				X
S66318.03	MW-108S-240917	Groundwater	09/17/2024	13:25				X
S66318.04	MW-114S-240917	Groundwater	09/17/2024	14:02				X
S66318.05	MW-103S-240917	Groundwater	09/17/2024	15:00				X
S66318.06	DUP-1-240917	Groundwater	09/17/2024	0:01				X
S66318.07	MS(MW-103S-240917)	Groundwater	09/17/2024	15:00				X
S66318.08	MSD(MW-103S-240917)	Groundwater	09/17/2024	15:00				X
S66318.09	EB-1-240917	Groundwater	09/17/2024	15:10				X
S66318.10	FB-1-240917	Groundwater	09/17/2024	10:05				X
S66318.11	Trip Blank	Groundwater	09/17/2024	0:01				X

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID				MW-103S	MW-108S	MW-110S	MW-112S	MW-114S	Dupe1	FB-1	EB-1	Trip Blank	MW-103S MS	MW-103S MSD
Date Collected				09/17/2024	09/17/2024	09/17/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024
METALS ANALYTE (ug/L)	DW	GSI							MW-114S					
Arsenic, Dissolved	10	10		16 f	<2 f	<2 f	27 f	20 f	20 f	<2 f	<2 f	NA	262 f	261 f
Arsenic	10	10		55	<2	<2	71	35	36	<2	<2	NA	314	320
Chromium VI, Dissolved	100	11		4 fb	<10 f	<10 f	<10 f	<10 f	<10 Ff	<10 Ff	<10 f	NA	125 f	134 f
Chromium VI	100	11		<250	<10	<250	<250	<50	<50 F	<10	<10	NA	4820	4900
Chromium, Dissolved	100	160	G	<5 f	<5 f	<5 f	<5 f	<5 f	<5 f	<5 f	<5 f	NA	253 f	254 f
Chromium	100	160	G	<5	<5	<5	<5	<5	<5	<5	<5	NA	252	252
Copper, Dissolved	1000	20	G	<5 f	<5 f	<5 f	<5 f	<5 f	4.631 bf	<5 f	<5 f	NA	245 f	249 f
Copper	1000	20	G	<5	<5	<5	<5	1.179 b	1.051 b	<5	<5	NA	250	248
Lead, Dissolved	4	44	G	<3 f	<3 f	<3 f	<3 f	<3 f	<3 f	<3 f	<3 f	NA	241 f	241 f
Lead	4	44	G	<3	1.063 b	<3	<3	0.558 b	0.525 b	<3	<3	NA	248	244
Selenium, Dissolved	50	5		<5 f	<5 f	<5 f	<5 f	<5 f	<5 f	<5 f	<5 f	NA	232 f	238 f
Selenium	50	5		<5	<5	<5	<5	<5	<5	<5	<5	NA	242	253
Zinc, Dissolved	2400	260	G	<5 f	11 f	<5 f	<5 f	12 f	15 f	<5 f	<5 f	NA	237 f	240 f
Zinc	2400	260	G	<5	13	<5	<5	19	20	<5	<5	NA	250	247
VOC ANALYTE (ug/L)	DW	GSI							MW-114S					
Acetone	730	1700		<50	<50	<50	<50	<50	<50	10 J	<50	<50	50	51
Acrylonitrile	2.6	2.0 (M); 1.2		<2	<2	<2	<2	<2	<2	<2	<2	<2	48	49
2-Butanone (MEK)	13000	2,200		<25	<25	<25	<25	<25	<25	<25	<25	<25	51	51
Benzene	5	200		0.92 J	<1	<1	<1	<1	<1	<1	<1	<1	52	51
n-Butylbenzene	NC	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	49	48
Bromobenzene	18	NA		<1	<1	<1	<1	<1	<1	<1	<1	<1	53	53
Bromochloromethane	NC	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	52	52
Bromodichloromethane	80	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	51	50
Bromoform	80 (A,W)	ID		<1	<1	<1	<1	<1	<1	<1	<1	<1	53	54
Bromomethane	10	4.2; [5(M)]		<5	<5	<5	<5	<5	<5	<5	<5	<5	37	46
sec-Butylbenzene	230	ID		<1	<1	<1	<1	<1	<1	<1	<1	<1	50	48
tert-Butylbenzene	80	ID		<1	<1	<1	<1	<1	<1	<1	<1	<1	51	49
Carbon disulfide	800	NC		<5	<5	<5	<5	<5	<5	<5	<5	<5	57	56
Carbon tetrachloride	5	38	X	<1	2	<1	<1	<1	<1	<1	<1	<1	52	51
Chlorobenzene	100	25		1	<1	<1	<1	<1	<1	<1	<1	<1	54	53
Chloroethane	430	1,100		<5	<5	<5	<5	<5	<5	<5	<5	<5	58	55
Chloroform	80	350		<1	0.67 J	<1	<1	<1	<1	<1	<1	<1	52	51
Chloromethane	260	NC		<5	<5	<5	<5	<5	<5	<5	<5	<5	57	56
1,1-Dichloroethane	880	740		<1	<1	<1	0.55 J	1	1	<1	<1	<1	51	50
1,1-Dichloroethene	7	130		<1	<1	<1	0.95 J	0.56	0.64 J	<1	<1	<1	53	51
1,2-Dibromo-3-chloropropane	NC	NC		<5	<5	<5	<5	<5	<5	<5	<5	<5	57	58
1,2-Dibromoethane	NC	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	53	53
1,2-Dichlorobenzene	600	13		<1	<1	<1	0.14 J	<1	<1	<1	<1	<1	52	51
1,2-Dichloroethane	5.0 (A)	360 (X)		<1	<1	<1	<1	<1	<1	<1	<1	<1	48	47
1,2-Dichloropropane	5.0 (A)	230 (X)		<1	<1	<1	<1	<1	<1	<1	<1	<1	49	49
1,3-Dichlorobenzene	6.6	28		<1	<1	<1	<1	<1	<1	<1	<1	<1	52	51
1,4-Dichlorobenzene	75	17		<1	<1	<1	<1	<1	<1	<1	<1	<1	52	52

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID				MW-103S	MW-108S	MW-110S	MW-112S	MW-114S	Dupe1	FB-1	EB-1	Trip Blank	MW-103S MS	MW-103S MSD
Date Collected				09/17/2024	09/17/2024	09/17/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024
VOC ANALYTE (ug/L)	DW	GSI							MW-114S					
cis-1,2-Dichloroethene	70	620		0.56 J	<1	<1	2	58	58	<1	<1	<1	54	53
cis-1,3-Dichloropropene	NC	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	51	51
Dibromochloromethane	80 (A,W)	ID		<5	<5	<5	<5	<5	<5	<5	<5	<5	53	53
Dibromomethane	230	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	51	52
Dichlorodifluoromethane	1700	ID		<5	<5	<5	<5	<5	<5	<5	<5	<5	68	69
Diethyl ether	10 (E)	ID		<10	<10	<10	<10	<10	<10	<10	<10	<10	52	53
trans-1,2-Dichloroethene	100	1500		<1	<1	<1	<1	0.64 J	0.61 J	<1	<1	<1	52	51
trans-1,3-Dichloropropene	NC	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	51	50
trans-1,4-Dichloro-2-butene	NC	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	52	53
Ethylbenzene	74	18		<1	<1	<1	<1	<1	<1	<1	<1	<1	53	52
2-Hexanone	1000	ID		<50	<50	<50	<50	<50	<50	<50	<50	<50	54	54
Hexachloroethane	21	6.7		<5	<5	<5	<5	<5	<5	<5	<5	<5	52	53
p-Isopropyltoluene	NC	NC		<5	<5	<5	<5	<5	<5	<5	<5	<5	51	50
Isopropylbenzene	800	28		<5	<5	<5	<5	<5	<5	<5	<5	<5	54	52
2-Methylnaphthalene	260	19		<5	<5	<5	<5	<5	<5	<5	<5	<5	54	56
4-Methyl-2-pentanone (MIBK)	1800	ID		<50	<50	<50	<50	<50	<50	<50	<50	<50	52	53
tert-Methyl butyl ether (MTBE)	40 (E)	7,100 (X)		<5	<5	<5	<5	<5	<5	<5	<5	<5	50	50
Methyl iodide	NC	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	37	46
Methylene chloride	5	1500		<5	<5	<5	<5	<5	<5	<5	<5	<5	52	52
Naphthalene	520	11		<5	<5	<5	<5	<5	<5	<5	<5	<5	55	55
n-Propylbenzene	80	ID		<1	<1	<1	<1	<1	<1	<1	<1	<1	49	48
Styrene	100	80		<1	<1	<1	<1	<1	<1	<1	<1	<1	53	52
1,1,1,2-Tetrachloroethane	77	ID		<1	<1	<1	<1	<1	<1	<1	<1	<1	54	53
1,1,1-Trichloroethane	200	89		<1	<1	<1	<1	<1	<1	<1	<1	<1	52	51
1,1,2,2-Tetrachloroethane	8.5	78 (X)		<1	<1	<1	<1	<1	<1	<1	<1	<1	54	52
1,1,2-Trichloroethane	5.0 (A)	330 (X)		<1	<1	<1	<1	<1	<1	<1	<1	<1	50	50
1,2,3-Trichlorobenzene	NC	NC		<5	<5	<5	<5	<5	<5	<5	<5	<5	52	53
1,2,3-Trichloropropane	42	NA		<1	<1	<1	<1	<1	<1	<1	<1	<1	51	51
1,2,3-Trimethylbenzene	NC	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	50	49
1,2,4-Trichlorobenzene	NC	NC		<5	<5	<5	<5	<5	<5	<5	<5	<5	54	53
1,2,4-Trimethylbenzene	63 (E)	17		<1	<1	<1	<1	<1	<1	<1	<1	<1	53	52
1,3,5-Trimethylbenzene	72 (E)	45		<1	<1	<1	<1	<1	<1	<1	<1	<1	54	53
Tetrachloroethene	5	60		<1	<1	<1	<1	<1	<1	<1	<1	<1	52	52
Tetrahydrofuran	95	11000		<90	<90	<90	<90	<90	<90	<90	<90	<90	47.4 J	47.3 J
Toluene	790	270		<1	<1	<1	<1	<1	<1	<1	<1	<1	51	50
Trichloroethene	5	200		<1	<1	<1	3	216 E	213 E	<1	<1	<1	51	50
Trichlorofluoromethane	2600	NA		<1	<1	<1	<1	<1	<1	<1	<1	<1	62	60
Vinyl chloride	2	13		1	<1	<1	7	4	4	<1	<1	<1	59	58
o-Xylene	NC	NC		<1	<1	<1	<1	<1	<1	<1	<1	<1	52	51
p,m-Xylene	NC	NC		<2	<2	<2	<2	<2	<2	<2	<2	<2	107	103
Xylenes, Total	280	49		<3	<3	<3	<3	<3	<3	<3	<3	<3	159	154

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

Sample ID				MW-103S	MW-108S	MW-110S	MW-112S	MW-114S	Dupe1	FB-1	EB-1	Trip Blank	MW-103S MS	MW-103S MSD
Date Collected				09/17/2024	09/17/2024	09/17/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024	09/27/2024
PFA ANALYTE (ng/L)	DW	GSI							MW-114S					
PFBA	NC	NC		<22 X	<10	<11	<31 X	<10	<10	NA	<9.8	<11	120	130
PFPeA	NC	NC		<4.0	<4.1	<4.3	<4.1	<4.0	<4.2	NA	<3.9	<4.2	110	120
4:2 FTS	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	99	110
PFHxA	400,000	NC		<2.0	<2.1	1.8 J	<2.1	2.2	1.7 J	NA	<2.0	<2.1	110	120
PFBS	420	NC		<2.0	1.8 J	2.1 J	1.8 J	1.8 J	1.9 J	NA	<2.0	<2.1	97	100
PFHpA	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	120	110
PFPeS	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	110	120
6:2 FTS	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	140	130
PFOA	4	12,000		2.1	<2.1	2.7	<2.1	2.1	2 J	NA	<2.0	<2.1	91	88
PFHxS	10	NC		<2.0	<2.1	2.5	<2.1	1.5 J	1.6 J	NA	<2.0	<2.1	120	120
PFHxS-LN	NC	NC		<2.0	<2.1	1.7 J	<2.1	1.5 J	1.6 J	NA	<2.0	<2.1	96	99
PFHxS-BR	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	16	18
PFNA	6	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	110	110
8:2 FTS	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	92	110
PFHpS	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	100	110
PFDA	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	120	120
N-MeFOSAA	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	120	130
EtFOSAA	NC	NC		<4.0	<4.1	<4.3	<4.1	<4.0	<4.2	NA	<3.9	<4.2	120	120
PFOS	4	12		92	3.9	5.9	11	28	33	NA	<2.0	<2.1	230	210
PFOS-LN	NC	NC		59	<2.1	1.3 J	5.2	14	18	NA	<2.0	<2.1	160	140
PFOS-BR	NC	NC		31	2.2	3.6	4.6	13	14	NA	<2.0	<2.1	66	66
PFUnDA	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	130	130
PFNS	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	110	120
PFDoDA	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	120	130
PFDS	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	130	130
PFTTrDA	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	120	130
FOSA	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	97	110
PFTeDA	NC	NC		<4.0	<4.1	<4.3	<4.1	<4.0	<4.2	NA	<3.9	<4.2	100	100
11Cl-PF3OUdS	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	120	130
9Cl-PF3ONS	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	120	110
ADONA	NC	NC		<2.0	<2.1	<2.2	<2.1	<2.0	<2.1	NA	<2.0	<2.1	76	95
HFPO-DA	NC	NC		<10.0	<10	<11	<10	<10	<10	NA	<9.8	<11	100	120

Table 1
Groundwater Analytical Results
RACER - Flint West # 12990

NOTES:

DW - Drinking Water Residential Generic Criteria.
GSI - Groundwater Surface Water Interface Generic Criteria per MDEQ Surface Water Division Rule 57.

Blank cells indicate no detectable concentrations	
Exceeds DW criteria	X
Exceeds GSI criteria	X
Exceeds both DW and GSI criteria	X
Compound also found in associated method blank, suggesting a laboratory artifact.	X
Insufficient data to develop criterion/no criterion	NC
Groundwater to Surface Water Interface Criteria - calculated based on 257ppm total hardness in the Flint River	G
Not Sampled	NS
Filtered in lab	1
Filtered and preserved in lab	2
Not analyzed	NA

PFAS criteria based on EGLE proposed drinking water criteria for selected PFAS compounds.

Perfluorobutanoic acid (PFBA)
Perfluoropentanoic acid (PFPeA)
Fluorotelomer sulfonic acid (4:2 FTS)
Perfluorohexanoic acid (PFHxA)
Perfluorobutane sulfonic acid (PFBS)
Perfluoroheptanoic acid (PFHpA)
Perfluoropentane sulfonic acid (PFPeS)
Fluorotelomer sulfonic acid (6:2 FTS)
Perfluorooctanoic acid (PFOA)
Perfluorohexane sulfonic acid (PFHxS)
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)
Perfluorononanoic acid (PFNA)
Fluorotelomer sulfonic acid (8:2 FTS)
Perfluoroheptane sulfonic acid (PFHpS)
Perfluorodecanoic acid (PFDA)

N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)
Perfluorooctane sulfonic acid (PFOS)
Perfluorooctane Sulfonic Acid - LN (PFOS-LN)
Perfluorooctane Sulfonic Acid - BR (PFOS-BR)
Perfluoroundecanoic acid (PFUnDA)
Perfluorononane sulfonic acid (PFNS)
Perfluorododecanoic acid (PFDoDA)
Perfluorodecane sulfonic acid (PFDS)
Perfluorotridecanoic acid (PFTrDA)
Perfluorooctane sulfonamide (FOSA)
Perfluorotetradecanoic acid (PFTeDA)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)
4,8-dioxa-3H-perfluorononanoic acid (ADONA)
Hexafluoropropylene oxide dimer (HFPO-DA)

Table 3
Analytical Methods and Holding Time Criteria
March 2024 Biannual Groundwater Sampling Event
RACER Flint West #12990, Flint, Michigan

Parameter	Analytical Method	Matrix	Sample ID	Holding Time (days)				Approved Holding Time
				Collection Date/Time	Extraction Date/Time	Latest Analytical Date/Time	Actual Holding Time (days)	
Chromium VI, Dissolved	SM3500-Cr	Groundwater	MW-112S-240917	09/17/24 11:25		09/18/24 10:26	0.96	24 Hours (1 Day)
		Groundwater	MW-110S-240917	09/17/24 12:40		09/18/24 10:40	0.92	
		Groundwater	MW-108S-240917	09/17/24 13:25		09/18/24 10:48	0.89	
		Groundwater	MW-114S-240917	09/17/24 14:02		09/18/24 10:56	0.87	
		Groundwater	MW-103S-240917	09/17/24 15:00		09/18/24 11:02	0.83	
		Groundwater	DUP-1-240917	09/17/24 14:02		09/18/24 11:09	0.88	
		Groundwater	MS(MW-103S-240917)	09/17/24 15:00		09/18/24 11:32	0.86	
		Groundwater	MSD(MW-103S-240917)	09/17/24 15:00		09/18/24 11:38	0.86	
		Water	EB-1-240917	09/17/24 15:10		09/18/24 11:44	0.86	
		Water	FB-1-240917	09/17/24 10:05		09/18/24 10:09	1.00	
Chromium VI, Total	SM3500-Cr	Groundwater	MW-112S-240917	09/17/24 11:25		09/18/24 09:12	0.91	24 Hours (1 Day)
		Groundwater	MW-110S-240917	09/17/24 12:40		09/18/24 09:33	0.87	
		Groundwater	MW-108S-240917	09/17/24 13:25		09/18/24 09:28	0.84	
		Groundwater	MW-114S-240917	09/17/24 14:02		09/18/24 09:39	0.82	
		Groundwater	MW-103S-240917	09/17/24 15:00		09/18/24 09:45	0.78	
		Groundwater	DUP-1-240917	09/17/24 14:02		09/18/24 09:51	0.83	
		Groundwater	MS(MW-103S-240917)	09/17/24 15:00		09/18/24 09:57	0.79	
		Groundwater	MSD(MW-103S-240917)	09/17/24 15:00		09/18/24 10:02	0.79	
		Water	EB-1-240917	09/17/24 15:10		09/18/24 10:14	0.79	
		Water	FB-1-240917	09/17/24 10:05		09/18/24 09:06	0.96	
Metals, Total	E200.8	Groundwater	MW-112S-240917	09/17/24 11:25	09/19/24 10:40	09/19/24 11:53	2.02	180 Days
		Groundwater	MW-110S-240917	09/17/24 12:40	09/19/24 10:40	09/19/24 11:58	1.97	
		Groundwater	MW-108S-240917	09/17/24 13:25	09/19/24 10:40	09/19/24 12:03	1.94	
		Groundwater	MW-114S-240917	09/17/24 14:02	09/19/24 10:40	09/19/24 12:13	1.92	
		Groundwater	MW-103S-240917	09/17/24 15:00	09/19/24 10:40	09/19/24 12:21	1.89	
		Groundwater	DUP-1-240917	09/17/24 14:02	09/19/24 10:40	09/19/24 12:36	1.94	
		Groundwater	MS(MW-103S-240917)	09/17/24 15:00	09/19/24 10:40	09/19/24 12:26	1.89	
		Groundwater	MSD(MW-103S-240917)	09/17/24 15:00	09/19/24 10:40	09/19/24 12:27	1.89	
		Water	EB-1-240917	09/17/24 15:10	09/19/24 10:40	09/19/24 12:44	1.90	
		Water	FB-1-240917	09/17/24 10:05	09/19/24 10:40	09/19/24 12:50	2.11	

Table 3
Analytical Methods and Holding Time Criteria
March 2024 Biannual Groundwater Sampling Event
RACER Flint West #12990, Flint, Michigan

Parameter	Analytical Method	Matrix	Sample ID	Holding Time (days)				Approved Holding Time
				Collection Date/Time	Extraction Date/Time	Latest Analytical Date/Time	Actual Holding Time (days)	
Metals, Dissolved (As, Cr, Cu, Pb, Se, Zn)	E200.8	Groundwater	MW-112S-240917	09/17/24 11:25	09/19/24 10:40	09/19/24 11:56	2.02	180 Days
		Groundwater	MW-110S-240917	09/17/24 12:40	09/19/24 10:40	09/19/24 12:01	1.97	
		Groundwater	MW-108S-240917	09/17/24 13:25	09/19/24 10:40	09/19/24 12:08	1.95	
		Groundwater	MW-114S-240917	09/17/24 14:02	09/19/24 10:40	09/19/24 12:18	1.93	
		Groundwater	MW-103S-240917	09/17/24 15:00	09/19/24 10:40	09/19/24 12:34	1.90	
		Groundwater	DUP-1-240917	09/17/24 14:02	09/19/24 10:40	09/19/24 12:39	1.94	
		Groundwater	MS(MW-103S-240917)	09/17/24 15:00	09/19/24 10:40	09/19/24 20:45	2.24	
		Groundwater	MSD(MW-103S-240917)	09/17/24 15:00	09/19/24 10:40	09/19/24 12:55	1.91	
		Water	EB-1-240917	09/17/24 15:10	09/19/24 10:40	09/19/24 12:47	1.90	
		Water	FB-1-240917	09/17/24 10:05	09/19/24 10:40	09/19/24 12:53	2.12	
VOCs	SW5030C /8260C	Groundwater	MW-112S-240917	09/17/24 11:25		09/19/24 18:02	2.28	14 Days
		Groundwater	MW-110S-240917	09/17/24 12:40		09/19/24 18:26	2.24	
		Groundwater	MW-108S-240917	09/17/24 13:25		09/19/24 18:49	2.22	
		Groundwater	MW-114S-240917	09/17/24 14:02		09/19/24 19:12	2.22	
		Groundwater	MW-103S-240917	09/17/24 15:00		09/19/24 19:35	2.19	
		Groundwater	DUP-1-240917	09/17/24 14:02		09/19/24 19:59	2.25	
		Groundwater	MS(MW-103S-240917)	09/17/24 15:00		09/19/24 20:45	2.24	
		Groundwater	MSD(MW-103S-240917)	09/17/24 15:00		09/19/24 21:08	2.26	
		Water	EB-1-240917	09/17/24 15:10		09/19/24 14:09	1.96	
		Water	FB-1-240917	09/17/24 10:05		09/19/24 14:33	2.19	
		Water	Trip Blank	09/17/24 00:01		09/19/24 14:56	2.62	
PFAS	ASTM D7979-19M	Groundwater	MW-112S-240917	09/17/24 11:25	09/18/24 11:00	09/18/24 19:09	1.32	14 Days to Extract 28 to Analyze
		Groundwater	MW-110S-240917	09/17/24 12:40	09/18/24 11:00	09/18/24 19:29	1.28	
		Groundwater	MW-108S-240917	09/17/24 13:25	09/18/24 11:00	09/18/24 19:49	1.27	
		Groundwater	MW-114S-240917	09/17/24 14:02	09/18/24 11:00	09/18/24 20:09	1.25	
		Groundwater	MW-103S-240917	09/17/24 15:00	09/18/24 11:00	09/19/24 11:53	1.87	
		Groundwater	DUP-1-240917	09/17/24 00:01	09/18/24 11:00	09/18/24 20:49	1.87	
		Groundwater	MS(MW-103S-240917)	09/17/24 15:00	09/18/24 11:00	09/19/24 12:13	1.88	
		Groundwater	MSD(MW-103S-240917)	09/17/24 15:00	09/18/24 11:00	09/18/24 21:29	1.27	
		Water	EB-1-240917	09/17/24 15:10	09/18/24 11:00	09/18/24 21:49	1.28	
		Water	Trip Blank	09/17/24 00:01	09/18/24 11:00	10/04/24 18:45	17.78	

Table 4
Qualified Sample Results Due to Outlying MS/MSD Results
September 2024 Biannual Groundwater Sampling Event
RACER Flint West #12990, Flint, Michigan

Analyte	MS or LCS % Recovery	MSD or LCSD Replicate % Recovery	RPD (percent)	Control Limits		Associated Samples	Qualified Result(s)
				% Recovery	RPD		
Report QC-S66316-01, Lab Sample ID: 240919A11.6631608N							
Methyl iodide	73.7	91.1	21.1	68.8-116.4	30	MW-103S, MW-108S, MW-110S, MW-112-S, MW-114-S, DUP-1, EB-1, FB-1, Trip Blank	None
Bromomethane	73.4	91.5	22.0	56.8-151.3	30		None
Report QC-S66318-01, Lab Sample ID: AK240918.LCS240918 LCS/LCSD							
FPePA (5:3 FTCA)	81.0	101.8	22.8	70.0-130.0	30	MW-103S, MW-108S, MW-110S, MW-112-S, MS-114-S, Dup-1 EB-1, FB-1 Trip Blank	None
PFTTrDA	107.0	103.6	21.1	70.0-130.0	30		None
PFDOS	122.0	99.0	20.8	70.0-130.0	30		None
Report QC-S66318-01, Lab Sample ID: AK240918P46LIST.LCS240918 LCS/LCSD							
FPePA (5:3 FTCA)	81.4	101.8	22.3	70.0-130.0	30	MW-103S, MW-108S, MW-110S, MW-112-S, MS-114-S, Dup-1 EB-1, FB-1 Trip Blank	None
PFTTrDA	107.0	101.8	21.1	70.0-130.0	30		None
PFDOS	122.0	99.0	20.8	70.0-130.0	30		None

Table 4
Qualified Sample Results Due to Outlying MS/MSD Results
September 2024 Biannual Groundwater Sampling Event
RACER Flint West #12990, Flint, Michigan

Analyte	MS or LCS % Recovery	MSD or LCSD Replicate % Recovery	RPD (percent)	Control Limits		Associated Samples	Qualified Result(s)
				% Recovery	RPD		
Report QC-S66318-01, Lab Sample ID AK240918.6631807R MS/MSD							
ADONA	75.2	94.1	22.2	70.0-130.0	30	MW-103S, MW-108S, MW-110S, MW-112-S, MS-114-S, Dup-1 EB-1, FB-1 Trip Blank	None

Table 5
Field Sample Duplicate Results and Relative Percent Differences (RPD)
September 2024 Biannual Groundwater Sampling Event
RACER Flint West #12990, Flint, Michigan

Analyte	09/17/2024 14:02	Dup-1	RPD (%)
Arsenic, Dissolved	20	20	0.0
Arsenic	35	36	2.8
Chromium VI, Dissolved	<10	<10	--
Chromium VI	<50	<50	--
Chromium, Dissolved	<5	<5	--
Chromium	<5	<5	--
Copper, Dissolved	<5	4.631	--
Copper	1.179	1.051	11.5
Lead, Dissolved	<3	<3	--
Lead	0.558	0.525	6.1
Selenium, Dissolved	<5	<5	--
Selenium	<5	<5	--
Zinc, Dissolved	12	15	22.2
Zinc	19	20	5.1
Acetone	<50	<50	--
Acrylonitrile	<2	<2	--
2-Butanone (MEK)	<25	<25	--
Benzene	<1	<1	--
n-Butylbenzene	<1	<1	--
Bromobenzene	<1	<1	--
Bromochloromethane	<1	<1	--
Bromodichloromethane	<1	<1	--
Bromoform	<1	<1	--
Bromomethane	<5	<5	--
sec-Butylbenzene	<1	<1	--
tert-Butylbenzene	<1	<1	--
Carbon disulfide	<5	<5	--
Carbon tetrachloride	<1	<1	--
Chlorobenzene	<1	<1	--
Chloroethane	<5	<5	--
Chloroform	<1	<1	--
Chloromethane	<5	<5	--
1,1-Dichloroethane	1	1	0.0
1,1-Dichloroethene	0.56	0.64	13.3
1,2-Dibromo-3-chloropropane	<5	<5	--
1,2-Dibromoethane	<1	<1	--
1,2-Dichlorobenzene	<1	<1	--
1,2-Dichloroethane	<1	<1	--
1,2-Dichloropropane	<1	<1	--
1,3-Dichlorobenzene	<1	<1	--
1,4-Dichlorobenzene	<1	<1	--
cis-1,2-Dichloroethene	58	58	0.0
cis-1,3-Dichloropropene	<1	<1	--

Table 5
Field Sample Duplicate Results and Relative Percent Differences (RPD)
September 2024 Biannual Groundwater Sampling Event
RACER Flint West #12990, Flint, Michigan

Analyte	09/17/2024 14:02	Dup-1	RPD (%)
Dibromochloromethane	<5	<5	--
Dibromomethane	<5	<5	--
Dichlorodifluoromethane	<5	<5	--
Diethyl ether	<10	<10	--
trans-1,2-Dichloroethene	0.64	0.61	4.8
trans-1,3-Dichloropropene	<1	<1	--
trans-1,4-Dichloro-2-butene	<1	<1	--
Ethylbenzene	<1	<1	--
2-Hexanone	<50	<50	--
Hexachloroethane	<5	<5	--
p-Isopropyltoluene	<5	<5	--
Isopropylbenzene	<5	<5	--
2-Methylnaphthalene	<5	<5	--
4-Methyl-2-pentanone (MIBK)	<50	<50	--
tert-Methyl butyl ether (MTBE)	<5	<5	--
Methyl iodide	<1	<1	--
Methylene chloride	<5	<5	--
Naphthalene	<5	<5	--
n-Propylbenzene	<1	<1	--
Styrene	<1	<1	--
1,1,1,2-Tetrachloroethane	<1	<1	--
1,1,1-Trichloroethane	<1	<1	--
1,1,2,2-Tetrachloroethane	<1	<1	--
1,1,2-Trichloroethane	<1	<1	--
1,2,3-Trichlorobenzene	<5	<5	--
1,2,3-Trichloropropane	<1	<1	--
1,2,3-Trimethylbenzene	<1	<1	--
1,2,4-Trichlorobenzene	<5	<5	--
1,2,4-Trimethylbenzene	<1	<1	--
1,3,5-Trimethylbenzene	<1	<1	--
Tetrachloroethene	<1	<1	--
Tetrahydrofuran	<90	<90	--
Toluene	<1	<1	--
Trichloroethene	216	213	1.4
Trichlorofluoromethane	<1	<1	--
Vinyl chloride	4	4	0.0
o-Xylene	<1	<1	--
p,m-Xylene	<2	<2	--
Xylenes, Total	<3	<3	--

Table 5
Field Sample Duplicate Results and Relative Percent Differences (RPD)
September 2024 Biannual Groundwater Sampling Event
RACER Flint West #12990, Flint, Michigan

Analyte	MW-114S (Groundwater)		
	09/17/2023 14:02	Dupe	RPD (%)
PFBA	<10	<10	--
PFPeA	<4.0	<4.2	--
4:2 FTSA	<2.0	<2.1	--
PFHxA	2.2	1.7	25.6
PFBS	1.8	1.9	5.4
PFHpA	<2.0	<2.1	--
PFPeS	<2.0	<2.1	--
6:2 FTSA	<2.0	<2.1	--
PFOA	2.1	2	4.9
PFHxS	1.5	1.6	6.5
PFHxS-LN	1.5	1.6	6.5
PFHxS-BR	<2.0	<2.1	--
PFNA	<2.0	<2.1	--
8:2 FTSA	<2.0	<2.1	--
PFHpS	<2.0	<2.1	--
PFDA	<2.0	<2.1	--
N-MeFOSAA	<2.0	<2.1	--
EtFOSAA	<4.0	<4.2	--
PFOS	28	33	16.4
PFOS-LN	14	18	25.0
PFOS-BR	13	14	7.4
PFUnDA	<2.0	<2.1	--
PFNS	<2.0	<2.1	--
PFDoDA	<2.0	<2.1	--
PFDS	<2.0	<2.1	--
PFTTrDA	<2.0	<2.1	--
FOSA	<2.0	<2.1	--
PFTeDA	<4.0	<4.2	--
11Cl-PF3OUdS	<2.0	<2.1	--
9Cl-PF3ONS	<2.0	<2.1	--
ADONA	<2.0	<2.1	--
HFPO-DA	<10	<10	--

NOTE: Since this validation report is included as an Appendix to the December 2024 Data Report, Copies of the laboratory reports are included in the December 2024 Data Report as Appendix B, Attachment 3 and are not duplicated here.