Memo

SUBJECT
2023 Joslyn Temporary Monitoring Plan
First and Second Quarter Results

TO
Emily Bertolini, EGLE
Peter Ramanauskas, USEPA

DATE
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This memorandum summarizes the results of the first and second quarter (1Q and 2Q) monitoring events completed as part of the Joslyn Temporary Monitoring Plan (JTMP) at the Joslyn South Parcel of the Revitalizing Auto Communities Environmental Response Trust (RACER) Pontiac North Campus Site (Site) located in Pontiac, Michigan. The quarterly event (1Q) and semi-annual event (2Q) consisted of gauging and sampling select monitoring wells at the Site. The monitoring locations included for both events are shown on **Figure 1**.

On March 6th (1Q) and June 19th (2Q), 2023, Arcadis began monitoring activities by gauging Site monitoring wells. Following each gauging event, monitoring wells were sampled for site-specific volatile organic compounds (VOCs). Groundwater sampling logs are included as **Attachment 1**. All groundwater samples were submitted to Merit Laboratories and analyzed for VOCs via United State Environmental Protection Agency (USEPA) Method. The analytical reports from Merit are provided as **Attachment 2**. The results of the gauging and sampling are summarized in the attached tables:

- **Table 1** – Summary of Groundwater Elevations
- **Table 2** – Summary of Monitoring Well Analytical Results

Groundwater Gauging

Monitoring wells were gauged for depth to water and total depth using an electronic water level meter and were measured to the nearest 0.01-foot. The groundwater elevation data was used to create the groundwater elevation contour figures included as **Figure 2A** and **2B**. As shown on **Figure 2A** and **2B**, although the groundwater elevation within the shallow monitoring wells varies depending on the saturated unit screened by each well, the groundwater gradient is generally to the east-southeast on the Jocelyn South Parcel.

Groundwater Analytical Summary

Groundwater samples were collected from 10 monitoring wells in 1Q (quarterly event), and 16 monitoring wells in 2Q (semi-annual event) and submitted for analysis of VOCs. A summary of the monitoring wells sampled and exceedances of the Groundwater Surface Water Interface (GSI) Criteria and Site-Specific Volatilization to Indoor Air Criteria (SSVIAC) for groundwater is shown on **Figure 3**. The following is based on the analytical results from the groundwater sampling:

- Elevated VOC detections remain within and just South of the former gas station footprint and decrease toward the property boundaries.
- The majority of residential SSVIAC exceedances are on the south-southeast portion of the parcel near the former pump island and historical site structures.
- One offsite monitoring well, JS-MW-29, has a low-level ethylbenzene exceedance for residential SSVIAC within the northern Lenox Street ROW.

Emily Bertolini, EGLE
Peter Ramanauskas, USEPA
October 11, 2023

Closing

The 3Q JTMP monitoring event was completed September 25th and 26th, 2023, with groundwater gauging completed on September 22nd. Following receipt of the 4th quarter results, a comprehensive summary report will be prepared to evaluate trends and evaluate the overall groundwater conceptual site model. Based on the results, recommendation as appropriate for any next steps will be provided to EGLE and USEPA for review and comment. For any questions related to the 1st and 2nd quarter JTMP results contact Dave Favero by phone at 217-741-6235 or by email at dfavero@racertrust.org, or Tiffany Linder by phone at 810-225-1928 or by email at Tiffany.Linder@arcadis.com.

Enclosures:

Tables:

Table 1 – Summary of Groundwater Elevations

Table 2 – Summary of Monitoring Well Analytical Results

Figures:

Figure 1 – Joslyn South Parcel Temporary Groundwater Monitoring Plan Summary

Figure 2A – Joslyn Groundwater Contour Map – March 8, 2023

Figure 2B – Joslyn Groundwater Contour Map – June 19, 2023

Figure 3 – Joslyn South Parcel 2023 Semiannual Groundwater Analytical Results

Attachments:

Attachment 1 – Groundwater Sampling Logs

Attachment 2 – Analytical Reports

TABLES

Table 1
Summary of Groundwater Elevations
Joslyn South Parcel
RACER Trust Pontiac North Campus

Well ID	Ground Elevation	Well Elevation [1]	Total Depth (ft)	Date	Depth to Water (ft)[2]	Groundwater Elevation
Joslyn-Wesbrook South Parcel Monitoring Wells						
JS-MW-03	987.34	987.11	13.83	3/8/2023	13.40	973.71
JS-MW-04	987.69	987.49	13.68	3/8/2023	4.67	982.82
JS-MW-05	986.29	985.94	10.30	3/8/2023	2.45	983.49
JS-MW-06	984.97	984.71	13.92	3/8/2023	13.76	970.95
JS-MW-07	985.74	985.42	14.62	3/8/2023	12.56	972.86
JS-MW-09	986.99	986.61	13.01	3/8/2023	11.29	975.32
JS-MW-10	986.96	986.72	15.72	3/8/2023	11.68	975.04
JS-MW-11	985.69	985.40	13.79	3/8/2023	12.07	973.33
JS-MW-16	985.75	985.34	15.86	3/8/2023	13.17	972.17
JS-MW-19	984.48	984.05	16.70	3/8/2023	16.70	967.35
JS-MW-20	986.07	985.64	17.82	3/8/2023	13.09	972.55
JS-MW-21	984.13	983.59	16.86	3/8/2023	13.05	970.54
JS-MW-22	983.52	983.14	17.71	3/8/2023	12.66	970.48
JS-MW-23	984.63	984.30	10.34	3/8/2023	0.60	983.70
JS-MW-24	983.70	983.32	7.25	3/8/2023	0.02	983.30
JS-MW-25	983.51	983.11	7.35	3/8/2023	1.79	981.32
JS-MW-26	984.64	984.22	18.05	3/8/2023	10.17	974.05
JS-MW-27	987.90	987.55	15.73	3/8/2023	11.47	976.08
JS-MW-28	985.72	985.26	9.70	3/8/2023	1.27	983.99
JS-MW-29	985.28	984.93	10.20	3/8/2023	2.13	982.80
JS-MW-30	984.54	984.07	8.19	3/8/2023	0.70	983.37

Abbreviations:
ft - feet

Footnotes:
[1] Top of Temporary Well Casing/Stickup Elevation is in feet National Vertical Geodetic Datum (1988).
[2] Depth to water measurements collected from top of temporary well casing/stickup.

Table 2
Summary of Monitoring Well Analytical Results
Joslyn South Parcel
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Res Joslyn SSVIAC BASE	NR Joslyn SSVIAC <50k SOG	Location ID	JS-MW-04	JS-MW-04	JS-MW-05	JS-MW-05	JS-MW-06	JS-MW-09	JS-MW-09	JS-MW-10	JS-MW-10	JS-MW-11
							Date Collected	3/9/2023	6/20/2023	3/13/2023	6/20/2023	6/19/2023	3/9/2023	6/20/2023	3/13/2023	6/19/2023	6/19/2023
VOCs																	
1,1,1,2-Tetrachloroethane	ug/L	--	77	320	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,1,1-Trichloroethane	ug/L	89	200	200	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,1,2,2-Tetrachloroethane	ug/L	78	9	35.0	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,1,2-Trichloroethane	ug/L	330	5.0	5.0	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,1-Dichloroethane	ug/L	740	880	2,500	**4.7**	*40*		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,1-Dichloroethene	ug/L	130	7.0	7.0	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,2,3-Trichlorobenzene	ug/L	--	--	--	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
1,2,3-Trichloropropane	ug/L	--	42	120	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,2,3-Trimethylbenzene	ug/L	--	--	--	**43**	*150*		< 1 U [<1 U]	< 1 U	< 1 U	***159***	2	***380 Y***	***470 Y***	< 1 U	< 1 U [< 1 U]	< 1 U
1,2,4-Trichlorobenzene	ug/L	99	70	70	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
1,2,4-Trimethylbenzene	ug/L	17	63	63	**25**	*120*		< 1 U [<1 U]	< 1 U	< 1 U	***220 Y***	20	***1,350 Y***	***1,740 Y***	< 1 U	< 1 U [< 1 U]	1
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	--	0.2	0.2	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	5.7	0.05	0.05	**0.13**	*0.39*		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,2-Dichlorobenzene	ug/L	13	600	600	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,2-Dichloroethane	ug/L	360	5.0	5.0	**1.4**	*5.1*		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	***8***	**4 [4]**	< 1 U
1,2-Dichloropropane	ug/L	230	5.0	5.0	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,3,5-Trimethylbenzene	ug/L	45	72	72	**18**	*110*		< 1 U [<1 U]	< 1 U	< 1 U	***147***	< 1 U	***390 Y***	***520 Y***	< 1 U	< 1 U [< 1 U]	< 1 U
1,3-Dichlorobenzene	ug/L	28	7	19.0	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
1,4-Dichlorobenzene	ug/L	17	75	75	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	2,200	13,000	38,000	**2,600**	*12,000*		< 25 U [<25 U]	< 25 U	< 25 U	46	< 25 U	< 1,300 UY	< 1,300 UY	< 25 U	< 25 U [< 25 U]	< 25 U
2-Hexanone	ug/L	--	1,000	2,900	--	--		< 50 U [<50 U]	< 50 U	< 50 U	< 50 U	< 50 U	< 2,500 UY	< 2,500 UY	< 50 U	< 50 U [< 50 U]	< 50 U
2-Methylnaphthalene	ug/L	19	260	750	**66**	*110*		< 5 U [<5 U]	< 5 U	< 5 U	40	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
2-Phenylbutane (sec-Butylbenzene)	ug/L	--	80	230	**270**	*400*		< 1 U [<1 U]	< 1 U	< 1 U	1	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	--	1,800	5,200	**200**	*5,000*		< 50 U [<50 U]	< 50 U	< 50 U	< 50 U	< 50 U	< 2,500 UY	< 2,500 UY	< 50 U	< 50 U [< 50 U]	< 50 U
Acetone	ug/L	1,700	730	2,100	**50,000**	*200,000*		< 50 U [<50 U]	< 50 U	< 50 U	< 105 UX	< 50 U	< 2,500 UY	< 2,500 UY	< 50 U	< 50 U [< 50 U]	< 50 U
Acrylonitrile	ug/L	2.0	3	11.0	--	--		< 2 U [<2 U]	< 2 U	< 2 U	< 2 U	< 2 U	< 100 UY	< 100 UY	< 2 U	< 2 U [< 2 U]	< 2 U
Benzene	ug/L	200	5.0	5.0	**1.0**	*8.4*		< 1 U [<1 U]	< 1 U	< 1 U	***590 Y***	< 1 U	***520 Y***	***410 Y***	***102***	***44 [47]***	< 1 U
Bromobenzene	ug/L	--	18	50	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Bromodichloromethane	ug/L	--	80	80	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Bromoform	ug/L	--	80	80	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Bromomethane (Methyl bromide)	ug/L	5.0	10	29	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
Carbon disulfide	ug/L	--	800	2,300	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
Carbon tetrachloride	ug/L	38	5.0	5.0	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Chlorobenzene	ug/L	25	100	100	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Chlorobromomethane	ug/L	--	--	--	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Chloroethane	ug/L	1,100	430	1,700	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
Chloroform (Trichloromethane)	ug/L	350	80	80	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Chloromethane (Methyl chloride)	ug/L	--	260	1,100	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
cis-1,2-Dichloroethene	ug/L	620	70	70	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
cis-1,3-Dichloropropene	ug/L	--	--	--	--	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Cymene (p-Isopropyltoluene)	ug/L	--	--	--	--	--		< 5 U [<5 U]	< 5 U	< 5 U	5	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
Dibromochloromethane	ug/L	--	80	80	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
Dibromomethane	ug/L	--	80	230	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
Dichlorodifluoromethane (CFC-12)	ug/L	--	1,700	4,800	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
Ethyl ether	ug/L	--	10	10	--	--		< 10 U [<10 U]	< 10 U	< 10 U	< 10 U	< 10 U	< 500 UY	< 500 UY	< 10 U	< 10 U [< 10 U]	< 10 U
Ethylbenzene	ug/L	18	74	74	**2.8**	*28*		< 1 U [<1 U]	< 1 U	< 1 U	***300 Y***	**16**	***1,610 Y***	***1,500 Y***	< 1 U	< 1 U [< 1 U]	< 1 U
Hexachloroethane	ug/L	6.7	7	21.0	--	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U

Table 2
Summary of Monitoring Well Analytical Results
Joslyn South Parcel
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Res Joslyn SSVIAC BASE	NR Joslyn SSVIAC <50k SOG	Location ID	JS-MW-04	JS-MW-04	JS-MW-05	JS-MW-05	JS-MW-06	JS-MW-09	JS-MW-09	JS-MW-10	JS-MW-10	JS-MW-11
							Date Collected	3/9/2023	6/20/2023	3/13/2023	6/20/2023	6/19/2023	3/9/2023	6/20/2023	3/13/2023	6/19/2023	6/19/2023
Iodomethane	ug/L	--	--	--	**--**	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Isopropyl benzene	ug/L	28	800	2,300	**0.60**	*6.7*		< 5 U [<5 U]	< 5 U	< 5 U	***12***	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
m&p-Xylene	ug/L	--	--	--	**--**	--		< 2 U [<2 U]	2	< 2 U	1,020 Y	26	5,000 Y	4,800 Y	< 2 U	< 2 U [< 2 U]	< 2 U
Methyl tert butyl ether (MTBE)	ug/L	7,100	40	40	**250**	*810*		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
Methylene chloride	ug/L	1,500	5.0	5.0	**--**	--		< 5 U [<5 U]	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 300 UY	< 5 U	< 5 U [< 5 U]	< 5 U
Naphthalene	ug/L	11	520	1,500	**4.2**	*12*		< 5 U [<5 U]	< 5 U	< 5 U	***100 Y***	< 5 U	< 300 UY	***300 Y***	< 5 U	< 5 U [< 5 U]	< 5 U
N-Butylbenzene	ug/L	--	80	230	**44**	*360*		< 1 U [<1 U]	< 1 U	< 1 U	< 14 UX	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
N-Propylbenzene	ug/L	--	80	230	**43**	*970*		< 1 U [<1 U]	< 1 U	< 1 U	41	3	**170 Y**	**170 Y**	< 1 U	< 1 U [< 1 U]	< 1 U
o-Xylene	ug/L	--	--	--	**--**	--		< 1 U [<1 U]	< 1 U	< 1 U	25	< 1 U	100 Y	90 Y	< 1 U	< 1 U [< 1 U]	< 1 U
Styrene	ug/L	80	100	100	**33**	*170*		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
tert-Butylbenzene	ug/L	--	80	230	**0.077**	*0.71*		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Tetrachloroethene	ug/L	60	5.0	5.0	**--**	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Tetrahydrofuran	ug/L	11,000	95	270	**--**	--		< 90 U [<90 U]	< 90 U	< 90 U	< 90 U	< 90 U	< 4,500 UY	< 4,500 UY	< 90 U	< 90 U [< 90 U]	< 90 U
Toluene	ug/L	270	790	790	**300**	*6,600*		< 1 U [<1 U]	< 1 U	< 1 U	65	< 1 U	130 Y	100 Y	< 1 U	< 1 U [< 1 U]	< 1 U
trans-1,2-Dichloroethene	ug/L	1,500	100	100	**--**	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
trans-1,3-Dichloropropene	ug/L	--	--	--	**--**	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
trans-1,4-Dichloro-2-butene	ug/L	--	--	--	**--**	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Trichloroethene	ug/L	200	5.0	5.0	**--**	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Trichlorofluoromethane (CFC-11)	ug/L	--	2,600	7,300	**--**	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U
Vinyl chloride	ug/L	13	2.0	2.0	**--**	--		< 1 U [<1 U]	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 50 UY	< 1 U	< 1 U [< 1 U]	< 1 U

Table 2
Summary of Monitoring Well Analytical Results
Joslyn South Parcel
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Res Joslyn SSVIAC BASE	NR Joslyn SSVIAC <50k SOG	Location ID	JS-MW-16	JS-MW-16	JS-MW-19	JS-MW-19	JS-MW-20	JS-MW-20	JS-MW-21	JS-MW-21	JS-MW-22	JS-MW-23
							Date Collected	3/9/2023	6/22/2023	3/9/2023	6/20/2023	3/13/2023	6/20/2023	3/13/2023	6/21/2023	3/13/2023	3/14/2023
VOCs																	
1,1,1,2-Tetrachloroethane	ug/L	--	77	320	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,1-Trichloroethane	ug/L	89	200	200	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	ug/L	78	9	35.0	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	ug/L	330	5.0	5.0	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	ug/L	740	880	2,500	**4.7**	*40*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	ug/L	130	7.0	7.0	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,3-Trichlorobenzene	ug/L	--	--	--	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
1,2,3-Trichloropropane	ug/L	--	42	120	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,3-Trimethylbenzene	ug/L	--	--	--	**43**	*150*		2	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,4-Trichlorobenzene	ug/L	99	70	70	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
1,2,4-Trimethylbenzene	ug/L	17	63	63	**25**	*120*		2	13	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	--	0.2	0.2	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	5.7	0.05	0.05	**0.13**	*0.39*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	ug/L	13	600	600	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	ug/L	360	5.0	5.0	**1.4**	*5.1*		***12***	**3**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	ug/L	230	5.0	5.0	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3,5-Trimethylbenzene	ug/L	45	72	72	**18**	*110*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	ug/L	28	7	19.0	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	ug/L	17	75	75	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	2,200	13,000	38,000	**2,600**	*12,000*		< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U
2-Hexanone	ug/L	--	1,000	2,900	--	--		< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U
2-Methylnaphthalene	ug/L	19	260	750	**66**	*110*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
2-Phenylbutane (sec-Butylbenzene)	ug/L	--	80	230	**270**	*400*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	--	1,800	5,200	**200**	*5,000*		< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U
Acetone	ug/L	1,700	730	2,100	**50,000**	*200,000*		< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U
Acrylonitrile	ug/L	2.0	3	11.0	--	--		< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Benzene	ug/L	200	5.0	5.0	**1.0**	*8.4*		**4**	**3**	< 1 U	**4**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromobenzene	ug/L	--	18	50	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromodichloromethane	ug/L	--	80	80	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	ug/L	--	80	80	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromomethane (Methyl bromide)	ug/L	5.0	10	29	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Carbon disulfide	ug/L	--	800	2,300	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Carbon tetrachloride	ug/L	38	5.0	5.0	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	ug/L	25	100	100	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobromomethane	ug/L	--	--	--	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	ug/L	1,100	430	1,700	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Chloroform (Trichloromethane)	ug/L	350	80	80	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane (Methyl chloride)	ug/L	--	260	1,100	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
cis-1,2-Dichloroethene	ug/L	620	70	70	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	ug/L	--	--	--	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Cymene (p-Isopropyltoluene)	ug/L	--	--	--	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Dibromochloromethane	ug/L	--	80	80	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Dibromomethane	ug/L	--	80	230	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Dichlorodifluoromethane (CFC-12)	ug/L	--	1,700	4,800	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Ethyl ether	ug/L	--	10	10	--	--		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Ethylbenzene	ug/L	18	74	74	**2.8**	*28*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Hexachloroethane	ug/L	6.7	7	21.0	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U

Table 2
Summary of Monitoring Well Analytical Results
Joslyn South Parcel
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Res Joslyn SSVIAC BASE	NR Joslyn SSVIAC <50k SOG	Location ID	JS-MW-16	JS-MW-16	JS-MW-19	JS-MW-19	JS-MW-20	JS-MW-20	JS-MW-21	JS-MW-21	JS-MW-22	JS-MW-23
							Date Collected	3/9/2023	6/22/2023	3/9/2023	6/20/2023	3/13/2023	6/20/2023	3/13/2023	6/21/2023	3/13/2023	3/14/2023
Iodomethane	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Isopropyl benzene	ug/L	28	800	2,300	**0.60**	*6.7*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
m&p-Xylene	ug/L	--	--	--	**--**	--		5	15	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Methyl tert butyl ether (MTBE)	ug/L	7,100	40	40	**250**	*810*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Methylene chloride	ug/L	1,500	5.0	5.0	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Naphthalene	ug/L	11	520	1,500	**4.2**	*12*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
N-Butylbenzene	ug/L	--	80	230	**44**	*360*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
N-Propylbenzene	ug/L	--	80	230	**43**	*970*		< 1 U	5	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	1
o-Xylene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Styrene	ug/L	80	100	100	**33**	*170*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
tert-Butylbenzene	ug/L	--	80	230	**0.077**	*0.71*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Tetrachloroethene	ug/L	60	5.0	5.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Tetrahydrofuran	ug/L	11,000	95	270	**--**	--		< 90 U	< 90 U	< 90 U	< 90 U	< 90 U	< 90 U	< 90 U	< 90 U	< 90 U	< 90 U
Toluene	ug/L	270	790	790	**300**	*6,600*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	ug/L	1,500	100	100	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,4-Dichloro-2-butene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	ug/L	200	5.0	5.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichlorofluoromethane (CFC-11)	ug/L	--	2,600	7,300	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	ug/L	13	2.0	2.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Table 2
Summary of Monitoring Well Analytical Results
Joslyn South Parcel
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Res Joslyn SSVIAC BASE	NR Joslyn SSVIAC <50k SOG	Location ID	JS-MW-23	JS-MW-24	JS-MW-24	JS-MW-26	JS-MW-27	JS-MW-27	JS-MW-29	JS-MW-30	JS-MW-30
							Date Collected	6/21/2023	3/14/2023	6/22/2023	6/21/2023	3/9/2023	6/22/2023	6/22/2023	3/14/2023	6/21/2023
VOCs																
1,1,1,2-Tetrachloroethane	ug/L	--	77	320	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,1,1-Trichloroethane	ug/L	89	200	200	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	ug/L	78	9	35.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	ug/L	330	5.0	5.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	ug/L	740	880	2,500	**4.7**	*40*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	ug/L	130	7.0	7.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,2,3-Trichlorobenzene	ug/L	--	--	--	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
1,2,3-Trichloropropane	ug/L	--	42	120	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,2,3-Trimethylbenzene	ug/L	--	--	--	**43**	*150*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,2,4-Trichlorobenzene	ug/L	99	70	70	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
1,2,4-Trimethylbenzene	ug/L	17	63	63	**25**	*120*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	--	0.2	0.2	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	5.7	0.05	0.05	**0.13**	*0.39*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	ug/L	13	600	600	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	ug/L	360	5.0	5.0	**1.4**	*5.1*		< 1 U	< 1 U	< 1 U	< 1 U	1 [1]	1 [1]	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	ug/L	230	5.0	5.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,3,5-Trimethylbenzene	ug/L	45	72	72	**18**	*110*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	ug/L	28	7	19.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	ug/L	17	75	75	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	2,200	13,000	38,000	**2,600**	*12,000*		< 25 U	< 25 U	< 25 U	< 25 U	< 25 U [<25 U]	< 25 U [< 25 U]	< 25 U	< 25 U	< 25 U
2-Hexanone	ug/L	--	1,000	2,900	**--**	--		< 50 U	< 50 U	< 50 U	< 50 U	< 50 U [<50 U]	< 50 U [< 50 U]	< 50 U	< 50 U	< 50 U
2-Methylnaphthalene	ug/L	19	260	750	**66**	*110*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
2-Phenylbutane (sec-Butylbenzene)	ug/L	--	80	230	**270**	*400*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	2	< 1 U	< 1 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	--	1,800	5,200	**200**	*5,000*		< 50 U	< 50 U	< 50 U	< 50 U	< 50 U [<50 U]	< 50 U [< 50 U]	< 50 U	< 50 U	< 50 U
Acetone	ug/L	1,700	730	2,100	**50,000**	*200,000*		< 50 U	< 50 U	< 50 U	< 50 U	< 50 U [<50 U]	< 50 U [< 50 U]	< 50 U	< 50 U	< 50 U
Acrylonitrile	ug/L	2.0	3	11.0	**--**	--		< 2 U	< 2 U	< 2 U	< 2 U	< 2 U [<2 U]	< 2 U [< 2 U]	< 2 U	< 2 U	< 2 U
Benzene	ug/L	200	5.0	5.0	**1.0**	*8.4*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Bromobenzene	ug/L	--	18	50	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Bromodichloromethane	ug/L	--	80	80	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Bromoform	ug/L	--	80	80	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Bromomethane (Methyl bromide)	ug/L	5.0	10	29	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
Carbon disulfide	ug/L	--	800	2,300	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
Carbon tetrachloride	ug/L	38	5.0	5.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Chlorobenzene	ug/L	25	100	100	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Chlorobromomethane	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Chloroethane	ug/L	1,100	430	1,700	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
Chloroform (Trichloromethane)	ug/L	350	80	80	**--**	--		1	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Chloromethane (Methyl chloride)	ug/L	--	260	1,100	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
cis-1,2-Dichloroethene	ug/L	620	70	70	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Cymene (p-Isopropyltoluene)	ug/L	--	--	--	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
Dibromochloromethane	ug/L	--	80	80	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
Dibromomethane	ug/L	--	80	230	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
Dichlorodifluoromethane (CFC-12)	ug/L	--	1,700	4,800	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
Ethyl ether	ug/L	--	10	10	**--**	--		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U [<10 U]	< 10 U [< 10 U]	< 10 U	< 10 U	< 10 U
Ethylbenzene	ug/L	18	74	74	**2.8**	*28*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	**3**	< 1 U	< 1 U
Hexachloroethane	ug/L	6.7	7	21.0	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U

Table 2
Summary of Monitoring Well Analytical Results
Joslyn South Parcel
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Res Joslyn SSVIAC BASE	NR Joslyn SSVIAC <50k SOG	Location ID	JS-MW-23	JS-MW-24	JS-MW-24	JS-MW-26	JS-MW-27	JS-MW-27	JS-MW-29	JS-MW-30	JS-MW-30
							Date Collected	6/21/2023	3/14/2023	6/22/2023	6/21/2023	3/9/2023	6/22/2023	6/22/2023	3/14/2023	6/21/2023
Iodomethane	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Isopropyl benzene	ug/L	28	800	2,300	**0.60**	*6.7*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
m&p-Xylene	ug/L	--	--	--	**--**	--		< 2 U	< 2 U	< 2 U	< 2 U	< 2 U [<2 U]	< 2 U [< 2 U]	< 2 U	< 2 U	< 2 U
Methyl tert butyl ether (MTBE)	ug/L	7,100	40	40	**250**	*810*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
Methylene chloride	ug/L	1,500	5.0	5.0	**--**	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
Naphthalene	ug/L	11	520	1,500	**4.2**	*12*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U [<5 U]	< 5 U [< 5 U]	< 5 U	< 5 U	< 5 U
N-Butylbenzene	ug/L	--	80	230	**44**	*360*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	4	< 1 U	< 1 U
N-Propylbenzene	ug/L	--	80	230	**43**	*970*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	17	< 1 U	< 1 U
o-Xylene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Styrene	ug/L	80	100	100	**33**	*170*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
tert-Butylbenzene	ug/L	--	80	230	**0.077**	*0.71*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Tetrachloroethene	ug/L	60	5.0	5.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Tetrahydrofuran	ug/L	11,000	95	270	**--**	--		< 90 U	< 90 U	< 90 U	< 90 U	< 90 U [<90 U]	< 90 U [< 90 U]	< 90 U	< 90 U	< 90 U
Toluene	ug/L	270	790	790	**300**	*6,600*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	ug/L	1,500	100	100	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
trans-1,4-Dichloro-2-butene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Trichloroethene	ug/L	200	5.0	5.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Trichlorofluoromethane (CFC-11)	ug/L	--	2,600	7,300	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U
Vinyl chloride	ug/L	13	2.0	2.0	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U [<1 U]	< 1 U [< 1 U]	< 1 U	< 1 U	< 1 U

Table 2
Summary of Monitoring Well Analytical Results
Joslyn South Parcel
RACER Trust Pontiac North Campus

Notes:

1) Criteria listed are from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Clean Up Criteria Requirements Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, December 21, 2020.

2) Criteria listed are from the EGLE Joslyn Site-Specific Criteria Evaluation dated May 3, 2022.

3) Nonresidential SSVIAC was calculated from the Residential EGLE site-specific criteria.

4) Grey shaded values denotes exceedance and/or equal to Michigan Groundwater Surface Water Interface criteria

5) Yellow highlighted values denotes exceedance and/or equal to Michigan Residential Drinking Water criteria

6) Orange highlighted values denotes exceedance and/or equal to Nonresidential Drinking Water criteria

7) Values in bold denotes exceedance and/or equal to Residential Joslyn site-specific volatilization to indoor air criteria

8) Italicized values denotes exceedance and/or equal to Nonresidential Joslyn site-specific volatilization to indoor air criteria <50k - Basement scenario

9) Duplicate analyses are presented in brackets.

10) Samples were analyzed by EPA Method SW5030C/8260C

Abbreviations:

<	Not detected above the laboratory reporting limit
ug/L	Micrograms per liter
S	Surrogate recovery outside of control limits
U	Compound was analyzed for but not detected. The associated value is the compound quantitation limit.
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
BASE	Basement scenario
NA	Not Analyzed
NR	Nonresidential
RES	Residential
SOG	Slab-On-Grade scenario
SSVIAC	Site-specific volatilization to indoor air criteria
VOCs	Volatile Organic Compounds
<50k	Less than 50,000 square feet

FIGURES

Service Layer Credits: Google Earth Pro Aerial Dated March 19, 2021

JS-MW-07
JS-MW-03
JS-MW-16
JS-MW-27
JS-MW-09
JS-MW-19
JS-MW-10
JS-MW-05
JS-MW-11
JS-MW-06
JS-MW-04
JS-MW-20
JS-MW-29
JS-MW-21
JS-MW-22
6", ~5.5 ft. bgs
Lenox Ave
12", ~7 ft. bgs
12", ~8 ft. bgs
JS-MW-23
JS-MW-24
JS-MW-25
JS-MW-28
JS-MW-26
JS-MW-30

LEGEND

- EXISTING MONITORING WELL
- QUARTERLY SAMPLING
- SEMI-ANNUAL SAMPLING
- GAUGE ONLY
- WATER
- GAS
- TELECOMMUNICATIONS
- STORM SEWER
- SANITARY SEWER
- HISTORIC SITE STRUCTURES
- PROPERTY BOUNDARY
- ft bgs FEET BELOW GROUND SURFACE

0 20 40
SCALE IN FEET

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

JOSLYN SOUTH PARCEL TEMPORARY GROUNDWATER MONITORING PLAN SUMMARY

ARCADIS

FIGURE 1

CITY: NOVI, MI DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\JoslynProperty\LenoxProperty_TempGWMonitoring_2023.mxd PLOTTED: 4/19/2023 12:52:33 PM BY: TYarbrough

Service Layer Credits: Google Earth Pro Aerial Dated March 19, 2021

JS-MW-07
972.86

JS-MW-03
973.71

JS-MW-16
972.17

975

974

973

972

971

JS-MW-27
976.08

JS-MW-09
975.32

JS-MW-19
967.35

976

968

JS-MW-11
973.33

JS-MW-04
982.82*

JS-MW-10
975.04*

JS-MW-05
983.49*

JS-MW-06
970.95

969

970

JS-MW-20
972.55*

JS-MW-29
982.80*

JS-MW-21
970.54

JS-MW-22
970.48

6", ~5.5 ft. bgs

12", ~7 ft. bgs

12", ~8 ft. bgs

Lenox Ave

970

971

972

973

974

JS-MW-23
983.70*

JS-MW-24
983.30*

JS-MW-25
981.32*

JS-MW-28
983.99*

JS-MW-30
983.37*

JS-MW-26
974.05

LEGEND

- MONITORING WELL
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- * ELEVATION NOT USED FOR CONTOURING
- HISTORIC SITE STRUCTURES
- PROPERTY BOUNDARY
- WATER
- GAS
- TELECOMMUNICATIONS
- STORM SEWER
- SANITARY SEWER

ft bgs = FEET BELOW GROUND SURFACE

NOTES:

1. GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL.
2. WATER LEVELS COLLECTED ON MARCH 8, 2023.

0 20 40

SCALE IN FEET

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

JOSLYN GROUNDWATER CONTOUR MAP MARCH 8, 2023

ARCADIS

FIGURE
2A

CITY: NOVI, MI DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\JoslynProperty\GW Elevation\JoslynAve_GW_2023_0308.mxd PLOTTED: 8/23/2023 2:52:34 PM BY: TYarbrough

Service Layer Credits: Google Earth Pro Aerial Dated March 19, 2021

JS-MW-07
976.39

JS-MW-03
976.66

976

975

JS-MW-16
973.80

977

JS-MW-27
977.04

JS-MW-09
976.42

974

JS-MW-19
972.54

973

JS-MW-04
981.05*

JS-MW-10
975.80*

JS-MW-05
980.97*

JS-MW-11
973.55

JS-MW-06
972.88

JS-MW-20
975.17*

JS-MW-29
981.20*

JS-MW-21
972.60

JS-MW-22
972.55

6", ~5.5 ft. bgs

12", ~7 ft. bgs

12", ~8 ft. bgs

Lenox Ave

972

973

JS-MW-23
982.60*

974

JS-MW-24
982.40*

JS-MW-25
980.79*

975

JS-MW-28
982.52*

JS-MW-26
975.32

JS-MW-30
982.55*

LEGEND

- MONITORING WELL
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- * ELEVATION NOT USED FOR CONTOURING
- HISTORIC SITE STRUCTURES
- PROPERTY BOUNDARY
- WATER
- GAS
- TELECOMMUNICATIONS
- STORM SEWER
- SANITARY SEWER

ft bgs = FEET BELOW GROUND SURFACE

NOTES:

1. GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL.
2. WATER LEVELS COLLECTED ON JUNE 19, 2023.

0 20 40

SCALE IN FEET

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

JOSLYN GROUNDWATER CONTOUR MAP
JUNE 19, 2023

ARCADIS

FIGURE
2B

CITY: NOVI, MI DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\JoslynProperty\GW Elevation\JoslynAve_GW_2023_0619.mxd PLOTTED: 9/6/2023 10:58:45 AM BY: TYarbrough

JS-MW-09		
SI: 8.5 - 13.5 ft bgs		
Date Collected	3/9/2023	6/20/2023
VOCs		
1,2,3-Trimethylbenzene	***380 Y***	***470 Y***
1,2,4-Trimethylbenzene	***1,350 Y***	***1,740 Y***
1,2-Dichloroethane	< 50 UY	< 50 UY
1,3,5-Trimethylbenzene	***390 Y***	***520 Y***
2-Methylnaphthalene	< 300 UY	< 300 UY
Benzene	***520 Y***	***410 Y***
Ethylbenzene	***1,610 Y***	***1,500 Y***
Isopropyl benzene	< 300 UY	< 300 UY
Naphthalene	< 300 UY	***300 Y***
N-Propylbenzene	**170 Y**	**170 Y**
Total Xylenes	***5,100 Y***	***4,890 Y***

JS-MW-06	
SI: 9-14 ft bgs	
Date Collected	6/19/2023
VOCs	
1,2,3-Trimethylbenzene	2
1,2,4-Trimethylbenzene	20
1,2-Dichloroethane	< 1 U
1,3,5-Trimethylbenzene	< 1 U
2-Methylnaphthalene	< 5 U
Benzene	< 1 U
Ethylbenzene	**16**
Isopropyl benzene	< 5 U
Naphthalene	< 5 U
N-Propylbenzene	3
Total Xylenes	26

JS-MW-16		
SI: 11 - 16 ft bgs		
Date Collected	3/9/2023	6/22/2023
VOCs		
1,2,3-Trimethylbenzene	2	3
1,2,4-Trimethylbenzene	2	13
1,2-Dichloroethane	***12***	**3**
1,3,5-Trimethylbenzene	< 1 U	< 1 U
2-Methylnaphthalene	< 5 U	< 5 U
Benzene	**4**	**3**
Ethylbenzene	< 1 U	< 1 U
Isopropyl benzene	< 5 U	< 5 U
Naphthalene	< 5 U	< 5 U
N-Propylbenzene	< 1 U	5
Total Xylenes	5	15

JS-MW-19		
SI: 12 - 17 ft bgs		
Date Collected	3/9/2023	6/20/2023
VOCs		
1,2,3-Trimethylbenzene	< 1 U	< 1 U
1,2,4-Trimethylbenzene	< 1 U	< 1 U
1,2-Dichloroethane	< 1 U	< 1 U
1,3,5-Trimethylbenzene	< 1 U	< 1 U
2-Methylnaphthalene	< 5 U	< 5 U
Benzene	< 1 U	**4**
Ethylbenzene	< 1 U	< 1 U
Isopropyl benzene	< 5 U	< 5 U
Naphthalene	< 5 U	< 5 U
N-Propylbenzene	2	< 1 U
Total Xylenes	< 2 U	< 2 U

JS-MW-10		
SI: 10.5 - 15.5 ft bgs		
Date Collected	3/13/2023	6/19/2023
VOCs		
1,2,3-Trimethylbenzene	< 1 U	< 1 U [< 1 U]
1,2,4-Trimethylbenzene	< 1 U	< 1 U [< 1 U]
1,2-Dichloroethane	***8***	**4 [4]**
1,3,5-Trimethylbenzene	< 1 U	< 1 U [< 1 U]
2-Methylnaphthalene	< 5 U	< 5 U [< 5 U]
Benzene	***102***	***44 [47]***
Ethylbenzene	< 1 U	< 1 U [< 1 U]
Isopropyl benzene	< 5 U	< 5 U [< 5 U]
Naphthalene	< 5 U	< 5 U [< 5 U]
N-Propylbenzene	< 1 U	< 1 U [< 1 U]
Total Xylenes	< 2 U	< 2 U [< 2 U]

JS-MW-05		
SI: 6-11 ft bgs		
Date Collected	3/13/2023	6/20/2023
VOCs		
1,2,3-Trimethylbenzene	< 1 U	***159***
1,2,4-Trimethylbenzene	< 1 U	***220 Y***
1,2-Dichloroethane	< 1 U	< 1 U
1,3,5-Trimethylbenzene	< 1 U	***147***
2-Methylnaphthalene	< 5 U	40
Benzene	< 1 U	***590 Y***
Ethylbenzene	< 1 U	***300 Y***
Isopropyl benzene	< 5 U	***12***
Naphthalene	< 5 U	***100 Y***
N-Propylbenzene	< 1 U	41
Total Xylenes	< 2 U	***1,045 Y***

JS-MW-29	
SI: 5.5 - 10.5 ft bgs	
Date Collected	6/22/2023
VOCs	
1,2,3-Trimethylbenzene	< 1 U
1,2,4-Trimethylbenzene	< 1 U
1,2-Dichloroethane	< 1 U
1,3,5-Trimethylbenzene	< 1 U
2-Methylnaphthalene	< 5 U
Benzene	< 1 U
Ethylbenzene	**3**
Isopropyl benzene	< 5 U
Naphthalene	< 5 U
N-Propylbenzene	17
Total Xylenes	< 2 U

Chemical Name	Groundwater Surface Water Interface	Res Joslyn SSVIAC BASE	NR Joslyn SSVIAC <50k SOG
VOCs			
1,2,3-Trimethylbenzene	--	**43**	*150*
1,2,4-Trimethylbenzene	17	**25**	*120*
1,2-Dichloroethane	360	**1.4**	*5.1*
1,3,5-Trimethylbenzene	45	**18**	*110*
2-Methylnaphthalene	19	**66**	*110*
Benzene	200	**1.0**	*8.4*
Ethylbenzene	18	**2.8**	*28*
Isopropyl benzene	28	**0.60**	*6.7*
Naphthalene	11	**4.2**	*12*
N-Propylbenzene	--	**43**	*970*
Total Xylenes	49	**75**	*410*

JS-MW-07 JS-MW-03 JS-MW-16 JS-MW-09 JS-MW-27 JS-MW-19 JS-MW-10 JS-MW-05 JS-MW-11 JS-MW-06 JS-MW-04 JS-MW-22 JS-MW-20 JS-MW-29 JS-MW-21 6", ~5.5 ft. bgs 12", ~7 ft. bgs 12", ~8 ft. bgs Lenox JS-MW-24 JS-MW-23 JS-MW-25 JS-MW-28 JS-MW-26 JS-MW-30

0 40 80
SCALE IN FEET

LEGEND

- MONITORING WELL
- MANHOLE
- CATCH BASIN
- EXCEEDS RESIDENTIAL JOSLYN SSVIAC
- NO EXCEEDANCES OF JOSLYN SSVIAC
- WATER
- GAS
- TELECOMMUNICATIONS
- STORM SEWER
- SANITARY SEWER
- HISTORIC SITE STRUCTURES
- PROPERTY BOUNDARY
- < NOT DETECTED ABOVE THE LABORATORY REPORTING LIMIT
- ft bgs FEET BELOW GROUND SURFACE
- U COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
- Y ELEVATED REPORTING LIMIT DUE TO HIGH TARGET CONCENTRATION
- BASE BASEMENT SCENARIO
- NR NONRESIDENTIAL
- RES RESIDENTIAL
- SI SCREENED INTERVAL
- SOG SLAB-ON-GRADE SCENARIO
- SSVIAC SITE-SPECIFIC VOLATILIZATION TO INDOOR AIR CRITERIA
- VOCs VOLATILE ORGANIC COMPOUNDS
- <50k LESS THAN 50,000 SQUARE FEET

NOTES:

1. ALL CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER LITER (µg/L).

2. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS.

3. CRITERIA LISTED ARE FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE) CLEAN UP CRITERIA REQUIREMENTS TABLE 1: GROUNDWATER: RESIDENTIAL AND NONRESIDENTIAL, PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS, DECEMBER 21, 2020.

4. CRITERIA LISTED ARE FROM THE EGLE JOSLYN SITE-SPECIFIC CRITERIA EVALUATION DATED MAY 3, 2022.

5. A SAMPLE COULD NOT BE COLLECTED FROM JS-MW-06 DURING 1Q SAMPLING AS PLANNED DUE TO AN INSUFFICIENT AMOUNT OF WATER IN THE WELL.

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

JOSLYN SOUTH PARCEL
2023 SEMIANNUAL GROUNDWATER ANALYTICAL RESULTS

ARCADIS

FIGURE
3

CITY: NOVI, MI DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\Former_Fiero_Property\Joslyn_Wesbrook_SouthParcel_GWAnalytical_202306.mxd PLOTTED: 7/31/2023 9:31:23 PM BY: TYarbrough

Attachment 1

Groundwater Sampling Logs

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-04			**Date**	03/09/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	39.0 degrees F and Mostly Cloudy. The wind is blowing E at 10.3 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	3.14	**Total Depth (ft-bmp)**	13.66	**Water Column (ft)**	10.52	**Gallons in Well**	1.71
Purge Start	14:44	**Pump Intake (ft-bmp)**	8.3	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	15:19	**Volumes Purged**	0.74	**Sample ID**	JS-MW-04_GW-030923	**Sampled by**	Leticia Ferreira
Sample Time	15:16	**Gallons Purged**	1.27	**Replicate/ Code No.**	DUP-02_GW-030923	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
14:45	0	0	300	3.14	--	7.16	2	1.23	3.85	8.6	94	--	--
14:50	5	5	150	3.14	--	6.97	1.78	0.69	4.65	8.1	65	--	--
14:55	5	10	150	3.14	--	6.96	1.24	0.91	9.05	7	83.3	--	--
15:00	5	15	150	3.14	--	7	1.2	2.29	9.82	7.1	85.1	--	--
15:05	5	20	150	3.14	--	7.09	2.04	4.54	3.22	8.9	101	--	--
15:10	5	25	150	3.14	--	7.1	2.04	4	3.19	9	97	--	--
15:15	5	30	150	3.14	--	7.15	2.1	3.9	3.22	9	97.6	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	6	HCL

Comments:

Well Casing Volume Conversion

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

Well Information

Well Location:	Joslyn MI	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	NA	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-05			**Date**	03/13/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	27.0 degrees F and Light Snow and Fog/Mist. The wind is blowing N/NE at 4.7 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	2.07	**Total Depth (ft-bmp)**	10.25	**Water Column (ft)**	8.18	**Gallons in Well**	1.33
Purge Start	10:31	**Pump Intake (ft-bmp)**	6.1	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	11:05	**Volumes Purged**		**Sample ID**	JS-MW-05_GW-031323	**Sampled by**	Leticia Ferreira
Sample Time	11:09	**Gallons Purged**		**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
10:32	0	0	300	2.07	--	6.93	1.19	22.8	2.87	4.7	9	--	--
10:37	5	5	150	2.07	--	6.85	1.18	8.06	2.46	4.4	29.2	--	--
10:42	5	10	150	2.07	--	6.86	1.18	6.18	2.49	4.5	36.5	--	--
10:47	5	15	150	2.07	--	6.89	1.17	4.45	2.47	4.4	41.7	--	--
10:52	5	20	150	2.07	--	6.91	1.16	4.58	2.8	4.4	46.5	--	--
10:57	5	25	150	2.07	--	6.94	1.16	4	2.8	4.4	49	--	--
11:02	5	30	150	2.07	--	6.95	1.15	4.25	2.8	4.4	49.9	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn MI

Condition of Well: Good condition

Well Completion: NA

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-09			**Date**	03/09/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	36.0 degrees F and Mostly Cloudy. The wind is blowing N/NE at 9.2 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	9.87	**Total Depth (ft-bmp)**	12.96	**Water Column (ft)**	3.09	**Gallons in Well**	0.5
Purge Start	11:52	**Pump Intake (ft-bmp)**	11.3	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End		**Volumes Purged**	1.98	**Sample ID**	JS-MW-09_GW-030923	**Sampled by**	Leticia Ferreira
Sample Time	12:24	**Gallons Purged**	0.99	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:53	0	0	300	9.87	--	6.86	1.02	18.1	0.56	9.3	-51.1	--	--
11:58	5	5	150	9.87	--	6.85	1.02	6.24	0.35	9.5	-51.5	--	--
12:03	5	10	120	9.87	--	6.65	1.01	23	0.3	9.6	-58.2	--	--
12:08	5	15	120	9.87	--	6.67	1.02	12.5	0.29	9.3	-60.9	--	--
12:13	5	20	100	9.87	--	6.69	1.04	9.45	0.29	9.5	-63	--	--
12:18	5	25	100	9.87	--	6.69	1.04	10	0.3	9.5	-66.1	--	--
12:23	5	30	100	9.87	--	6.69	1.04	9.9	0.29	9.4	-70.9	Clear	Mild to medium

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn MI	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	NA	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

Project Number	30167840	**Well ID**	JS-MW-10			**Date**	03/09/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	39.9 degrees F and Cloudy. The wind is blowing E/NE at 10.3 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.05	**Total Depth (ft-bmp)**	15.71	**Water Column (ft)**	4.66	**Gallons in Well**	0.76
Purge Start	15:35	**Pump Intake (ft-bmp)**	13.3	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	16:31	**Volumes Purged**		**Sample ID**	JS-MW-10_GW-031323	**Sampled by**	Leticia Ferreira
Sample Time	10:04	**Gallons Purged**		**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
15:36	0	0	300	11.05	--	6.87	2.29	107	1.57	10	-14.4	--	--
15:41	5	5	150	11.05	--	6.85	2.08	70.3	0.54	9.9	-32.9	--	--
15:46	5	10	150	11.05	--	6.86	1.65	44.1	0.36	9.7	-33.4	--	--
15:51	5	15	150	11.05	--	6.85	1.59	68.7	0.31	9.7	-29.5	--	--
15:56	5	20	150	11.05	--	6.81	1.83	69	0.3	9.8	-27.3	--	--
16:01	5	25	150	11.05	--	6.81	1.83	69	0.3	9.8	-27.3	--	--
16:06	5	30	--	11.05	--	6.87	1.86	70.9	0.29	9.8	-36.3	--	--
16:11	5	35	150	11.05	--	6.87	1.84	100	0.3	9.9	-33	--	--
16:16	5	40	150	11.05	--	6.87	1.84	1050	0.3	9.8		--	--
16:21	5	45	150	11.05	--	6.89	1.84	67.6	0.3	9.8	1020	--	--
16:26	5	50	300	11.05	--	7.89	2.28	67.6	0.3	9.8	-35.6	--	--
16:31	5	55	300	11.05	--	6.89	2.33	1050	0.33	9.8	-51.8	--	--
09:58	1047	1102	300	11.05	--	6.75	2.02	275	1.27	8.6	22	--	--
10:03	5	1107	150	11.05	--	6.99	1.5	21.4	0.55	8.2	-15.4	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments: The well went dry; stopped purging. Planned to resume sampling the next day after one parameters taking. Resumed sampling on Monday, March 13th, 2023.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn MI

Well Locked at Arrival: yes

Condition of Well: Good condition

Well Locked at Departure: yes

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

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

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

Groundwater Sampling Form

Well Completion: NA

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-16			**Date**	03/09/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	33.1 degrees F and Mostly Cloudy. The wind is blowing N at 6.9 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	13.07	**Total Depth (ft-bmp)**	15.65	**Water Column (ft)**	2.58	**Gallons in Well**	0.42
Purge Start	09:38	**Pump Intake (ft-bmp)**	14.25	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	10:30	**Volumes Purged**	3.96	**Sample ID**	JS-MW-16_GW-030923	**Sampled by**	Leticia Ferreira
Sample Time	10:20	**Gallons Purged**	1.66	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
09:39	0	0	300	13.07	--	6.97	0.83	35.1	1.06	9.6	-62.8	--	--
09:44	5	5	150	13.07	--	7.06	0.85	17.2	0.48	9.5	-76.8	--	--
09:49	5	10	150	13.07	--	7.04	0.85	16.1	0.14	9.6	-77.8	--	--
09:54	5	15	150	13.07	--	6.97	0.85	64.4	0.29	9.2	-75.2	--	--
09:59	5	20	150	13.07	--	6.95	0.85	50.1	0.29	9	-74.5	--	--
10:04	5	25	150	13.07	--	6.92	0.85	26.1	0.27	9	-73.5	--	--
10:09	5	30	150	13.07	--	6.91	0.85	9.57	0.26	9	-73.5	--	--
10:14	5	35	150	13.07	--	6.9	0.85	8.9	0.27	8.9	-73.6	--	--
10:19	5	40	150	13.07	--	6.91	0.85	9.2	0.27	9	-73.7	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	9	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn MI

Condition of Well: Good condition

Well Completion: NA

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-19			**Date**	03/09/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	33.1 degrees F and Mostly Cloudy. The wind is blowing N at 6.9 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	13.50	**Total Depth (ft-bmp)**	16.35	**Water Column (ft)**	2.85	**Gallons in Well**	0.46
Purge Start	10:47	**Pump Intake (ft-bmp)**	14.9	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	11:21	**Volumes Purged**	3.62	**Sample ID**	JS-MW-19	**Sampled by**	Leticia Ferreira
Sample Time	11:19	**Gallons Purged**	1.66	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
10:48	0	0	300	13.50	--	8.71	1.43	235	0.62	9.7	3.3	--	--
10:53	5	5	300	13.50	--	6.71	1.42	77	0.44	9.7	9.8	--	--
10:58	5	10	150	13.50	--	6.7	1.43	44.1	0.36	9.4	14	--	--
11:03	5	15	150	13.50	--	8.7	1.43	12.3	0.32	9.5	12.9	--	--
11:08	5	20	150	13.50	--	6.73	1.44	4.84	0.31	9.6	3.9	--	--
11:13	1440	25	150	13.50	--	6.7	1.43	4.55	0.32	9.8	3.8	--	--
11:18	5	30	150	13.50	--	6.75	1.44	3.9	0.34	9.8	3.9	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn MI

Condition of Well: Good condition

Well Completion: NA

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-20			**Date**	03/13/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	28.9 degrees F and Light Snow. The wind is blowing N at 6.9 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	10.90	**Total Depth (ft-bmp)**	17.82	**Water Column (ft)**	6.92	**Gallons in Well**	1.12
Purge Start	14:15	**Pump Intake (ft-bmp)**	13.5	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	14:38	**Volumes Purged**	1.06	**Sample ID**	JS-MW-20_GW-031323	**Sampled by**	Leticia Ferreira
Sample Time	14:45	**Gallons Purged**	1.19	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
14:16	0	0	300	10.90	--	6.86	7.35	5.34	0.39	6	102.4	--	--
14:19	3	3	150	10.90	--	6.88	7.36	6.76	0.32	5.9	100.5	--	--
14:24	5	8	150	10.90	--	6.93	7.37	8.36	0.21	5.8	97.4	--	--
14:29	5	13	150	10.90	--	6.95	7.39	8.97	0.13	5.4	96.4	--	--
14:34	5	18	150	10.90	--	6.94	7.37	9.23	0.11	5.7	97	--	--
14:39	5	23	150	10.90	--	6.94	7.34	9.15	0.11	5.8	97.5	--	--
14:44	5	28	150	10.90	--	6.94	7.37	8.9	0.11	5.7	100.5	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn MI

Well Locked at Arrival: yes

Condition of Well: Good condition

Well Locked at Departure: yes

Well Completion: NA

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-21			**Date**	03/13/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	28.9 degrees F and Light Snow. The wind is blowing N/NE at 5.8 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.00	**Total Depth (ft-bmp)**	16.85	**Water Column (ft)**	4.85	**Gallons in Well**	0.79
Purge Start	13:15	**Pump Intake (ft-bmp)**	14.4	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	13:54	**Volumes Purged**	1.84	**Sample ID**	JS-MW-21_GW-031323	**Sampled by**	Leticia Ferreira
Sample Time	13:52	**Gallons Purged**	1.45	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:16	0	0	300	12.00	--	6.79	3.05	32	0.85	7.5	79.4	--	--
13:21	5	5	150	12.00	--	6.93	3.1	25.9	0.29	7.3	66.9	--	--
13:26	5	10	120	12.00	--	7.02	3.08	26.3	0.25	7.7	61.4	--	--
13:31	5	15	120	12.00	--	7.01	3.11	20.7	0.28	7.7	59.6	--	--
13:36	5	20	120	12.00	--	7.01	3.11	16.3	0.28	7.4	59	--	--
13:41	5	25	120	12.00	--	7	3.11	10.8	0.28	7.2	58.5	--	--
13:46	5	30	120	12.00	--	7.01	3.11	10.2	0.28	7.4	59	--	--
13:51	5	35	120	12.00	--	7.01	3.11	9.8	0.28	7.4	59	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn MI

Condition of Well: Good condition

Well Completion: NA

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-22			**Date**	03/13/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	28.0 degrees F and Light Snow and Fog/Mist. The wind is blowing N/NE at 6.9 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.08	**Total Depth (ft-bmp)**	17.7	**Water Column (ft)**	6.62	**Gallons in Well**	1.08
Purge Start	12:01	**Pump Intake (ft-bmp)**	14	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	12:30	**Volumes Purged**	1.61	**Sample ID**	JS-MW-22_GW-031323	**Sampled by**	Leticia Ferreira
Sample Time	12:28	**Gallons Purged**	1.74	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
12:02	0	0	300	11.08	--	6.66	5.96	54.5	5.01	7	34.2	--	--
12:07	5	5	150	11.08	--	6.94	6.13	48.7	0.36	7	-5.2	--	--
12:12	5	10	150	11.08	--	7.01	6.12	33.7	0.27	7.8	-18.3	--	--
12:17	5	15	150	11.08	--	7.04	6.11	25	0.19	7.1	-26.8	--	--
12:22	5	20	150	11.08	--	7.04	6.08	10.8	0.15	7.1	-28.4	--	--
12:27	5	25	150	11.08	--	7.04	6.08	10.9	0.14	7	-29.6	--	--
12:27	1440	25	150	11.08	--	7.04	6.06	9.9	0.15	7.2	-29.7	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

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

Well Information

Well Location: Joslyn MI
Condition of Well: Good condition
Well Completion: NA
Well Locked at Arrival: yes
Well Locked at Departure: yes
Key Number To Well: NA

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

Groundwater Sampling Form

Project Number	30167840	**Well ID**	JS-MW-23			**Date**	03/14/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	21.9 degrees F and Mostly Cloudy. The wind is blowing NW at 17.2 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	0.80	**Total Depth (ft-bmp)**	10.15	**Water Column (ft)**	9.35	**Gallons in Well**	1.52
Purge Start	12:09	**Pump Intake (ft-bmp)**	6	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	12:52	**Volumes Purged**		**Sample ID**	JS-MW-23_GW-031423	**Sampled by**	Leticia Ferreira
Sample Time	12:51	**Gallons Purged**		**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
12:10	0	0	300	0.80	--	7.05	2.16	31.4	3.41	5.3	116.8	--	--
12:15	5	5	120	0.80	--	7.01	2.17	27.6	2.85	4.6	108.1	--	--
12:20	5	10	120	0.80	--	7.04	1.79	34.3	3.67	4.2	101.6	--	--
12:25	5	15	120	0.80	--	7.01	1.85	26.6	3.26	4.8	101.7	--	--
12:30	1440	20	120	0.80	--	7.02	1.87	22.7	3.73	4.2	101.4	--	--
12:35	5	25	120	0.80	--	7	1.95	18.1	3.36	4.6	103.3	--	--
12:40	5	30	120	0.80	--	7.03	2.15	10.8	2.69	5.1	100.9	--	--
12:45	5	35	120	0.80	--	7.05	2.15	10.1	2.56	5.1	99.4	--	--
12:50	5	40	120	0.80	--	7.03	2.18	9.8	2.63	5.2	91.5	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn MI	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	NA	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-24			**Date**	03/13/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	19.0 degrees F and Mostly Clear.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	0.70	**Total Depth (ft-bmp)**	7.25	**Water Column (ft)**	6.55	**Gallons in Well**	1.06
Purge Start	10:25	**Pump Intake (ft-bmp)**	4	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	11:04	**Volumes Purged**	1.37	**Sample ID**	JS-MW-24_GW-031423	**Sampled by**	Leticia Ferreira
Sample Time	11:02	**Gallons Purged**	1.45	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
10:26	0	0	300	0.70	--	7.15	1.03	23.3	4.27	3	89.2	--	--
10:31	5	5	150	0.70	--	7.22	1	20.9	4.32	2.7	87.5	--	--
10:36	5	10	150	0.70	--	7.16	1.06	90.3	2	3	83.4	--	--
10:41	5	15	150	0.70	--	7.2	1.01	37.2	3.21	2.8	89.3	--	--
10:46	5	20	150	0.70	--	7.17	0.99	31.1	4	2.8	91.8	--	--
10:51	5	25	150	0.70	--	7.14	0.95	10.9	5.44	2.8	94.5	--	--
10:56	5	30	150	0.70	--	7.14	0.96	10.5	5.36	2.8	94.5	--	--
11:01	5	35	150	0.70	--	7.14	0.95	9.9	5.2	2.8	94.6	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

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

Well Information

Well Location: Joslyn MI
Condition of Well: Good condition
Well Completion: NA
Well Locked at Arrival: yes
Well Locked at Departure: yes
Key Number To Well: NA

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-27			**Date**	03/09/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	37.9 degrees F and Partly Cloudy. The wind is blowing at 5.8 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.29	**Total Depth (ft-bmp)**	15.62	**Water Column (ft)**	4.33	**Gallons in Well**	0.7
Purge Start	13:04	**Pump Intake (ft-bmp)**	13.5	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	13:47	**Volumes Purged**	1.70	**Sample ID**	JS-MW-27_GW-030923	**Sampled by**	Leticia Ferreira
Sample Time	13:41	**Gallons Purged**	1.19	**Replicate/ Code No.**	DUP-01_GW-030923	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:05	0	0	300	11.29	--	6.73	5.91	73.9	2.1	10.6	15.5	--	--
13:10	5	5	120	11.29	--	6.84	5.48	32.2	0.35	10.4	1.2	--	--
13:15	5	10	120	11.29	--	6.86	5.33	24.9	0.35	10.1	2	--	--
13:20	5	15	120	11.29	--	6.88	5.09	18.5	0.38	10.2	4.5	--	--
13:25	5	20	120	11.29	--	6.89	4.84	17.2	0.4	10.5	7.7	--	--
13:30	5	25	120	11.29	--	6.88	4.8	6.79	0.37	10.5	11.8	--	--
13:35	5	30	120	11.29	--	6.88	4.9	6	0.38	10.4	13.4	--	--
13:40	5	35	120	11.29	--	6.88	4.9	5.8	0.4	10.5	19	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	6	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn MI

Condition of Well: Good condition

Well Completion: NA

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-30			**Date**	03/14/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	21.9 degrees F and Mostly Cloudy. The wind is blowing NW at 17.2 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	0.70	**Total Depth (ft-bmp)**	8.19	**Water Column (ft)**	7.49	**Gallons in Well**	1.22
Purge Start	11:25	**Pump Intake (ft-bmp)**	6	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	11:59	**Volumes Purged**	0.88	**Sample ID**	JS-MW-30_GW-031423	**Sampled by**	Leticia Ferreira
Sample Time	11:59	**Gallons Purged**	1.07	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:26	0	0	300	0.70	--	7.18	0.828	10.3	2.83	2.4	105.5	--	--
11:31	5	5	150	0.70	--	6.99	0.817	14.3	2.43	2.1	113	--	--
11:36	5	10	120	0.70	--	6.98	0.823	13.7	2.38	2	112.6	--	--
11:41	5	15	120	0.70	--	7	0.824	11	2.09	2.6	2.3	--	--
11:46	5	20	120	0.70	--	7.02	0.833	7.61	2.12	2.3	107.5	--	--
11:51	5	25	120	0.70	--	7.04	0.836	7	2.1	2.3	106	--	--
11:56	5	30	120	0.70	--	7.04	0.834	6.9	2.11	2.3	105.2	Clear	None

Constituent Sampled	Container	Number	Preservative
Full 8260 VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn MI

Well Locked at Arrival: yes

Condition of Well: Good condition

Well Locked at Departure: yes

Well Completion: NA

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

Project Number	30167840	**Well ID**	JS-MW-04			**Date**	06/20/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	64.4 degrees F and Cloudy. The wind is blowing E/NE at 5.8 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.48	**Total Depth (ft-bmp)**	13.68	**Water Column (ft)**	7.2	**Gallons in Well**	1.17
Purge Start	08:36	**Pump Intake (ft-bmp)**	11	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	09:45	**Volumes Purged**	1.71	**Sample ID**	JS-MW-04_GW-062023	**Sampled by**	Garrett Link
Sample Time	09:45	**Gallons Purged**	2.00	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
08:36	0	0	115	7.11	--	7.18	1.9	3.67	0.95	14.2	82	--	--
08:41	5	5	120	7.70	--	7.2	1.9	1.02	0.55	14.4	77.5	--	--
08:46	5	10	115	8.58	--	7.23	1.88	1.71	0.52	14.4	69.4	--	--
08:51	5	15	115	8.97	--	7.26	1.8	7.16	0.94	14.6	64.3	--	--
08:56	5	20	115	9.38	--	7.31	1.61	0.07	2.74	14.7	61.2	--	--
09:01	5	25	115	9.79	--	7.38	1.38	6.31	4.77	15	66	--	--
09:06	5	30	100	10.10	--	7.37	1.32	6.32	3.89	15.4	71.8	--	--
09:11	5	35	100	10.37	--	7.35	1.39	4.75	3.58	15.3	77	--	--
09:16	5	40	100	10.64	--	7.33	1.46	5.13	3.21	15.3	80.7	--	--
09:21	5	45	100	11.04	--	7.29	1.58	5.97	2.78	14.8	84.8	--	--
09:26	5	50	100	11.38	--	7.28	1.66	6.48	2.19	15	85.8	--	--
09:31	5	55	115	11.73	--	7.26	1.73	7.67	1.95	14.8	86.8	--	--
09:36	5	60	115	12.09	--	7.24	1.8	7.42	1.55	14.7	86.5	--	Mild

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Flush mount	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-05			**Date**	06/20/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	69.8 degrees F and Cloudy. The wind is blowing E at 11.4 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	5.50	**Total Depth (ft-bmp)**	10.3	**Water Column (ft)**	4.8	**Gallons in Well**	0.78
Purge Start	10:22	**Pump Intake (ft-bmp)**	8.24	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	11:30	**Volumes Purged**	2.56	**Sample ID**	JS-MW-05_GW-062023	**Sampled by**	Garrett Link
Sample Time	11:25	**Gallons Purged**	2.00	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
10:22	0	0	115	5.49	--	6.98	1.27	6.61	0.43	16.1	34.3	--	--
10:27	5	5	115	5.81	--	7	1.26	5.71	0.38	16.2	-21.5	--	--
10:32	5	10	115	5.93	--	7.01	1.25	5.64	0.26	16.2	-38.7	--	--
10:37	5	15	115	6.05	--	7.01	1.23	10.6	0.21	16.5	-51.3	--	--
10:42	5	20	115	6.18	--	7	1.22	10.2	0.26	16.4	-58	--	--
10:47	5	25	115	6.26	--	7	1.23	8.06	0.31	16.3	-62.4	--	--
10:52	5	30	115	6.35	--	7	1.22	8.05	0.29	16.3	-66.2	--	--
10:57	5	35	115	6.43	--	6.99	1.23	11.8	0.26	16.4	-69.4	--	--
11:02	5	40	115	6.50	--	6.99	1.23	18.4	0.27	16.5	-72.2	--	--
11:07	5	45	115	6.56	--	6.98	1.23	14.6	0.24	16.5	-74.9	--	--
11:12	5	50	115	6.60	--	6.98	1.23	17.5	0.28	16.3	-76.7	--	--
11:17	5	55	115	6.67	--	6.98	1.23	18.3	0.39	16.6	-79.3	--	--
11:22	5	60	115	6.69	--	6.98	1.24	12.4	0.54	16.6	-81	--	Mild

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn

Well Locked at Arrival: yes

Condition of Well: Good condition

Well Locked at Departure: yes

Well Completion: Flush mount

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-06			**Date**	06/19/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	77.0 degrees F and Cloudy. The wind is blowing E/NE at 10.3 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.20	**Total Depth (ft-bmp)**	13.81	**Water Column (ft)**	1.61	**Gallons in Well**	0.26
Purge Start	13:12	**Pump Intake (ft-bmp)**	12.81	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	13:55	**Volumes Purged**	1.92	**Sample ID**	JS-MW-06_GW-061923	**Sampled by**	Garrett Link
Sample Time	13:58	**Gallons Purged**	0.50	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:12	0	0	100	12.29	--	7.2	1.2	35.7	1.4	18.3	73.4	--	--
13:21	9	9	145	12.59	--	7.18	1.25	7.39	0.75	13.7	59.4	--	--
13:26	5	14	145	13.26	--	7.19	1.2	11.2	0.16	12.8	40.4	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments: Well went dry. Insufficient well volume to collect set of parameters before sampling. Collected sample once well recharged on 6/19/23 at 13:55

Well Casing Volume Conversion

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

Well Information

Well Location: Joslyn
Condition of Well: Good condition
Well Completion: Flush mount
Well Locked at Arrival: yes
Well Locked at Departure: yes
Key Number To Well: NA

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-09			**Date**	06/19/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	78.8 degrees F and Mostly Cloudy.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	10.22	**Total Depth (ft-bmp)**	13	**Water Column (ft)**	2.78	**Gallons in Well**	0.45
Purge Start	14:44	**Pump Intake (ft-bmp)**	12	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	08:12	**Volumes Purged**	1.67	**Sample ID**	JS-MW-09_GW-061923	**Sampled by**	Garrett Link
Sample Time	08:12	**Gallons Purged**	0.75	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
14:45	0	0	120	11.00	--	6.83	0.82	6.37	0.32	14.1	48.4	--	--
14:50	5	5	120	11.23	--	6.83	0.83	18.9	0.24	14.3	23.4	--	--
14:54	4	9	120	11.82	--	6.9	0.88	94.1	0.16	14	-5.7	--	--
15:01	7	16	120	12.50	--	6.92	0.94	68.1	2.29	13.6	-34.5	--	--
08:03	1022	1038	120	10.92	--	6.77	0.91	6.6	0.99	12.8	147.4	--	Medium

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments: Well went dry. Collected sample once well recharged on 6/20/23 at 8:12

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn

Condition of Well: Missing bolts

Well Completion: Flush mount

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-10			**Date**	06/19/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	73.4 degrees F and Cloudy. The wind is blowing E/NE at 12.8 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	10.87	**Total Depth (ft-bmp)**	15.71	**Water Column (ft)**	4.84	**Gallons in Well**	0.79
Purge Start	11:19	**Pump Intake (ft-bmp)**	13	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	12:36	**Volumes Purged**	3.16	**Sample ID**	JS-MW-10_GW-061923	**Sampled by**	Garrett Link
Sample Time	12:37	**Gallons Purged**	2.50	**Replicate/ Code No.**	DUP-01_061923	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:25	0	0	140	10.87	--	7	2.21	42.2	2.95	13.7	79	--	--
11:31	6	6	140	11.87	--	7.08	1.94	10.1	2.2	13.6	63.8	--	--
11:35	4	10	140	12.32	--	7.1	1.56	17.4	2.4	13.6	48.4	--	--
11:40	5	15	140	12.70	--	7.09	1.54	33.1	2.03	13.5	38.5	--	--
11:45	5	20	140	13.10	--	7.05	1.74	40	1.84	13.5	27	--	--
11:50	5	25	140	13.60	--	7.04	1.84	52.1	2	13.6	19.2	--	--
11:55	5	30	140	13.95	--	7.04	1.98	60.3	2.06	14.1	11.6	--	--
12:00	5	35	140	14.20	--	7.04	2.12	61.5	1.85	13.9	9	--	--
12:06	6	41	140	14.60	--	7.06	2.13	72.1	2.08	13.6	5.9	--	--
12:11	5	46	140	14.95	--	7.05	2.18	294	1.75	14	2.5	--	--
12:16	5	51	140	15.36	--	7.04	2.19	716	3.44	13.4	-3.9	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	6	HCL

Comments: Well went dry. Insufficient well volume to collect set of parameters before sampling. Collected sample once well recharged on 6/19/2023 at 12:30

Well Casing Volume Conversion

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

Well Information

Well Location: Joslyn
Condition of Well: Good condition
Well Completion: Flush mount
Well Locked at Arrival: yes
Well Locked at Departure: yes
Key Number To Well: NA

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

Groundwater Sampling Form

Project Number	30167840	**Well ID**	JS-MW-11			**Date**	06/19/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	78.8 degrees F and Cloudy. The wind is blowing E at 10.3 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.91	**Total Depth (ft-bmp)**	13.75	**Water Column (ft)**	1.84	**Gallons in Well**	0.3
Purge Start	14:05	**Pump Intake (ft-bmp)**	11.5	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	14:13	**Volumes Purged**	1.33	**Sample ID**	JS-MW-11_GW-061923	**Sampled by**	Garrett Link
Sample Time	14:25	**Gallons Purged**	0.40	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
14:05	0	0	145	12.16	--	7.21	0.74	71	6.4	13.9	83.5	--	--
14:10	5	5	145	12.91	--	7.21	0.74	--	6.1	15	85.8	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments: Well went dry. Insufficient well volume to collect set of parameters before sampling. Collected sample once well recharged on 6/19/2023 at 14:25.

Well Casing Volume Conversion

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

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Flush mount	Key Number To Well:	NA

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-16			**Date**	06/22/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	73.0 degrees F and Mostly Cloudy. The wind is blowing E/SE at 9.2 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.93	**Total Depth (ft-bmp)**	15.86	**Water Column (ft)**	3.93	**Gallons in Well**	0.64
Purge Start	11:39	**Pump Intake (ft-bmp)**	13.5	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	12:55	**Volumes Purged**	3.13	**Sample ID**	JS-MW-16_GW-062223	**Sampled by**	Garrett Link
Sample Time	12:45	**Gallons Purged**	2.00	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:45	0	0	120	12.24	--	7.02	0.87	13.6	0.15	14.3	-1.7	--	--
11:50	5	5	115	12.31	--	7.04	0.86	13	0.11	14.6	-17.9	--	--
11:55	5	10	115	12.37	--	7.06	0.86	8.07	0.07	14.7	-35	--	--
12:00	5	15	115	12.44	--	7.06	0.85	5.47	0.06	14.7	-47.5	--	--
12:05	5	20	115	12.50	--	7.06	0.85	4.29	0.07	15	-55.9	--	--
12:10	5	25	115	12.55	--	7.06	0.85	1.92	0.04	15.2	-60.3	--	--
12:15	5	30	115	12.56	--	7.04	0.83	1.54	0.1	15.9	-65.2	--	--
12:20	5	35	115	12.65	--	7.04	0.83	2.32	0.08	15.7	-67.7	--	--
12:25	5	40	115	12.73	--	7.04	0.83	2.42	0.08	15	-70.6	--	--
12:30	5	45	115	12.76	--	7.04	0.83	2.4	0.06	14.8	-73.8	--	--
12:35	5	50	115	12.80	--	7.05	0.83	2.67	0.07	14.9	-76.3	--	--
12:40	5	55	115	12.86	--	7.06	0.83	2.55	0.11	15.1	-79	--	--
12:45	5	60	115	12.91	--	7.06	0.84	2.09	0.07	15.2	-80.08	--	Mild

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	9	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn

Well Locked at Arrival: yes

Condition of Well: Good condition

Well Locked at Departure: yes

Well Completion: Flush mount

Key Number To Well: NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-19			**Date**	06/20/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	77.0 degrees F and Partly Cloudy. The wind is blowing E/SE at 11.4 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.66	**Total Depth (ft-bmp)**	16.7	**Water Column (ft)**	5.04	**Gallons in Well**	0.82
Purge Start	12:53	**Pump Intake (ft-bmp)**	14.7	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	14:05	**Volumes Purged**	3.05	**Sample ID**	JS-MW-19_GW-062023	**Sampled by**	Garrett Link
Sample Time	14:00	**Gallons Purged**	2.50	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
12:55	0	0	115	11.89	--	7.13	1.21	2.98	3.35	15.4	128.5	--	--
13:00	5	5	110	11.92	--	7.15	1.2	2.6	1.17	15.6	117	--	--
13:05	5	10	110	11.95	--	7.15	1.2	2.4	0.71	15.6	101.8	--	--
13:09	4	14	110	11.95	--	7.15	1.2	1.66	1.17	15.6	82.6	--	--
13:15	6	20	110	11.96	--	7.15	1.2	1.81	0.7	15.5	62	--	--
13:20	5	25	110	11.98	--	7.14	1.2	1.92	1.63	15.5	46.1	--	--
13:25	5	30	110	11.98	--	7.14	1.2	2.38	0.84	15.2	31.9	--	--
13:30	5	35	110	11.99	--	7.14	1.2	2.08	0.69	15.1	17.3	--	--
13:35	5	40	110	11.99	--	7.13	1.19	3.29	0.66	15	8.2	--	--
13:40	5	45	115	11.99	--	7.12	1.18	3.34	0.64	14.9	-0.8	--	--
13:45	5	50	115	12.00	--	7.11	1.18	3.29	0.64	15.5	-9.8	--	--
13:50	5	55	115	12.00	--	7.09	1.17	2.5	0.63	15.3	-15	--	--
13:55	5	60	115	12.01	--	7.09	1.17	1.87	0.69	15.2	-20.7	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments: ORP readings would not stabilize after 1 hour of purging.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	no
Condition of Well:	Missing bolts,Missing lock	Well Locked at Departure:	no
Well Completion:	Flush mount	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

Project Number	30167840	**Well ID**	JS-MW-20			**Date**	06/20/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	80.6 degrees F and Partly Cloudy.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	9.96	**Total Depth (ft-bmp)**	17.82	**Water Column (ft)**	7.86	**Gallons in Well**	1.28
Purge Start	14:28	**Pump Intake (ft-bmp)**	15.86	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	15:40	**Volumes Purged**	1.95	**Sample ID**	JS-MW-20_GW-062023	**Sampled by**	Garrett Link
Sample Time	15:35	**Gallons Purged**	2.50	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
14:30	0	0	110	10.59	--	6.98	7.25	5.13	0.68	16.4	123.1	--	--
14:35	5	5	110	11.19	--	7.03	7.12	24.9	0.3	16.8	107.9	--	--
14:40	5	10	110	11.60	--	7.04	6.93	7.16	0.35	17	99.3	--	--
14:45	5	15	110	11.99	--	7.05	6.69	2.06	0.54	16.9	92.6	--	--
14:50	5	20	110	12.48	--	7.05	6.16	1.64	0.74	16.5	84.7	--	--
14:55	5	25	110	13.05	--	7.04	4.9	2.53	0.73	17.1	78	--	--
15:00	5	30	110	13.20	--	7.03	4.22	3.08	0.75	17.2	75	--	--
15:05	5	35	110	13.34	--	7.02	3.95	3.09	0.79	16.7	73.5	--	--
15:10	5	40	110	13.48	--	7.02	4.12	3.17	0.81	16.8	73.6	--	--
15:15	5	45	110	13.64	--	7.02	4.43	3.14	0.83	17	74.1	--	--
15:20	5	50	110	13.78	--	7.02	4.87	3.4	0.81	16.8	75.1	--	--
15:25	5	55	110	13.95	--	7.02	5.37	2.02	0.77	16.9	75.5	--	--
15:30	5	60	110	14.06	--	7.03	5.55	2.31	0.92	16.8	75.2	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments: Conductivity readings would not stabilize after 1 hour of purging.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	no
Condition of Well:	Missing lock	Well Locked at Departure:	no
Well Completion:	Flush mount	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-21			**Date**	06/21/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	64.0 degrees F and Clear. The wind is blowing E/NE at 5.8 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.22	**Total Depth (ft-bmp)**	16.86	**Water Column (ft)**	5.64	**Gallons in Well**	0.92
Purge Start	08:01	**Pump Intake (ft-bmp)**	14.86	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	09:10	**Volumes Purged**	1.90	**Sample ID**	JS-MW-21	**Sampled by**	Garrett Link
Sample Time	09:05	**Gallons Purged**	1.75	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
08:03	0	0	105	11.36	--	6.98	4.34	18.4	0.41	13.6	155.6	--	--
08:08	5	5	105	11.37	--	7.02	4.21	5.64	0.2	13.5	135.5	--	--
08:13	5	10	105	11.38	--	7.03	4.2	2	0.18	13.7	129.7	--	--
08:18	5	15	100	11.39	--	7.03	4.18	2.03	0.15	13.8	123.7	--	--
08:23	5	20	100	11.39	--	7.03	4.18	2	0.38	13.5	118.9	--	--
08:28	5	25	100	11.39	--	7.03	4.18	0.79	0.11	13.8	116.4	--	--
08:33	5	30	100	11.40	--	7.03	4.19	0.7	0.1	13.8	114.1	--	--
08:38	5	35	100	11.40	--	7.02	4.17	1.88	0.1	14	112.2	--	--
08:43	5	40	100	11.41	--	7.02	4.2	1.67	0.11	14	110.8	--	--
08:48	5	45	100	11.41	--	7.02	4.17	1.78	0.08	13.9	109.4	--	--
08:53	5	50	100	11.42	--	7.02	4.19	1.28	0.1	14	108.5	--	--
08:58	5	55	100	11.42	--	7.02	4.2	2.5	0.09	13.8	107.4	--	--
09:03	5	60	100	11.42	--	7.02	4.19	1.59	0.1	14	106.5	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	no
Condition of Well:	Missing bolts,Missing lock	Well Locked at Departure:	no
Well Completion:	Flush mount	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

Project Number	30167840	**Well ID**	JS-MW-23			**Date**	06/21/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	68.0 degrees F and Clear. The wind is blowing E/NE at 8.1 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	1.80	**Total Depth (ft-bmp)**	10.34	**Water Column (ft)**	8.54	**Gallons in Well**	1.39
Purge Start	09:35	**Pump Intake (ft-bmp)**	8	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	10:50	**Volumes Purged**	1.80	**Sample ID**	JS-MW-23_GW-062123	**Sampled by**	Garrett Link
Sample Time	10:45	**Gallons Purged**	2.50	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
09:40	0	0	120	2.65	--	7.16	0.79	6.2	0.44	17.1	100	--	--
09:45	5	5	120	2.74	--	7.16	0.78	3.46	0.27	17.3	94.2	--	--
09:50	5	10	120	2.78	--	7.15	0.77	2.71	0.29	17.4	89.4	--	--
09:55	5	15	120	2.82	--	7.15	0.77	1.49	0.34	17.1	83.5	--	--
10:00	5	20	120	2.85	--	7.15	0.77	1.19	0.37	17.3	77.3	--	--
10:05	5	25	120	2.88	--	7.16	0.77	1.26	0.37	17.3	70.8	--	--
10:10	5	30	120	2.88	--	7.16	0.78	1.25	0.34	17.5	64.9	--	--
10:15	5	35	120	2.88	--	7.16	0.78	0.9	0.39	17.5	59.2	--	--
10:20	5	40	120	2.89	--	7.16	0.8	0.66	0.34	17.5	54.2	--	--
10:25	5	45	120	2.93	--	7.16	0.8	0.23	0.32	17.8	47.9	--	--
10:30	5	50	120	2.91	--	7.15	0.82	0.15	0.29	17.7	43.4	--	--
10:35	5	55	120	2.83	--	7.16	0.83	0.09	0.28	17.7	39	--	--
10:40	5	60	120	2.81	--	7.16	0.84	0.02	0.85	17.6	35.3	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	yes
Condition of Well:	Missing bolts	Well Locked at Departure:	yes
Well Completion:	Flush mount	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-24			**Date**	06/22/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	63.0 degrees F and Partly Cloudy. The wind is blowing E/NE at 6.9 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	1.31	**Total Depth (ft-bmp)**	7.25	**Water Column (ft)**	5.94	**Gallons in Well**	0.97
Purge Start	08:10	**Pump Intake (ft-bmp)**	5	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	09:20	**Volumes Purged**	2.06	**Sample ID**	JS-MW-24_GW-062223	**Sampled by**	Garrett Link
Sample Time	09:17	**Gallons Purged**	2.00	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
08:15	0	0	115	1.80	--	7.04	1.09	5.88	0.21	17.8	155.9	--	--
08:21	6	6	120	1.99	--	7.08	1.09	4.79	0.33	17.8	139.4	--	--
08:25	4	10	120	2.02	--	7.09	1.09	2.78	0.38	18.1	130.9	--	--
08:30	5	15	120	2.07	--	7.09	1.1	1.51	0.54	18.1	124.6	--	--
08:35	5	20	120	2.13	--	7.09	1.1	1.89	0.61	18.2	120.2	--	--
08:40	5	25	120	2.16	--	7.09	1.1	1.61	0.68	18.3	117.7	--	--
08:45	5	30	120	2.20	--	7.09	1.1	1.47	0.63	18.4	115.8	--	--
08:50	5	35	120	2.19	--	7.08	1.11	0.94	0.61	18.4	114.6	--	--
08:55	5	40	120	2.20	--	7.07	1.1	1.04	0.47	18.1	113.9	--	--
09:00	5	45	120	2.20	--	7.07	1.1	1.07	0.4	18.1	112.8	--	--
09:05	5	50	120	2.23	--	7.07	1.1	1.01	0.37	18	112.4	--	--
09:10	5	55	120	2.24	--	7.07	1.1	0.77	0.35	17.9	111.9	--	--
09:15	5	60	120	2.25	--	7.07	1.1	0.6	0.31	17.9	111.4	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Flush mount	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-26			**Date**	06/21/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	80.1 degrees F and Partly Cloudy. The wind is blowing at 5.8 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	9.11	**Total Depth (ft-bmp)**	18.05	**Water Column (ft)**	8.94	**Gallons in Well**	1.45
Purge Start	12:48	**Pump Intake (ft-bmp)**	16	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	14:05	**Volumes Purged**	1.72	**Sample ID**	JS-MW-26_GW-062123	**Sampled by**	Garrett Link
Sample Time	14:00	**Gallons Purged**	2.50	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
12:55	0	0	115	10.05	--	7.09	4.36	18.7	0.39	17.7	92.6	--	--
13:00	5	5	115	10.31	--	7.02	4.24	11.5	0.3	16.3	68.7	--	--
13:05	5	10	115	10.54	--	7.02	4.16	6.18	0.24	16.7	51.4	--	--
13:10	5	15	115	10.75	--	7.03	4.17	4.32	0.16	15.9	35.4	--	--
13:15	5	20	115	10.84	--	7.04	4.19	1.53	0.1	16	24.6	--	--
13:20	5	25	115	11.00	--	7.03	4.18	3.51	0.08	16.1	15	--	--
13:25	5	30	115	11.05	--	7.04	4.17	2.82	0.07	16.4	7.9	--	--
13:30	5	35	115	11.07	--	7.06	4.21	1.24	0.09	16.5	0.6	--	--
13:35	5	40	115	11.14	--	7.06	4.24	1.21	0.1	15.8	-6.1	--	--
13:40	5	45	115	11.21	--	7.06	4.22	1.56	0.08	15.9	-11.3	--	--
13:45	5	50	115	11.29	--	7.07	4.21	2.09	0.09	15.5	-16.1	--	--
13:50	5	55	115	11.36	--	7.07	4.18	1.04	0.06	15.6	-19.6	--	--
13:55	5	60	115	11.41	--	7.07	4.18	0.83	0.35	16.1	-22.5	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments: Temperature readings would not stabilize after 1 hour of purging.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Flush mount	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-27			**Date**	06/22/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	75.0 degrees F and Mostly Cloudy. The wind is blowing E at 10.3 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	10.55	**Total Depth (ft-bmp)**	15.23	**Water Column (ft)**	4.68	**Gallons in Well**	0.76
Purge Start	13:20	**Pump Intake (ft-bmp)**	13	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	14:08	**Volumes Purged**	2.63	**Sample ID**	JS-MW-27_GW-062223	**Sampled by**	Garrett Link
Sample Time	14:02	**Gallons Purged**	2.00	**Replicate/ Code No.**	DUP-02_GW-062223	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:22	0	0	115	11.76	--	7.03	3.93	2.76	0.1	14.7	87.5	--	--
13:28	6	6	115	10.79	--	7.06	3.46	1.6	0.14	14.9	73.4	--	--
13:33	5	11	115	10.81	--	7.05	3.25	0.52	0.1	14.8	66.5	--	--
13:37	4	15	115	10.82	--	7.06	3.2	0.8	0.3	14.9	60.7	--	--
13:42	5	20	115	10.83	--	7.05	3.22	0.78	0.4	14.8	55.7	--	--
13:47	5	25	115	10.83	--	7.04	3.25	0.38	0.39	14.9	50.5	--	--
13:52	5	30	115	10.86	--	7.03	3.32	0.85	0.35	15.5	43.9	--	--
13:58	6	36	115	10.87	--	7.02	3.38	0.48	0.35	15.7	39.5	--	--
14:01	3	39	115	10.87	--	7.02	3.41	0.29	0.37	15.6	37.4	--	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	6	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	no
Condition of Well:	Missing bolts,Missing lock	Well Locked at Departure:	no
Well Completion:	Flush mount	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

Project Number	30167840	**Well ID**	JS-MW-29			**Date**	06/22/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	70.0 degrees F and Partly Cloudy. The wind is blowing SE at 5.8 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	3.86	**Total Depth (ft-bmp)**	10.2	**Water Column (ft)**	6.34	**Gallons in Well**	1.03
Purge Start	09:39	**Pump Intake (ft-bmp)**	8	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	10:49	**Volumes Purged**	1.94	**Sample ID**	JS-MW-29_GW-062223	**Sampled by**	Garrett Link
Sample Time	10:43	**Gallons Purged**	2.00	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
09:40	0	0	120	4.89	--	7.16	2.79	4.89	0.24	15.8	22.1	--	--
09:46	6	6	120	5.26	--	7.24	2.73	5.39	0.15	15.9	-14.9	--	--
09:50	4	10	120	--	--	7.27	2.65	5.91	0.12	15.9	-51	--	--
09:55	5	15	120	5.44	--	7.3	2.57	4.11	0.12	16.1	-80.9	--	--
10:00	5	20	120	5.44	--	7.28	2.48	3.2	0.16	16.1	-91.1	--	--
10:05	5	25	120	5.45	--	7.27	2.34	2	0.34	16.2	-90.8	--	--
10:10	5	30	120	5.45	--	7.26	2.3	1.91	0.65	16.2	-88.9	--	--
10:15	5	35	120	5.45	--	7.26	2.34	2.18	0.74	16.2	-89.5	--	--
10:20	5	40	120	5.46	--	7.26	2.35	1.33	0.65	16.2	-90.3	--	--
10:25	5	45	120	5.67	--	7.26	2.4	0.77	0.65	16.1	-91.2	--	--
10:30	5	50	120	5.80	--	7.26	2.42	1.14	0.49	16.3	-92.1	--	--
10:35	5	55	120	5.90	--	7.27	2.54	0.97	0.6	16.3	-93.1	--	--
10:40	5	60	120	5.90	--	7.26	2.47	0.92	0.76	16.2	-94.3	--	Mild

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location:	Joslyn	Well Locked at Arrival:	no
Condition of Well:	Missing lock	Well Locked at Departure:	no
Well Completion:	Flush mount	Key Number To Well:	NA

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

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

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

Groundwater Sampling Form

ARCADIS

Project Number	30167840	**Well ID**	JS-MW-30			**Date**	06/21/2023
Project Name/Location	RACER Pontiac North Campus 2023	**Weather(°F)**	77.0 degrees F and Mostly Clear. The wind is blowing at 4.7 mph.				
Measuring Pt. Description	Top of Inner Casing	**MP Elevation**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	1.67	**Total Depth (ft-bmp)**	8.19	**Water Column (ft)**	6.52	**Gallons in Well**	1.06
Purge Start	11:20	**Pump Intake (ft-bmp)**	6	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Purge End	12:10	**Volumes Purged**	1.89	**Sample ID**	JS-MW-30_GW-062123	**Sampled by**	Garrett Link
Sample Time	12:08	**Gallons Purged**	2.00	**Replicate/ Code No.**	NA	**Sample Type**	Grab

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:25	0	0	120	1.91	--	7.07	0.97	25	0.44	18.3	103.3	--	--
11:30	5	5	100	1.91	--	7.1	0.93	11.1	0.37	19.3	92	--	--
11:35	5	10	100	1.91	--	7.1	0.93	8.11	0.36	19.7	88.2	--	--
11:41	6	16	100	1.91	--	7.09	0.92	4.79	0.36	19.9	81.7	--	--
11:45	4	20	100	1.95	--	7.07	0.9	5.07	0.29	19	78.8	--	--
11:50	5	25	100	1.97	--	7.09	0.89	3.5	0.29	18.8	75.2	--	--
11:55	5	30	100	1.99	--	7.1	0.92	2.22	0.3	18.8	71.8	--	--
12:00	5	35	100	1.99	--	7.09	0.9	1.61	0.31	19.1	69.4	--	--
12:05	5	40	100	2.00	--	7.1	0.92	2.32	0.29	18.6	67.8		None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04; 1.5 = 0.09; 2.5 = 0.26; 3.5 = 0.50; 6 = 1.47
1.25 = 0.06; 2 = 0.16; 3 = 0.37; 4 = 0.65

Well Information

Well Location: Joslyn

Condition of Well: Good condition

Well Completion: Flush mount

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: NA

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

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

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

Attachment 2

Analytical Reports

Analytical Laboratory Report

Report ID: S46107.01(01)
Generated on 03/15/2023

Report to

Attention: Alexis Crisp
Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Addtional Contacts: Tiffany Linder, Ian Drost

Report produced by

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)

Report Summary

Lab Sample ID(s): S46107.01-S46107.08
Project: Monitoring
Collected Date(s): 03/09/2023
Submitted Date/Time: 03/09/2023 15:20
Sampled by: Leticia Ferreria
P.O. #: 30167840.00005

Table of Contents

Maya Murshak
Technical Director

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.
Full accreditation certificates are available upon request. Starred (*) analytes are not 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.

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.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
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
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
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
N/A	Not Applicable
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003

Sample Summary (8 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S46107.01	JS-MW-16_GW-030923	Groundwater	03/09/23 10:20
S46107.02	JS-MW-16_GW-030923 MS	Groundwater	03/09/23 10:20
S46107.03	JS-MW-16_GW-030923 MSD	Groundwater	03/09/23 10:20
S46107.04	JS-MW-19_GW-030923	Groundwater	03/09/23 11:19
S46107.05	JS-MW-09_GW-030923	Groundwater	03/09/23 12:24
S46107.06	JS-MW-27_GW-030923	Groundwater	03/09/23 13:41
S46107.07	Trip Blank	Water	03/09/23 00:01
S46107.08	DUP-01_GW-030923	Groundwater	03/09/23 00:01

Lab Sample ID: S46107.01
Sample Tag: JS-MW-16_GW-030923
Collected Date/Time: 03/09/2023 10:20
Matrix: Groundwater
COC Reference: 138071

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/13/23 10:58	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/13/23 14:53, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	4	1		ug/L	1	71-43-2	
1,2-Dichloroethane	12	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	

Lab Sample ID: S46107.01 (continued)
Sample Tag: JS-MW-16_GW-030923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/13/23 14:53, Analyst: KAG (continued)

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

Lab Sample ID: S46107.02
Sample Tag: JS-MW-16_GW-030923 MS
Collected Date/Time: 03/09/2023 10:20
Matrix: Groundwater
COC Reference: 138071

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/13/23 10:58	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/13/23 20:02, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	57	10		ug/L	1	60-29-7	1
Acetone	57	50		ug/L	1	67-64-1	1
Methyl iodide	56	1		ug/L	1	74-88-4	1
Carbon disulfide	45	5		ug/L	1	75-15-0	1
tert-Methyl butyl ether (MTBE)	57	5		ug/L	1	1634-04-4	1
Acrylonitrile	48	2		ug/L	1	107-13-1	1
2-Butanone (MEK)	52	25		ug/L	1	78-93-3	1
Dichlorodifluoromethane	42	5		ug/L	1	75-71-8	1
Chloromethane	57	5		ug/L	1	74-87-3	1
Vinyl chloride	49	1		ug/L	1	75-01-4	1
Bromomethane	52	5		ug/L	1	74-83-9	1
Chloroethane	50	5		ug/L	1	75-00-3	1
Trichlorofluoromethane	48	1		ug/L	1	75-69-4	1
1,1-Dichloroethene	47	1		ug/L	1	75-35-4	1
Methylene chloride	52	5		ug/L	1	75-09-2	1
trans-1,2-Dichloroethene	49	1		ug/L	1	156-60-5	1
1,1-Dichloroethane	52	1		ug/L	1	75-34-3	1
cis-1,2-Dichloroethene	54	1		ug/L	1	156-59-2	1
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	1
Chloroform	54	1		ug/L	1	67-66-3	1
Bromochloromethane	56	1		ug/L	1	74-97-5	1
1,1,1-Trichloroethane	49	1		ug/L	1	71-55-6	1
4-Methyl-2-pentanone (MIBK)	51	50		ug/L	1	108-10-1	1
2-Hexanone	52	50		ug/L	1	591-78-6	1
Carbon tetrachloride	47	1		ug/L	1	56-23-5	1
Benzene	54	1		ug/L	1	71-43-2	1
1,2-Dichloroethane	63	1		ug/L	1	107-06-2	1
Trichloroethene	50	1		ug/L	1	79-01-6	1
1,2-Dichloropropane	54	1		ug/L	1	78-87-5	1
Bromodichloromethane	54	1		ug/L	1	75-27-4	1
Dibromomethane	54	5		ug/L	1	74-95-3	1
cis-1,3-Dichloropropene	54	1		ug/L	1	10061-01-5	1
Toluene	52	1		ug/L	1	108-88-3	1
trans-1,3-Dichloropropene	54	1		ug/L	1	10061-02-6	1
1,1,2-Trichloroethane	56	1		ug/L	1	79-00-5	1
Tetrachloroethene	49	1		ug/L	1	127-18-4	1

1-Spiked at 50ug/L

Lab Sample ID: S46107.02 (continued)
Sample Tag: JS-MW-16_GW-030923 MS

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/13/23 20:02, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	45	1		ug/L	1	110-57-6	1
Dibromochloromethane	52	5		ug/L	1	124-48-1	1
1,2-Dibromoethane	52	1		ug/L	1	106-93-4	1
Chlorobenzene	50	1		ug/L	1	108-90-7	1
1,1,1,2-Tetrachloroethane	50	1		ug/L	1	630-20-6	1
Ethylbenzene	49	1		ug/L	1	100-41-4	1
p,m-Xylene*	105	2		ug/L	1		1
o-Xylene	49	1		ug/L	1	95-47-6	1
Styrene	53	1		ug/L	1	100-42-5	1
Isopropylbenzene	48	5		ug/L	1	98-82-8	1
Bromoform	52	1		ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	50	1		ug/L	1	79-34-5	1
1,2,3-Trichloropropane	49	1		ug/L	1	96-18-4	1
n-Propylbenzene	48	1		ug/L	1	103-65-1	1
Bromobenzene	51	1		ug/L	1	108-86-1	1
1,3,5-Trimethylbenzene	48	1		ug/L	1	108-67-8	1
tert-Butylbenzene	45	1		ug/L	1	98-06-6	1
1,2,4-Trimethylbenzene	51	1		ug/L	1	95-63-6	1
sec-Butylbenzene	44	1		ug/L	1	135-98-8	1
p-Isopropyltoluene	45	5		ug/L	1	99-87-6	1
1,3-Dichlorobenzene	48	1		ug/L	1	541-73-1	1
1,4-Dichlorobenzene	48	1		ug/L	1	106-46-7	1
1,2-Dichlorobenzene	49	1		ug/L	1	95-50-1	1
1,2,3-Trimethylbenzene	49	1		ug/L	1	526-73-8	1
n-Butylbenzene	42	1		ug/L	1	104-51-8	1
Hexachloroethane	44	5		ug/L	1	67-72-1	1
1,2-Dibromo-3-chloropropane	45	5		ug/L	1	96-12-8	1
1,2,4-Trichlorobenzene	46	5		ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	45	5		ug/L	1	87-61-6	1
Naphthalene	45	5		ug/L	1	91-20-3	1
2-Methylnaphthalene	36	5		ug/L	1	91-57-6	1

1-Spiked at 50ug/L

Lab Sample ID: S46107.03
Sample Tag: JS-MW-16_GW-030923 MSD
Collected Date/Time: 03/09/2023 10:20
Matrix: Groundwater
COC Reference: 138071

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/13/23 10:58	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/13/23 20:21, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	54	10		ug/L	1	60-29-7	1
Acetone	50	50		ug/L	1	67-64-1	1
Methyl iodide	45	1		ug/L	1	74-88-4	1
Carbon disulfide	41	5		ug/L	1	75-15-0	1
tert-Methyl butyl ether (MTBE)	55	5		ug/L	1	1634-04-4	1
Acrylonitrile	47	2		ug/L	1	107-13-1	1
2-Butanone (MEK)	48	25		ug/L	1	78-93-3	1
Dichlorodifluoromethane	35	5		ug/L	1	75-71-8	1
Chloromethane	54	5		ug/L	1	74-87-3	1
Vinyl chloride	39	1		ug/L	1	75-01-4	1
Bromomethane	50	5		ug/L	1	74-83-9	1
Chloroethane	44	5		ug/L	1	75-00-3	1
Trichlorofluoromethane	44	1		ug/L	1	75-69-4	1
1,1-Dichloroethene	43	1		ug/L	1	75-35-4	1
Methylene chloride	48	5		ug/L	1	75-09-2	1
trans-1,2-Dichloroethene	46	1		ug/L	1	156-60-5	1
1,1-Dichloroethane	50	1		ug/L	1	75-34-3	1
cis-1,2-Dichloroethene	52	1		ug/L	1	156-59-2	1
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	1
Chloroform	52	1		ug/L	1	67-66-3	1
Bromochloromethane	55	1		ug/L	1	74-97-5	1
1,1,1-Trichloroethane	46	1		ug/L	1	71-55-6	1
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	1
2-Hexanone	Not detected	50		ug/L	1	591-78-6	1
Carbon tetrachloride	45	1		ug/L	1	56-23-5	1
Benzene	52	1		ug/L	1	71-43-2	1
1,2-Dichloroethane	60	1		ug/L	1	107-06-2	1
Trichloroethene	48	1		ug/L	1	79-01-6	1
1,2-Dichloropropane	52	1		ug/L	1	78-87-5	1
Bromodichloromethane	52	1		ug/L	1	75-27-4	1
Dibromomethane	52	5		ug/L	1	74-95-3	1
cis-1,3-Dichloropropene	53	1		ug/L	1	10061-01-5	1
Toluene	50	1		ug/L	1	108-88-3	1
trans-1,3-Dichloropropene	52	1		ug/L	1	10061-02-6	1
1,1,2-Trichloroethane	54	1		ug/L	1	79-00-5	1
Tetrachloroethene	48	1		ug/L	1	127-18-4	1

1-Spiked at 50ug/L

Lab Sample ID: S46107.03 (continued)
Sample Tag: JS-MW-16_GW-030923 MSD

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/13/23 20:21, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	44	1		ug/L	1	110-57-6	1
Dibromochloromethane	51	5		ug/L	1	124-48-1	1
1,2-Dibromoethane	51	1		ug/L	1	106-93-4	1
Chlorobenzene	49	1		ug/L	1	108-90-7	1
1,1,1,2-Tetrachloroethane	49	1		ug/L	1	630-20-6	1
Ethylbenzene	48	1		ug/L	1	100-41-4	1
p,m-Xylene*	102	2		ug/L	1		1
o-Xylene	48	1		ug/L	1	95-47-6	1
Styrene	51	1		ug/L	1	100-42-5	1
Isopropylbenzene	48	5		ug/L	1	98-82-8	1
Bromoform	50	1		ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	50	1		ug/L	1	79-34-5	1
1,2,3-Trichloropropane	49	1		ug/L	1	96-18-4	1
n-Propylbenzene	47	1		ug/L	1	103-65-1	1
Bromobenzene	50	1		ug/L	1	108-86-1	1
1,3,5-Trimethylbenzene	48	1		ug/L	1	108-67-8	1
tert-Butylbenzene	45	1		ug/L	1	98-06-6	1
1,2,4-Trimethylbenzene	50	1		ug/L	1	95-63-6	1
sec-Butylbenzene	43	1		ug/L	1	135-98-8	1
p-Isopropyltoluene	44	5		ug/L	1	99-87-6	1
1,3-Dichlorobenzene	46	1		ug/L	1	541-73-1	1
1,4-Dichlorobenzene	46	1		ug/L	1	106-46-7	1
1,2-Dichlorobenzene	47	1		ug/L	1	95-50-1	1
1,2,3-Trimethylbenzene	47	1		ug/L	1	526-73-8	1
n-Butylbenzene	41	1		ug/L	1	104-51-8	1
Hexachloroethane	43	5		ug/L	1	67-72-1	1
1,2-Dibromo-3-chloropropane	43	5		ug/L	1	96-12-8	1
1,2,4-Trichlorobenzene	46	5		ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	44	5		ug/L	1	87-61-6	1
Naphthalene	45	5		ug/L	1	91-20-3	1
2-Methylnaphthalene	40	5		ug/L	1	91-57-6	1

1-Spiked at 50ug/L

Lab Sample ID: S46107.04
Sample Tag: JS-MW-19_GW-030923
Collected Date/Time: 03/09/2023 11:19
Matrix: Groundwater
COC Reference: 138071

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/13/23 10:58	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 16:41, Analyst: KAG

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

Lab Sample ID: S46107.04 (continued)
Sample Tag: JS-MW-19_GW-030923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 16:41, Analyst: KAG (continued)

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

Lab Sample ID: S46107.05
Sample Tag: JS-MW-09_GW-030923
Collected Date/Time: 03/09/2023 12:24
Matrix: Groundwater
COC Reference: 138071

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/13/23 10:58	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 22:34, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	500		ug/L	50	60-29-7	Y
Acetone	Not detected	2,500		ug/L	50	67-64-1	Y
Methyl iodide	Not detected	50		ug/L	50	74-88-4	Y
Carbon disulfide	Not detected	300		ug/L	50	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/L	50	1634-04-4	Y
Acrylonitrile	Not detected	100		ug/L	50	107-13-1	Y
2-Butanone (MEK)	Not detected	1,300		ug/L	50	78-93-3	Y
Dichlorodifluoromethane	Not detected	300		ug/L	50	75-71-8	Y
Chloromethane	Not detected	300		ug/L	50	74-87-3	Y
Vinyl chloride	Not detected	50		ug/L	50	75-01-4	Y
Bromomethane	Not detected	300		ug/L	50	74-83-9	Y
Chloroethane	Not detected	300		ug/L	50	75-00-3	Y
Trichlorofluoromethane	Not detected	50		ug/L	50	75-69-4	Y
1,1-Dichloroethene	Not detected	50		ug/L	50	75-35-4	Y
Methylene chloride	Not detected	300		ug/L	50	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	50		ug/L	50	156-60-5	Y
1,1-Dichloroethane	Not detected	50		ug/L	50	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	50		ug/L	50	156-59-2	Y
Tetrahydrofuran*	Not detected	4,500		ug/L	50	109-99-9	Y
Chloroform	Not detected	50		ug/L	50	67-66-3	Y
Bromochloromethane	Not detected	50		ug/L	50	74-97-5	Y
1,1,1-Trichloroethane	Not detected	50		ug/L	50	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	2,500		ug/L	50	108-10-1	Y
2-Hexanone	Not detected	2,500		ug/L	50	591-78-6	Y
Carbon tetrachloride	Not detected	50		ug/L	50	56-23-5	Y
Benzene	520	50		ug/L	50	71-43-2	Y
1,2-Dichloroethane	Not detected	50		ug/L	50	107-06-2	Y
Trichloroethene	Not detected	50		ug/L	50	79-01-6	Y
1,2-Dichloropropane	Not detected	50		ug/L	50	78-87-5	Y
Bromodichloromethane	Not detected	50		ug/L	50	75-27-4	Y
Dibromomethane	Not detected	300		ug/L	50	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	50		ug/L	50	10061-01-5	Y
Toluene	130	50		ug/L	50	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	50		ug/L	50	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	50		ug/L	50	79-00-5	Y
Tetrachloroethene	Not detected	50		ug/L	50	127-18-4	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S46107.05 (continued)
Sample Tag: JS-MW-09_GW-030923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 22:34, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	Not detected	50		ug/L	50	110-57-6	Y
Dibromochloromethane	Not detected	300		ug/L	50	124-48-1	Y
1,2-Dibromoethane	Not detected	50		ug/L	50	106-93-4	Y
Chlorobenzene	Not detected	50		ug/L	50	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	50		ug/L	50	630-20-6	Y
Ethylbenzene	1,610	50		ug/L	50	100-41-4	Y
p,m-Xylene*	5,000	100		ug/L	50		Y
o-Xylene	100	50		ug/L	50	95-47-6	Y
Styrene	Not detected	50		ug/L	50	100-42-5	Y
Isopropylbenzene	Not detected	300		ug/L	50	98-82-8	Y
Bromoform	Not detected	50		ug/L	50	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	50		ug/L	50	79-34-5	Y
1,2,3-Trichloropropane	Not detected	50		ug/L	50	96-18-4	Y
n-Propylbenzene	170	50		ug/L	50	103-65-1	Y
Bromobenzene	Not detected	50		ug/L	50	108-86-1	Y
1,3,5-Trimethylbenzene	390	50		ug/L	50	108-67-8	Y
tert-Butylbenzene	Not detected	50		ug/L	50	98-06-6	Y
1,2,4-Trimethylbenzene	1,350	50		ug/L	50	95-63-6	Y
sec-Butylbenzene	Not detected	50		ug/L	50	135-98-8	Y
p-Isopropyltoluene	Not detected	300		ug/L	50	99-87-6	Y
1,3-Dichlorobenzene	Not detected	50		ug/L	50	541-73-1	Y
1,4-Dichlorobenzene	Not detected	50		ug/L	50	106-46-7	Y
1,2-Dichlorobenzene	Not detected	50		ug/L	50	95-50-1	Y
1,2,3-Trimethylbenzene	380	50		ug/L	50	526-73-8	Y
n-Butylbenzene	Not detected	50		ug/L	50	104-51-8	Y
Hexachloroethane	Not detected	300		ug/L	50	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	300		ug/L	50	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	300		ug/L	50	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	300		ug/L	50	87-61-6	Y
Naphthalene	Not detected	300		ug/L	50	91-20-3	Y
2-Methylnaphthalene	Not detected	300		ug/L	50	91-57-6	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S46107.06
Sample Tag: JS-MW-27_GW-030923
Collected Date/Time: 03/09/2023 13:41
Matrix: Groundwater
COC Reference: 138071

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/13/23 10:58	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 17:04, Analyst: KAG

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

Lab Sample ID: S46107.06 (continued)
Sample Tag: JS-MW-27_GW-030923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 17:04, Analyst: KAG (continued)

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

Lab Sample ID: S46107.07
Sample Tag: Trip Blank
Collected Date/Time: 03/09/2023 00:01
Matrix: Water
COC Reference: 138071

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	3.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/13/23 10:58	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 15:30, Analyst: KAG

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

Lab Sample ID: S46107.07 (continued)
Sample Tag: Trip Blank

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 15:30, Analyst: KAG (continued)

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

Lab Sample ID: S46107.08
Sample Tag: DUP-01_GW-030923
Collected Date/Time: 03/09/2023 00:01
Matrix: Groundwater
COC Reference: 138071

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/13/23 10:58	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 17:28, Analyst: KAG

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

Lab Sample ID: S46107.08 (continued)
Sample Tag: DUP-01_GW-030923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/10/23 17:28, Analyst: KAG (continued)

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

Merit Laboratories Login Checklist

Lab Set ID: S46107
Client: ARCADIS_NOVI (ARCADIS U.S., Inc.)
Project: Monitoring
Submitted: 03/09/2023 15:20 Login User: MMC

Attention: Alexis Crisp
Address: Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.3
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

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

Client Review By: _____ Date: _____

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

C.O.C. PAGE # _____ OF _____ 138071

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Alexis Crisp
COMPANY: Arcadis
ADDRESS: 28550 Cabot Dr #500
CITY: Novi STATE: MI ZIP CODE: 48377
PHONE NO.: FAX NO.: P.O. NO.: 30167840.00005
E-MAIL ADDRESS: Tiffany.Linder@arcadis.com Alexis.Crisp@arcadis.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts payable ☐ SAME
COMPANY: ~~630 Plaza Dr #600~~ Arcadis
ADDRESS: 630 Plaza Dr #600
CITY: Highlands Ranch STATE: CO ZIP CODE: 80129
PHONE NO.: E-MAIL ADDRESS: accountspayable.administrator@arcadis.com

PROJECT NO./NAME:
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Leticia Ferreira

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

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

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR 2023 DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Full 8260 VOCs	Special Instructions
46107.01	03/09/23	10:20	JS-MW-16_GW-030923	GW	9		X						X	Run MS/MSD
.04 .02	03/09/23	1119	JS-MW-19_GW-030923	GW	3		X						X	
.05 .03	03/09/23	1224	JS-MW-09_GW-030923	GW	3		X						X	
.06 .04	03/09/23	1341	JS-MW-27_GW-030923	GW	3		X						X	
.07 .05	—	—	Trip blank	L	1		X						X	
.08 .06	03/09/23	—	DUP-01_GW-030923	GW	3		X						X	
(MC)														

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☐ Sampler	DATE 03/09/23	TIME 1400
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 3/9/23	TIME 1400
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 3/9/23	TIME 1520
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 3/9/23	TIME 1520

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 3.3

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

Rev. 5.18.12

Analytical Laboratory Report

Report ID: S46206.01(01)
Generated on 03/20/2023

Report to

Attention: Alexis Crisp
Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Addtional Contacts: Tiffany Linder, Ian Drost

Report produced by

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)

Report Summary

Lab Sample ID(s): S46206.01-S46206.06
Project: RACER PNC
Collected Date(s): 03/09/2023 - 03/13/2023
Submitted Date/Time: 03/13/2023 15:30
Sampled by: Leticia Ferreria
P.O. #: 30167840.00005

Table of Contents

Maya Murshak
Technical Director

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.
Full accreditation certificates are available upon request. Starred (*) analytes are not 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.

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.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
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
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
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
N/A	Not Applicable
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003

Sample Summary (6 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S46206.01	JS-MW-04_GW-030923	Groundwater	03/09/23 15:16
S46206.02	JS-MW-10_GW-031323	Groundwater	03/13/23 10:04
S46206.03	JS-MW-05_GW-031323	Groundwater	03/13/23 11:03
S46206.04	JS-MW-22_GW-031323	Groundwater	03/13/23 12:28
S46206.05	DUP-02_GW-030923	Groundwater	03/09/23 00:01
S46206.06	Trip Blank	Water	03/13/23 00:01

Lab Sample ID: S46206.01
Sample Tag: JS-MW-04_GW-030923
Collected Date/Time: 03/09/2023 15:16
Matrix: Groundwater
COC Reference: 160084

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 22:31, Analyst: KAG

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

Lab Sample ID: S46206.01 (continued)
Sample Tag: JS-MW-04_GW-030923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 22:31, Analyst: KAG (continued)

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

Lab Sample ID: S46206.02
Sample Tag: JS-MW-10_GW-031323
Collected Date/Time: 03/13/2023 10:04
Matrix: Groundwater
COC Reference: 160084

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 00:21, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	102	1		ug/L	1	71-43-2	
1,2-Dichloroethane	8	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	

Lab Sample ID: S46206.02 (continued)
Sample Tag: JS-MW-10_GW-031323

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 00:21, Analyst: KAG (continued)

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

Lab Sample ID: S46206.03
Sample Tag: JS-MW-05_GW-031323
Collected Date/Time: 03/13/2023 11:03
Matrix: Groundwater
COC Reference: 160084

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 22:50, Analyst: KAG

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

Lab Sample ID: S46206.03 (continued)
Sample Tag: JS-MW-05_GW-031323

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 22:50, Analyst: KAG (continued)

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

Lab Sample ID: S46206.04
Sample Tag: JS-MW-22_GW-031323
Collected Date/Time: 03/13/2023 12:28
Matrix: Groundwater
COC Reference: 160084

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 23:10, Analyst: KAG

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

Lab Sample ID: S46206.04 (continued)
Sample Tag: JS-MW-22_GW-031323

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 23:10, Analyst: KAG (continued)

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

Lab Sample ID: S46206.05
Sample Tag: DUP-02_GW-030923
Collected Date/Time: 03/09/2023 00:01
Matrix: Groundwater
COC Reference: 160084

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/20/23 12:05	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 23:29, Analyst: KAG

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

Lab Sample ID: S46206.05 (continued)
Sample Tag: DUP-02_GW-030923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/17/23 23:29, Analyst: KAG (continued)

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

Lab Sample ID: S46206.06
Sample Tag: Trip Blank
Collected Date/Time: 03/13/2023 00:01
Matrix: Water
COC Reference: 160084

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	5.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 19:38, Analyst: KAG

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

Lab Sample ID: S46206.06 (continued)
Sample Tag: Trip Blank

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 19:38, Analyst: KAG (continued)

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

Merit Laboratories Login Checklist

Lab Set ID: S46206
Client: ARCADIS_NOVI (ARCADIS U.S., Inc.)
Project: RACER PNC
Submitted: 03/13/2023 15:30 Login User: MMC

Attention: Alexis Crisp
Address: Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 5.3
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

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

Client Review By: _____ Date: _____

Merit Laboratories, Inc.

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

C.O.C. PAGE # _____ OF _____ 160084

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Alexis Crisp
COMPANY: Arcadis
ADDRESS: 28550 Cabot Dr #500
CITY: Novi STATE: MI ZIP CODE: 48377
PHONE NO.: CELL NO.: PO NO.: 30167840.00005
E-MAIL ADDRESS: Tiffany.Linder@arcadis.com Alexis.Crisp@arcadis.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts payable ☐ SAME
COMPANY: Arcadis
ADDRESS: 630 Plaza Dr #600
CITY: Highlands Ranch STATE: CO ZIP CODE: 80129
PHONE NO.: E-MAIL ADDRESS: accounts payable.administration@arcadis.com

PROJECT NO./NAME: RACER PNC
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Lenia Ferreira

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other _____

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Full 8260 VOCs
46206.01	03/09/23	1516	JS-MW-04_GW-030923	GW	3		X						X
	~~03/09/23~~		~~JS-MW-10_GW-030923~~	~~GW~~	~~3~~		~~X~~						~~X~~
.02	03/13/23	1004	JS-MW-10_GW-031323	GW	3		X						X
.03	03/13/23	1103	JS-MW-05_GW-031323	GW	3		X						X
	~~03/13/23~~	~~1208~~											
.04	03/13/23	1228	JS-MW-22_GW-031323	GW	3		X						X
.05	03/09/23	—	DUP-02_GW-030923	GW	3		X						X
.06	—	—	Triplank	L	1		X						X

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☐ Sampler	DATE	TIME
		03/13/23	1400
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
		3/13/23	14:00
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
		3/13/23	15:30
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
		3/13/23	1530

RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME

SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS

NOTES: TEMP. ON ARRIVAL 5.3

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

Rev. 1.26.22

Analytical Laboratory Report

Report ID: S46237.01(01)
Generated on 03/20/2023

Report to

Attention: Alexis Crisp
Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Addtional Contacts: Tiffany Linder, Ian Drost

Report produced by

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)

Report Summary

Lab Sample ID(s): S46237.01-S46237.06
Project: RACER PNC / 30167840
Collected Date(s): 03/13/2023 - 03/14/2023
Submitted Date/Time: 03/14/2023 15:10
Sampled by: Leticia Ferreria
P.O. #: 30167840.00005

Table of Contents

Maya Murshak
Technical Director

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.
Full accreditation certificates are available upon request. Starred (*) analytes are not 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.

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.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
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
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
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
N/A	Not Applicable
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003

Analytical Laboratory Report

Sample Summary (6 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S46237.01	JS-MW-24_GW-031423	Groundwater	03/14/23 11:02
S46237.02	JS-MW-30_GW-031423	Groundwater	03/14/23 11:57
S46237.03	JS-MW-23_GW-031423	Groundwater	03/14/23 12:51
S46237.04	JS-MW-21_GW-031323	Groundwater	03/13/23 13:52
S46237.05	JS-MW-20_GW-031323	Groundwater	03/13/23 14:45
S46237.06	Trip Blank	Water	03/13/23 00:01

Analytical Laboratory Report

Lab Sample ID: S46237.01
Sample Tag: JS-MW-24_GW-031423
Collected Date/Time: 03/14/2023 11:02
Matrix: Groundwater
COC Reference: 160086

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 21:12, Analyst: KAG

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

Lab Sample ID: S46237.01 (continued)
Sample Tag: JS-MW-24_GW-031423

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 21:12, Analyst: KAG (continued)

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

Lab Sample ID: S46237.02
Sample Tag: JS-MW-30_GW-031423
Collected Date/Time: 03/14/2023 11:57
Matrix: Groundwater
COC Reference: 160086

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/18/23 01:06, Analyst: KAG

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

Lab Sample ID: S46237.02 (continued)
Sample Tag: JS-MW-30_GW-031423

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/18/23 01:06, Analyst: KAG (continued)

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

Lab Sample ID: S46237.03
Sample Tag: JS-MW-23_GW-031423
Collected Date/Time: 03/14/2023 12:51
Matrix: Groundwater
COC Reference: 160086

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 22:00, Analyst: KAG

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

Lab Sample ID: S46237.03 (continued)
Sample Tag: JS-MW-23_GW-031423

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 22:00, Analyst: KAG (continued)

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

Lab Sample ID: S46237.04
Sample Tag: JS-MW-21_GW-031323
Collected Date/Time: 03/13/2023 13:52
Matrix: Groundwater
COC Reference: 160086

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 22:23, Analyst: KAG

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

Lab Sample ID: S46237.04 (continued)
Sample Tag: JS-MW-21_GW-031323

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 22:23, Analyst: KAG (continued)

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

Lab Sample ID: S46237.05
Sample Tag: JS-MW-20_GW-031323
Collected Date/Time: 03/13/2023 14:45
Matrix: Groundwater
COC Reference: 160086

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 22:47, Analyst: KAG

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

Lab Sample ID: S46237.05 (continued)
Sample Tag: JS-MW-20_GW-031323

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 22:47, Analyst: KAG (continued)

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

Lab Sample ID: S46237.06
Sample Tag: Trip Blank
Collected Date/Time: 03/13/2023 00:01
Matrix: Water
COC Reference: 160086

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	2.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	03/17/23 12:22	ASW	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 20:01, Analyst: KAG

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

Lab Sample ID: S46237.06 (continued)
Sample Tag: Trip Blank

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 03/16/23 20:01, Analyst: KAG (continued)

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

Merit Laboratories Login Checklist

Lab Set ID: S46237
Client: ARCADIS_NOVI (ARCADIS U.S., Inc.)
Project: RACER PNC / 30167840
Submitted: 03/14/2023 15:10 Login User: MAM

Attention: Alexis Crisp
Address: Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 2.9
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[ ] No	[X] N/A	Do water VOC or TOX bottles contain headspace	

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

Client Review By: _____ Date: _____

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

C.O.C. PAGE # _____ OF _____ 160086

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Alexis Crisp
COMPANY: Arcadis
ADDRESS: 28550 Cabot Dr #500
CITY: Novi STATE: MI ZIP CODE: 48377
PHONE NO.: CELL NO.:
P.O. NO.: 30167840.00005
E-MAIL ADDRESS: Tiffany.Linder@arcadis.com Alexis.Crisp@arcadis.com
QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: Arcadis
ADDRESS: 630 Plaza #600
CITY: Highlands Ranch STATE: CO ZIP CODE: 80129
PHONE NO.: E-MAIL ADDRESS: accountspayable-administration@arcadis.com

PROJECT NO./NAME: Racer PMC / 30167840
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Leticia Ferreira

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other _____

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Full 8260 VOC
46237.01	03/14/23	1102	JS-MW-24-GW-031423	GW	3		X						X
.02	03/14/23	1157	JS-MW-30-GW-031423	GW	3		X						X
.03	03/14/23	1251	JS-MW-23-GW-031423	GW	3		X						X
.04	03/13/23	1352	JS-MW-21-GW-031323	GW	3		X						X
.05	03/13/23	1445	JS-MW-20-GW-031323	GW	3		X						X
.06	—	—	Trip blank	L	1		X						X

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☐ Sampler	DATE	TIME
		03/14/23	1400
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
		3/14/23	1410
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
		3/14/23	1510
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
M Allcock		3/14/23	1510

RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME

SEAL NO. _____ SEAL INTACT YES ☐ NO ☐ INITIALS _____
SEAL NO. _____ SEAL INTACT YES ☐ NO ☐ INITIALS _____

NOTES: TEMP. ON ARRIVAL 2.9

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

Rev. 1.26.22

Analytical Laboratory Report

Report ID: S50028.01(01)
Generated on 06/27/2023

Report to

Attention: Alexis Crisp
Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Addtional Contacts: Tiffany Linder, Ian Drost

Report produced by

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)

Report Summary

Lab Sample ID(s): S50028.01-S50028.08
Project: RACER PNC
Collected Date(s): 06/19/2023 - 06/20/2023
Submitted Date/Time: 06/20/2023 13:50
Sampled by: Unknown
P.O. #: 30167840.00005

Table of Contents

Maya Murshak
Technical Director

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.
Full accreditation certificates are available upon request. Starred (*) analytes are not 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.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
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
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
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
N/A	Not Applicable
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003

Analytical Laboratory Report

Sample Summary (8 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S50028.01	JS-MW-10_GW061923	Groundwater	06/19/23 12:30
S50028.02	TRIP BLANK	Liquid	06/19/23 00:01
S50028.03	DUP-01_GW-061923	Groundwater	06/19/23 00:01
S50028.04	JS-MW-06_GW-061923	Groundwater	06/19/23 13:45
S50028.05	JS-MW-11_GW-061923	Groundwater	06/19/23 14:25
S50028.06	JS-MW-09_GW-062023	Groundwater	06/20/23 08:12
S50028.07	JS-MW-04_GW-062023	Groundwater	06/20/23 09:40
S50028.08	JS-MW-05_GW-062023	Groundwater	06/20/23 11:25

Lab Sample ID: S50028.01
Sample Tag: JS-MW-10_GW061923
Collected Date/Time: 06/19/2023 12:30
Matrix: Groundwater
COC Reference: 163448

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	>2	N/A	06/22/23 11:53	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 07:40, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	44	1		ug/L	1	71-43-2	
1,2-Dichloroethane	4	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	

Lab Sample ID: S50028.01 (continued)
Sample Tag: JS-MW-10_GW061923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 07:40, Analyst: NDK (continued)

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

Lab Sample ID: S50028.02
Sample Tag: TRIP BLANK
Collected Date/Time: 06/19/2023 00:01
Matrix: Liquid
COC Reference: 163448

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/22/23 11:53	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 05:18, Analyst: NDK

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

Lab Sample ID: S50028.02 (continued)
Sample Tag: TRIP BLANK

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 05:18, Analyst: NDK (continued)

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

Lab Sample ID: S50028.03
Sample Tag: DUP-01_GW-061923
Collected Date/Time: 06/19/2023 00:01
Matrix: Groundwater
COC Reference: 163448

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/22/23 11:53	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 08:03, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	47	1		ug/L	1	71-43-2	
1,2-Dichloroethane	4	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	

Lab Sample ID: S50028.03 (continued)
Sample Tag: DUP-01_GW-061923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 08:03, Analyst: NDK (continued)

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

Lab Sample ID: S50028.04
Sample Tag: JS-MW-06_GW-061923
Collected Date/Time: 06/19/2023 13:45
Matrix: Groundwater
COC Reference: 163448

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/22/23 11:53	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 08:27, Analyst: NDK

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

Lab Sample ID: S50028.04 (continued)
Sample Tag: JS-MW-06_GW-061923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 08:27, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	16	1		ug/L	1	100-41-4	
p,m-Xylene*	26	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	3	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	20	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	2	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Lab Sample ID: S50028.05
Sample Tag: JS-MW-11_GW-061923
Collected Date/Time: 06/19/2023 14:25
Matrix: Groundwater
COC Reference: 163448

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/22/23 11:53	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 08:50, Analyst: NDK

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

Lab Sample ID: S50028.05 (continued)
Sample Tag: JS-MW-11_GW-061923

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 08:50, Analyst: NDK (continued)

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

Lab Sample ID: S50028.06
Sample Tag: JS-MW-09_GW-062023
Collected Date/Time: 06/20/2023 08:12
Matrix: Groundwater
COC Reference: 163448

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/22/23 11:53	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 11:35, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	500		ug/L	50	60-29-7	Y
Acetone	Not detected	2,500		ug/L	50	67-64-1	Y
Methyl iodide	Not detected	50		ug/L	50	74-88-4	Y
Carbon disulfide	Not detected	300		ug/L	50	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/L	50	1634-04-4	Y
Acrylonitrile	Not detected	100		ug/L	50	107-13-1	Y
2-Butanone (MEK)	Not detected	1,300		ug/L	50	78-93-3	Y
Dichlorodifluoromethane	Not detected	300		ug/L	50	75-71-8	Y
Chloromethane	Not detected	300		ug/L	50	74-87-3	Y
Vinyl chloride	Not detected	50		ug/L	50	75-01-4	Y
Bromomethane	Not detected	300		ug/L	50	74-83-9	Y
Chloroethane	Not detected	300		ug/L	50	75-00-3	Y
Trichlorofluoromethane	Not detected	50		ug/L	50	75-69-4	Y
1,1-Dichloroethene	Not detected	50		ug/L	50	75-35-4	Y
Methylene chloride	Not detected	300		ug/L	50	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	50		ug/L	50	156-60-5	Y
1,1-Dichloroethane	Not detected	50		ug/L	50	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	50		ug/L	50	156-59-2	Y
Tetrahydrofuran*	Not detected	4,500		ug/L	50	109-99-9	Y
Chloroform	Not detected	50		ug/L	50	67-66-3	Y
Bromochloromethane	Not detected	50		ug/L	50	74-97-5	Y
1,1,1-Trichloroethane	Not detected	50		ug/L	50	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	2,500		ug/L	50	108-10-1	Y
2-Hexanone	Not detected	2,500		ug/L	50	591-78-6	Y
Carbon tetrachloride	Not detected	50		ug/L	50	56-23-5	Y
Benzene	410	50		ug/L	50	71-43-2	Y
1,2-Dichloroethane	Not detected	50		ug/L	50	107-06-2	Y
Trichloroethene	Not detected	50		ug/L	50	79-01-6	Y
1,2-Dichloropropane	Not detected	50		ug/L	50	78-87-5	Y
Bromodichloromethane	Not detected	50		ug/L	50	75-27-4	Y
Dibromomethane	Not detected	300		ug/L	50	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	50		ug/L	50	10061-01-5	Y
Toluene	100	50		ug/L	50	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	50		ug/L	50	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	50		ug/L	50	79-00-5	Y
Tetrachloroethene	Not detected	50		ug/L	50	127-18-4	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S50028.06 (continued)
Sample Tag: JS-MW-09_GW-062023

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 11:35, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	Not detected	50		ug/L	50	110-57-6	Y
Dibromochloromethane	Not detected	300		ug/L	50	124-48-1	Y
1,2-Dibromoethane	Not detected	50		ug/L	50	106-93-4	Y
Chlorobenzene	Not detected	50		ug/L	50	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	50		ug/L	50	630-20-6	Y
Ethylbenzene	1,500	50		ug/L	50	100-41-4	Y
p,m-Xylene*	4,800	100		ug/L	50		Y
o-Xylene	90	50		ug/L	50	95-47-6	Y
Styrene	Not detected	50		ug/L	50	100-42-5	Y
Isopropylbenzene	Not detected	300		ug/L	50	98-82-8	Y
Bromoform	Not detected	50		ug/L	50	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	50		ug/L	50	79-34-5	Y
1,2,3-Trichloropropane	Not detected	50		ug/L	50	96-18-4	Y
n-Propylbenzene	170	50		ug/L	50	103-65-1	Y
Bromobenzene	Not detected	50		ug/L	50	108-86-1	Y
1,3,5-Trimethylbenzene	520	50		ug/L	50	108-67-8	Y
tert-Butylbenzene	Not detected	50		ug/L	50	98-06-6	Y
1,2,4-Trimethylbenzene	1,740	50		ug/L	50	95-63-6	Y
sec-Butylbenzene	Not detected	50		ug/L	50	135-98-8	Y
p-Isopropyltoluene	Not detected	300		ug/L	50	99-87-6	Y
1,3-Dichlorobenzene	Not detected	50		ug/L	50	541-73-1	Y
1,4-Dichlorobenzene	Not detected	50		ug/L	50	106-46-7	Y
1,2-Dichlorobenzene	Not detected	50		ug/L	50	95-50-1	Y
1,2,3-Trimethylbenzene	470	50		ug/L	50	526-73-8	Y
n-Butylbenzene	Not detected	50		ug/L	50	104-51-8	Y
Hexachloroethane	Not detected	300		ug/L	50	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	300		ug/L	50	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	300		ug/L	50	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	300		ug/L	50	87-61-6	Y
Naphthalene	300	300		ug/L	50	91-20-3	Y
2-Methylnaphthalene	Not detected	300		ug/L	50	91-57-6	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S50028.07
Sample Tag: JS-MW-04_GW-062023
Collected Date/Time: 06/20/2023 09:40
Matrix: Groundwater
COC Reference: 163448

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/22/23 11:53	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 09:13, Analyst: NDK

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

Lab Sample ID: S50028.07 (continued)
Sample Tag: JS-MW-04_GW-062023

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/22/23 09:13, Analyst: NDK (continued)

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

Lab Sample ID: S50028.08
Sample Tag: JS-MW-05_GW-062023
Collected Date/Time: 06/20/2023 11:25
Matrix: Groundwater
COC Reference: 163448

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/26/23 11:05	NDK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/23/23 18:22, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	105		ug/L	1	67-64-1	X
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	46	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	828	1		ug/L	1	71-43-2	E
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	65	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	

X-Elevated reporting limit due to matrix interference
E-Concentration exceeds calibration range

Lab Sample ID: S50028.08 (continued)
Sample Tag: JS-MW-05_GW-062023

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/23/23 18:22, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	447	1		ug/L	1	100-41-4	E
p,m-Xylene*	1,285	2		ug/L	1		E
o-Xylene	25	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	12	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	41	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	147	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	376	1		ug/L	1	95-63-6	E
sec-Butylbenzene	1	1		ug/L	1	135-98-8	
p-Isopropyltoluene	5	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	159	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	14		ug/L	1	104-51-8	X
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	204	5		ug/L	1	91-20-3	E
2-Methylnaphthalene	40	5		ug/L	1	91-57-6	

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 06/26/23 23:33, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/L	20	60-29-7	Y
Acetone	Not detected	1,000		ug/L	20	67-64-1	Y
Methyl iodide	Not detected	20		ug/L	20	74-88-4	Y
Carbon disulfide	Not detected	100		ug/L	20	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	100		ug/L	20	1634-04-4	Y
Acrylonitrile	Not detected	40		ug/L	20	107-13-1	Y
2-Butanone (MEK)	Not detected	500		ug/L	20	78-93-3	Y
Dichlorodifluoromethane	Not detected	100		ug/L	20	75-71-8	Y
Chloromethane	Not detected	100		ug/L	20	74-87-3	Y
Vinyl chloride	Not detected	20		ug/L	20	75-01-4	Y
Bromomethane	Not detected	100		ug/L	20	74-83-9	Y
Chloroethane	Not detected	100		ug/L	20	75-00-3	Y

E-Concentration exceeds calibration range
X-Elevated reporting limit due to matrix interference
Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S50028.08 (continued)
Sample Tag: JS-MW-05_GW-062023

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 06/26/23 23:33, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	20		ug/L	20	75-69-4	Y
1,1-Dichloroethene	Not detected	20		ug/L	20	75-35-4	Y
Methylene chloride	Not detected	100		ug/L	20	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	20		ug/L	20	156-60-5	Y
1,1-Dichloroethane	Not detected	20		ug/L	20	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	20		ug/L	20	156-59-2	Y
Tetrahydrofuran*	Not detected	1,800		ug/L	20	109-99-9	Y
Chloroform	Not detected	20		ug/L	20	67-66-3	Y
Bromochloromethane	Not detected	20		ug/L	20	74-97-5	Y
1,1,1-Trichloroethane	Not detected	20		ug/L	20	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	1,000		ug/L	20	108-10-1	Y
2-Hexanone	Not detected	1,000		ug/L	20	591-78-6	Y
Carbon tetrachloride	Not detected	20		ug/L	20	56-23-5	Y
Benzene	590	20		ug/L	20	71-43-2	Y
1,2-Dichloroethane	Not detected	20		ug/L	20	107-06-2	Y
Trichloroethene	Not detected	20		ug/L	20	79-01-6	Y
1,2-Dichloropropane	Not detected	20		ug/L	20	78-87-5	Y
Bromodichloromethane	Not detected	20		ug/L	20	75-27-4	Y
Dibromomethane	Not detected	100		ug/L	20	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	20		ug/L	20	10061-01-5	Y
Toluene	50	20		ug/L	20	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	20		ug/L	20	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	20		ug/L	20	79-00-5	Y
Tetrachloroethene	Not detected	20		ug/L	20	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	20		ug/L	20	110-57-6	Y
Dibromochloromethane	Not detected	100		ug/L	20	124-48-1	Y
1,2-Dibromoethane	Not detected	20		ug/L	20	106-93-4	Y
Chlorobenzene	Not detected	20		ug/L	20	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	20		ug/L	20	630-20-6	Y
Ethylbenzene	300	20		ug/L	20	100-41-4	Y
p,m-Xylene*	1,020	40		ug/L	20		Y
o-Xylene	20	20		ug/L	20	95-47-6	Y
Styrene	Not detected	20		ug/L	20	100-42-5	Y
Isopropylbenzene	Not detected	100		ug/L	20	98-82-8	Y
Bromoform	Not detected	20		ug/L	20	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	20		ug/L	20	79-34-5	Y
1,2,3-Trichloropropane	Not detected	20		ug/L	20	96-18-4	Y
n-Propylbenzene	30	20		ug/L	20	103-65-1	Y
Bromobenzene	Not detected	20		ug/L	20	108-86-1	Y
1,3,5-Trimethylbenzene	100	20		ug/L	20	108-67-8	Y
tert-Butylbenzene	Not detected	20		ug/L	20	98-06-6	Y
1,2,4-Trimethylbenzene	220	20		ug/L	20	95-63-6	Y
sec-Butylbenzene	Not detected	20		ug/L	20	135-98-8	Y
p-Isopropyltoluene	Not detected	100		ug/L	20	99-87-6	Y
1,3-Dichlorobenzene	Not detected	20		ug/L	20	541-73-1	Y
1,4-Dichlorobenzene	Not detected	20		ug/L	20	106-46-7	Y
1,2-Dichlorobenzene	Not detected	20		ug/L	20	95-50-1	Y
1,2,3-Trimethylbenzene	110	20		ug/L	20	526-73-8	Y
n-Butylbenzene	Not detected	20		ug/L	20	104-51-8	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S50028.08 (continued)
Sample Tag: JS-MW-05_GW-062023

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 06/26/23 23:33, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hexachloroethane	Not detected	100		ug/L	20	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	100		ug/L	20	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	100		ug/L	20	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	100		ug/L	20	87-61-6	Y
Naphthalene	100	100		ug/L	20	91-20-3	Y
2-Methylnaphthalene	Not detected	100		ug/L	20	91-57-6	Y

Y-Elevated reporting limit due to high target concentration

Merit Laboratories Login Checklist

Lab Set ID: S50028
Client: ARCADIS_NOVI (ARCADIS U.S., Inc.)
Project: RACER PNC
Submitted: 06/20/2023 13:50 Login User: PFD

Attention: Alexis Crisp
Address: Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 4.5
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

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

Client Review By: _____ Date: _____

Merit Laboratories, Inc.
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

163448

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: LEXI CRISP
COMPANY: ARCADIS
ADDRESS: 28550 CABOT DRIVE #500
CITY: NOVI STATE: MI ZIP CODE: 48377
PHONE NO.: — CELL NO.: —
P.O. NO.: 30167840.00005
E-MAIL ADDRESS: LEXI.CRISP@ARCADIS.COM
QUOTE NO.: —

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS: ACCOUNTS.PAYABLE@ARCADIS.COM

PROJECT NO./NAME: RACER PNC
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

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs (8260)	Special Instructions
50028.01	6/19/23	1230	JS-MW-10_GW-061923	GW	3		3						X	
.02	6/19/23	—	TRIP BLANK	-	1		1						X	(1)-TRIP BLANK
.03	6/19/23	—	DUP-01_GW-061923	GW	3		3						X	
.04	6/19/23	13:45	JS-MW-06_GW-061923	GW	3		3						X	
.05	6/19/23	14:25	JS-MW-11_GW-061923	GW	3		3						X	
.06	6/20/23	8:12	JS-MW-09_GW-062023	GW	3		3						X	
.07	6/20/23	9:40	JS-MW-04_GW-062023	GW	3		3						X	
.08	6/20/23	11:25	JS-MW-05_GW-062023	GW	3		3						X	

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE 6/20/23	TIME 15:30	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 6/20/23	TIME 18:30	
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 6/20/23	TIME 17:30	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 6/26/23	TIME 1356	

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS		
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS		

NOTES: TEMP. ON ARRIVAL 4.5

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

Rev. 1.26.22

Analytical Laboratory Report

Report ID: S50191.01(01)
Generated on 06/28/2023

Report to

Attention: Alexis Crisp
Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Addtional Contacts: Tiffany Linder, Ian Drost

Report produced by

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)

Report Summary

Lab Sample ID(s): S50191.01-S50191.14
Project: RACER PNC
Collected Date(s): 06/20/2023 - 06/22/2023
Submitted Date/Time: 06/22/2023 15:40
Sampled by: Unknown
P.O. #: 30167840.00005

Table of Contents

Maya Murshak
Technical Director

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.
Full accreditation certificates are available upon request. Starred (*) analytes are not 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.

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.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
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
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
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
N/A	Not Applicable
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003

Sample Summary (14 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S50191.01	JS-MW-19_GW-062023	Groundwater	06/20/23 14:00
S50191.02	JS-MW-20_GW-062023	Groundwater	06/20/23 15:35
S50191.03	JS-MW-21_GW-062123	Groundwater	06/21/23 09:05
S50191.04	JS-MW-23_GW-062123	Groundwater	06/21/23 10:45
S50191.05	JS-MW-30_GW-062123	Groundwater	06/21/23 12:08
S50191.06	TRIP BLANK	Water	06/20/23 00:01
S50191.07	JS-MW-26_GW-062123	Groundwater	06/21/23 14:00
S50191.08	JS-MW-24_GW-062223	Groundwater	06/22/23 09:17
S50191.09	JS-MW-29_GW-062223	Groundwater	06/22/23 10:43
S50191.10	JS-MW-16_GW-062223	Groundwater	06/22/23 12:45
S50191.11	JS-MW-16_GW-062223 MS	Groundwater	06/22/23 12:45
S50191.12	JS-MW-16_GW-062223 MSD	Groundwater	06/22/23 12:45
S50191.13	JS-MW-27_GW-062223	Groundwater	06/22/23 14:05
S50191.14	DUP-02_GW-062223	Groundwater	06/22/23 00:01

Lab Sample ID: S50191.01
Sample Tag: JS-MW-19_GW-062023
Collected Date/Time: 06/20/2023 14:00
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 13:31, Analyst: KAG

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

Lab Sample ID: S50191.01 (continued)
Sample Tag: JS-MW-19_GW-062023

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 13:31, Analyst: KAG (continued)

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

Lab Sample ID: S50191.02
Sample Tag: JS-MW-20_GW-062023
Collected Date/Time: 06/20/2023 15:35
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 14:11, Analyst: KAG

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

Lab Sample ID: S50191.02 (continued)
Sample Tag: JS-MW-20_GW-062023

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 14:11, Analyst: KAG (continued)

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

Lab Sample ID: S50191.03
Sample Tag: JS-MW-21_GW-062123
Collected Date/Time: 06/21/2023 09:05
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 14:30, Analyst: KAG

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

Lab Sample ID: S50191.03 (continued)
Sample Tag: JS-MW-21_GW-062123

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 14:30, Analyst: KAG (continued)

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

Lab Sample ID: S50191.04
Sample Tag: JS-MW-23_GW-062123
Collected Date/Time: 06/21/2023 10:45
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 14:50, Analyst: KAG

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

Lab Sample ID: S50191.04 (continued)
Sample Tag: JS-MW-23_GW-062123

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 14:50, Analyst: KAG (continued)

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

Lab Sample ID: S50191.05
Sample Tag: JS-MW-30_GW-062123
Collected Date/Time: 06/21/2023 12:08
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 15:10, Analyst: KAG

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

Lab Sample ID: S50191.05 (continued)
Sample Tag: JS-MW-30_GW-062123

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 15:10, Analyst: KAG (continued)

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

Lab Sample ID: S50191.06
Sample Tag: TRIP BLANK
Collected Date/Time: 06/20/2023 00:01
Matrix: Water
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 12:52, Analyst: KAG

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

Lab Sample ID: S50191.06 (continued)
Sample Tag: TRIP BLANK

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 12:52, Analyst: KAG (continued)

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

Lab Sample ID: S50191.07
Sample Tag: JS-MW-26_GW-062123
Collected Date/Time: 06/21/2023 14:00
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 15:30, Analyst: KAG

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

Lab Sample ID: S50191.07 (continued)
Sample Tag: JS-MW-26_GW-062123

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 15:30, Analyst: KAG (continued)

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

Lab Sample ID: S50191.08
Sample Tag: JS-MW-24_GW-062223
Collected Date/Time: 06/22/2023 09:17
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 15:49, Analyst: KAG

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

Lab Sample ID: S50191.08 (continued)
Sample Tag: JS-MW-24_GW-062223

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 15:49, Analyst: KAG (continued)

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

Lab Sample ID: S50191.09
Sample Tag: JS-MW-29_GW-062223
Collected Date/Time: 06/22/2023 10:43
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 16:08, Analyst: KAG

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

Lab Sample ID: S50191.09 (continued)
Sample Tag: JS-MW-29_GW-062223

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 16:08, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	3	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	17	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	2	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	4	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Lab Sample ID: S50191.10
Sample Tag: JS-MW-16_GW-062223
Collected Date/Time: 06/22/2023 12:45
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 12:00	NDK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 16:28, Analyst: KAG

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

Lab Sample ID: S50191.10 (continued)
Sample Tag: JS-MW-16_GW-062223

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 16:28, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	15	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	5	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	13	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	3	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Lab Sample ID: S50191.11
Sample Tag: JS-MW-16_GW-062223 MS
Collected Date/Time: 06/22/2023 12:45
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 11:15, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	44	10		ug/L	1	60-29-7	1
Acetone	61	50		ug/L	1	67-64-1	1
Methyl iodide	49	1		ug/L	1	74-88-4	1
Carbon disulfide	50	5		ug/L	1	75-15-0	1
tert-Methyl butyl ether (MTBE)	45	5		ug/L	1	1634-04-4	1
Acrylonitrile	48	2		ug/L	1	107-13-1	1
2-Butanone (MEK)	46	25		ug/L	1	78-93-3	1
Dichlorodifluoromethane	63	5		ug/L	1	75-71-8	1
Chloromethane	47	5		ug/L	1	74-87-3	1
Vinyl chloride	50	1		ug/L	1	75-01-4	1
Bromomethane	47	5		ug/L	1	74-83-9	1
Chloroethane	47	5		ug/L	1	75-00-3	1
Trichlorofluoromethane	57	1		ug/L	1	75-69-4	1
1,1-Dichloroethene	50	1		ug/L	1	75-35-4	1
Methylene chloride	48	5		ug/L	1	75-09-2	1
trans-1,2-Dichloroethene	48	1		ug/L	1	156-60-5	1
1,1-Dichloroethane	47	1		ug/L	1	75-34-3	1
cis-1,2-Dichloroethene	48	1		ug/L	1	156-59-2	1
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	1
Chloroform	48	1		ug/L	1	67-66-3	1
Bromochloromethane	46	1		ug/L	1	74-97-5	1
1,1,1-Trichloroethane	48	1		ug/L	1	71-55-6	1
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	1
2-Hexanone	Not detected	50		ug/L	1	591-78-6	1
Carbon tetrachloride	52	1		ug/L	1	56-23-5	1
Benzene	51	1		ug/L	1	71-43-2	1
1,2-Dichloroethane	46	1		ug/L	1	107-06-2	1
Trichloroethene	49	1		ug/L	1	79-01-6	1
1,2-Dichloropropane	47	1		ug/L	1	78-87-5	1
Bromodichloromethane	47	1		ug/L	1	75-27-4	1
Dibromomethane	48	5		ug/L	1	74-95-3	1
cis-1,3-Dichloropropene	47	1		ug/L	1	10061-01-5	1
Toluene	48	1		ug/L	1	108-88-3	1
trans-1,3-Dichloropropene	47	1		ug/L	1	10061-02-6	1
1,1,2-Trichloroethane	46	1		ug/L	1	79-00-5	1
Tetrachloroethene	51	1		ug/L	1	127-18-4	1

1-Spiked at 50ug/L

Lab Sample ID: S50191.11 (continued)
Sample Tag: JS-MW-16_GW-062223 MS

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 11:15, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	50	1		ug/L	1	110-57-6	1
Dibromochloromethane	47	5		ug/L	1	124-48-1	1
1,2-Dibromoethane	47	1		ug/L	1	106-93-4	1
Chlorobenzene	47	1		ug/L	1	108-90-7	1
1,1,1,2-Tetrachloroethane	48	1		ug/L	1	630-20-6	1
Ethylbenzene	50	1		ug/L	1	100-41-4	1
p,m-Xylene*	113	2		ug/L	1		1
o-Xylene	48	1		ug/L	1	95-47-6	1
Styrene	49	1		ug/L	1	100-42-5	1
Isopropylbenzene	54	5		ug/L	1	98-82-8	1
Bromoform	47	1		ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	45	1		ug/L	1	79-34-5	1
1,2,3-Trichloropropane	46	1		ug/L	1	96-18-4	1
n-Propylbenzene	55	1		ug/L	1	103-65-1	1
Bromobenzene	48	1		ug/L	1	108-86-1	1
1,3,5-Trimethylbenzene	53	1		ug/L	1	108-67-8	1
tert-Butylbenzene	52	1		ug/L	1	98-06-6	1
1,2,4-Trimethylbenzene	64	1		ug/L	1	95-63-6	1
sec-Butylbenzene	50	1		ug/L	1	135-98-8	1
p-Isopropyltoluene	50	5		ug/L	1	99-87-6	1
1,3-Dichlorobenzene	47	1		ug/L	1	541-73-1	1
1,4-Dichlorobenzene	46	1		ug/L	1	106-46-7	1
1,2-Dichlorobenzene	46	1		ug/L	1	95-50-1	1
1,2,3-Trimethylbenzene	51	1		ug/L	1	526-73-8	1
n-Butylbenzene	49	1		ug/L	1	104-51-8	1
Hexachloroethane	50	5		ug/L	1	67-72-1	1
1,2-Dibromo-3-chloropropane	45	5		ug/L	1	96-12-8	1
1,2,4-Trichlorobenzene	49	5		ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	48	5		ug/L	1	87-61-6	1
Naphthalene	50	5		ug/L	1	91-20-3	1
2-Methylnaphthalene	48	5		ug/L	1	91-57-6	1

1-Spiked at 50ug/L

Lab Sample ID: S50191.12
Sample Tag: JS-MW-16_GW-062223 MSD
Collected Date/Time: 06/22/2023 12:45
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 11:34, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	49	10		ug/L	1	60-29-7	1
Acetone	61	50		ug/L	1	67-64-1	1
Methyl iodide	50	1		ug/L	1	74-88-4	1
Carbon disulfide	49	5		ug/L	1	75-15-0	1
tert-Methyl butyl ether (MTBE)	50	5		ug/L	1	1634-04-4	1
Acrylonitrile	50	2		ug/L	1	107-13-1	1
2-Butanone (MEK)	48	25		ug/L	1	78-93-3	1
Dichlorodifluoromethane	52	5		ug/L	1	75-71-8	1
Chloromethane	46	5		ug/L	1	74-87-3	1
Vinyl chloride	48	1		ug/L	1	75-01-4	1
Bromomethane	48	5		ug/L	1	74-83-9	1
Chloroethane	47	5		ug/L	1	75-00-3	1
Trichlorofluoromethane	51	1		ug/L	1	75-69-4	1
1,1-Dichloroethene	48	1		ug/L	1	75-35-4	1
Methylene chloride	49	5		ug/L	1	75-09-2	1
trans-1,2-Dichloroethene	48	1		ug/L	1	156-60-5	1
1,1-Dichloroethane	48	1		ug/L	1	75-34-3	1
cis-1,2-Dichloroethene	49	1		ug/L	1	156-59-2	1
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	1
Chloroform	49	1		ug/L	1	67-66-3	1
Bromochloromethane	50	1		ug/L	1	74-97-5	1
1,1,1-Trichloroethane	47	1		ug/L	1	71-55-6	1
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	1
2-Hexanone	Not detected	50		ug/L	1	591-78-6	1
Carbon tetrachloride	49	1		ug/L	1	56-23-5	1
Benzene	52	1		ug/L	1	71-43-2	1
1,2-Dichloroethane	49	1		ug/L	1	107-06-2	1
Trichloroethene	49	1		ug/L	1	79-01-6	1
1,2-Dichloropropane	49	1		ug/L	1	78-87-5	1
Bromodichloromethane	49	1		ug/L	1	75-27-4	1
Dibromomethane	52	5		ug/L	1	74-95-3	1
cis-1,3-Dichloropropene	51	1		ug/L	1	10061-01-5	1
Toluene	50	1		ug/L	1	108-88-3	1
trans-1,3-Dichloropropene	50	1		ug/L	1	10061-02-6	1
1,1,2-Trichloroethane	49	1		ug/L	1	79-00-5	1
Tetrachloroethene	51	1		ug/L	1	127-18-4	1

1-Spiked at 50ug/L

Lab Sample ID: S50191.12 (continued)
Sample Tag: JS-MW-16_GW-062223 MSD

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 11:34, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	52	1		ug/L	1	110-57-6	1
Dibromochloromethane	50	5		ug/L	1	124-48-1	1
1,2-Dibromoethane	49	1		ug/L	1	106-93-4	1
Chlorobenzene	49	1		ug/L	1	108-90-7	1
1,1,1,2-Tetrachloroethane	50	1		ug/L	1	630-20-6	1
Ethylbenzene	49	1		ug/L	1	100-41-4	1
p,m-Xylene*	113	2		ug/L	1		1
o-Xylene	49	1		ug/L	1	95-47-6	1
Styrene	50	1		ug/L	1	100-42-5	1
Isopropylbenzene	52	5		ug/L	1	98-82-8	1
Bromoform	50	1		ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	48	1		ug/L	1	79-34-5	1
1,2,3-Trichloropropane	48	1		ug/L	1	96-18-4	1
n-Propylbenzene	54	1		ug/L	1	103-65-1	1
Bromobenzene	50	1		ug/L	1	108-86-1	1
1,3,5-Trimethylbenzene	52	1		ug/L	1	108-67-8	1
tert-Butylbenzene	51	1		ug/L	1	98-06-6	1
1,2,4-Trimethylbenzene	64	1		ug/L	1	95-63-6	1
sec-Butylbenzene	47	1		ug/L	1	135-98-8	1
p-Isopropyltoluene	48	5		ug/L	1	99-87-6	1
1,3-Dichlorobenzene	47	1		ug/L	1	541-73-1	1
1,4-Dichlorobenzene	47	1		ug/L	1	106-46-7	1
1,2-Dichlorobenzene	47	1		ug/L	1	95-50-1	1
1,2,3-Trimethylbenzene	51	1		ug/L	1	526-73-8	1
n-Butylbenzene	47	1		ug/L	1	104-51-8	1
Hexachloroethane	48	5		ug/L	1	67-72-1	1
1,2-Dibromo-3-chloropropane	46	5		ug/L	1	96-12-8	1
1,2,4-Trichlorobenzene	50	5		ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	50	5		ug/L	1	87-61-6	1
Naphthalene	52	5		ug/L	1	91-20-3	1
2-Methylnaphthalene	49	5		ug/L	1	91-57-6	1

1-Spiked at 50ug/L

Lab Sample ID: S50191.13
Sample Tag: JS-MW-27_GW-062223
Collected Date/Time: 06/22/2023 14:05
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 16:47, Analyst: KAG

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

Lab Sample ID: S50191.13 (continued)
Sample Tag: JS-MW-27_GW-062223

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 16:47, Analyst: KAG (continued)

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

Lab Sample ID: S50191.14
Sample Tag: DUP-02_GW-062223
Collected Date/Time: 06/22/2023 00:01
Matrix: Groundwater
COC Reference: 140911

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/28/23 11:20	BDO	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 17:07, Analyst: KAG

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

Lab Sample ID: S50191.14 (continued)
Sample Tag: DUP-02_GW-062223

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/27/23 17:07, Analyst: KAG (continued)

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

Merit Laboratories Login Checklist

Lab Set ID: S50191
Client: ARCADIS_NOVI (ARCADIS U.S., Inc.)
Project: RACER PNC
Submitted: 06/22/2023 15:40 Login User: MMC

Attention: Alexis Crisp
Address: Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1909 FAX:
Email: Alexis.Crisp@arcadis.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.1
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

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

Client Review By: _____ Date: _____

Merit Laboratories, Inc.

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

C.O.C. PAGE # _____ OF _____ 140911

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: LEXI CRISP
COMPANY: ARCADIS
ADDRESS: 28550 Cabot Dr #500
CITY: Novi STATE: MI ZIP CODE: 48377
PHONE NO. — FAX NO. —
P.O. NO. 30167840.00005
E-MAIL ADDRESS: Lexi.Crisp@arcadis.com
QUOTE NO. —

INVOICE TO

CONTACT NAME ☐ SAME
COMPANY
ADDRESS
CITY STATE ZIP CODE
PHONE NO. E-MAIL ADDRESS: accounts.Payable@Arcadis.com

PROJECT NO./NAME: RACER · PNC
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

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Wate
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other _____

Special Instructions

MERIT LAB NO. FOR LAB USE ONLY	YEAR DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs (8260)	Special Instructions
50191.01	06/20/23	14:00	JS-MW-19_GW-062023	GW	3		X						X	
.02	6/20/23	15:35	JS-MW-20_GW-062023	GW	3		X						X	
.03	6/21/23	9:05	JS-MW-21_GW-062123	GW	3		X						X	
.04	6/21/23	10:45	JS-MW-23_GW-062123	GW	3		X						X	
.05	6/21/23	12:08	JS-MW-30_GW-062123	GW	3		X						X	
.06	6/20/23	—	TRIP BLANK	—	1		X						X	Trip Blank
.07	6/21/23	14:00	JS-MW-26_GW-062123	GW	3		X						X	
.08	6/22/23	9:17	JS-MW-24_GW-062223	GW	3		X						X	
.09	6/22/23	10:43	JS-MW-29_GW-062223	GW	3		X						X	
.10 1.11 1.12	6/22/23	12:45	JS-MW-16_GW-062223	GW	9		X						X	MS/MSD
.13	6/22/23	14:05	JS-MW-27_GW-062223	GW	3		X						X	
.14	6/22/23	—	DUP-02_GW-062223	GW	3		X						X	

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE 06/22/23	TIME 14:18
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 6/22/23	TIME 14:18
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 6/22/23	TIME 15:40
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 6/22/23	TIME 1540

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 3.1

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

Rev. 5.1