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MEMO

To: **Tyler Jacobs, USEPA**
From: Kevin Lund, PE
CC: **Brendan Mullen, RACER Trust**
David Favero, RACER Trust
Date: November 13, 2024

Project #: R2330031
Re: RACER Van Buren West Site – Spring 2024 Semi-Annual Groundwater Monitoring Results

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Tables, Figures and Attachments included in this Memo are:

- Table 1, Analytes for Semi-Annual Groundwater Monitoring
- Table 2, Monitoring Well Construction and Monitoring Data
- Table 3, Summary of Groundwater Sample Results (Non-Residential)
- Table 4, Summary of Groundwater Sample Results (Residential)
- Table 5, Total Depth to Bottom of Wells and Estimated Sediment Accumulation
- Figure 1, Site Location Map
- Figure 2, Groundwater Elevation Contour Map
- Figure 3, Semi-Annual Groundwater Monitoring Well Analytical Summary (Spring 2024)
- Figure 4, Dissolved Iron Isoconcentration Diagram (Spring 2024)
- Attachment 1, Low Flow Groundwater Field Sampling Forms
- Attachment 2, Laboratory Analytical Data Reports

The Mannik & Smith Group, Inc. (MSG) has been performing groundwater sampling activities at the Van Buren West Property located northeast of the Ecorse Road / Michigan Avenue intersection in Van Buren Township, Wayne County, Michigan (Site) on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust. *Figure 1, Site Location Map*, depicts the location of the Site relative to nearby roads and major topographic features.

Previous phases of investigation and associated findings were documented in the following reports: Phase IA Site Investigation, dated February 19, 2013; *RACER Van Buren Landfill Site – Phase IB Site Investigation*, dated November 20, 2013; *Phase II Site Investigation*, dated March 12, 2014; *Phase III Site Investigation*, dated September 4, 2014; and *RACER Van Buren Landfill Site – Phase IV Site Investigation*, dated July 23, 2015. Previous Semi-Annual Groundwater Sampling reports for the Fall 2015, Spring and Fall 2016, Spring and Fall 2017, Spring and Fall 2018, Spring and Fall 2019, Spring and Fall 2020, Spring and Fall 2021, Spring and Fall 2022, and Spring and Fall 2023 semi-annual groundwater sampling events were sent in 2016, 2017, 2018, 2019, 2020, 2021, 2022, and 2023 respectively (results for all other semi-annual sampling events were discussed in the corresponding investigation reports).

Since September 2012, MSG has conducted semi-annual groundwater monitoring in accordance with *USEPA Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* and the Site *Sampling Analysis Plan* (SAP). Proposed modifications to the Semi–Annual Groundwater Sampling Plan were approved by the USEPA Project Manager, Christopher Black via email on November 10, 2015. Since October 2022, sampling has been completed pursuant to the groundwater monitoring plan in the USEPA-approved May 2022 Corrective Measures Implementation Plan, and the sampling is now also completed in accordance with the February 2023 Quality Assurance Project Plan (QAPP). The Spring sampling event includes all operational monitoring wells, while the Fall sampling event only covers a portion of them.

Per the access agreement with General Motors LLC (GM), the Spring 2024 Semi-Annual Groundwater Sampling activities completed on the General Motors Property are summarized in a separate memo.

SPRING 2024 SEMI-ANNUAL GROUNDWATER MONITORING

The Spring 2024 Semi-Annual Groundwater Sampling event was completed between May 13 and July 1, 2024, by Andrew Hildebrandt and Kaitlin Koshurba. *Table 1, Analytes for Semi-Annual Groundwater Monitoring,* depicts the analytes and depth to water gauging list utilized during the Spring sampling event. Total well depths were also measured at every well to calculate the amount of sediment accumulation in each well.

Groundwater sampling field sheets can be found in *Attachment 1, Low Flow Groundwater Field Sampling Forms*. Groundwater sampling activities were conducted in general accordance with *USEPA Low-flow (Minimal Drawdown) Ground-Water Sampling Procedures* and the Site *SAP/QAPP*. All of the samples were analyzed for total and dissolved aluminum, iron, and manganese. Samples originating from MW-10 and MW-23 were analyzed for volatile organic compounds (VOCs) in addition to the metals listed above.

GROUNDWATER ELEVATION

Depth to groundwater was measured in the approved set of existing monitoring wells located on the Van Buren West Site and associated adjacent properties. A total of 30 monitoring wells were gauged during this event to assess the groundwater fluctuations at the Site. Groundwater elevations in the monitored wells were similar to previous elevations in these wells, with slightly shallower groundwater elevations (approximately 1.0 feet) of groundwater noted. A summary of the groundwater elevations from this sampling event and prior investigations is provided in *Table 2, Monitoring Well Construction and Monitoring Data.*

Inadvertently, two (2) monitoring wells were not gauged (MW-11 and MW-17) due to overgrown vegetation and flooding. Although these measurements were not collected, the projected groundwater movement at the Site is accurately represented due to the distribution of data from the remaining wells. The absence of the two (2) groundwater elevation measurements is not believed to substantially impact the results of the groundwater elevation contours and overall understanding of groundwater flow on Site. A visual representation of the groundwater elevations is depicted on *Figure 2, Groundwater Elevation Contour Map (Spring 2024).*

GROUNDWATER SAMPLE RESULTS

A summary of groundwater sample analytical results compared to Part 201 generic non-residential cleanup criteria is provided in *Table 3, Summary of Groundwater Sample Results (Non-Residential)*. Results compared to Part 201 generic residential cleanup criteria are summarized in *Table 4, Summary of Groundwater Sample Results (Residential)*. In addition, total well depths along with estimated sediment accumulation for each well monitored during this event are summarized in *Table 5, Total Depth to Bottom of Wells and Estimated Sediment Accumulation*. The laboratory reports can be found in *Attachment 2, Laboratory Analytical Data Reports*. The reported concentrations for the most recent five (5) monitoring events for the wells monitored during this event are depicted on *Figure 3, Semi-Annual Groundwater Monitoring Well Analytical Summary (Spring 2024).*

SUMMARY AND RECOMMENDATIONS

In summary, the groundwater sample analytical results from the Spring 2024 Semi-Annual Groundwater Monitoring event were very similar to previous groundwater sampling results. There is a concern that the total metals results are being influenced by sediment build-up in the wells and in turn, by turbidity of the water as a result of the sampling activities. Therefore, it is believed that dissolved metal concentrations are more representative of groundwater quality compared to total metals. As such, the following discussion is based on dissolved metal concentrations.

Ten (10) monitoring wells are located offsite (MW-18, MW-19, MW-20, MW-21, MW-22, MW-23, MW-25, MW-26, MW-29, and MW-30) and were compared to generic residential cleanup criteria. Four (4) offsite wells contained concentrations of dissolved iron above Residential Health-Based Water Value criteria (MW-19, MW-20, MW-22, and MW-23). Dissolved concentrations of aluminum and manganese were not detected above Residential Health-Based Water Value criteria in any of the offsite wells. MW-23 was also analyzed for VOCs; however, there were no detections above Part 201 criteria.

The fourteen (14) monitoring wells located onsite were compared to generic non-residential cleanup criteria (MW-1R, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-17, MW-27, and MW-34). Of these 14 wells, seven (7) contained concentrations of dissolved iron above Non-Residential Health-Based Drinking Water Value criteria (MW-1, MW-4, MW-5, MW-6, MW-9, MW-10, and MW-12). Dissolved concentrations of aluminum and manganese were not detected above Non-Residential Health-Based Drinking Water Value criteria in any of the onsite wells. MW-10 was also analyzed for VOCs; however, there were no detections above Part 201 criteria.

Based on the dissolved concentrations of aluminum, iron, and manganese over time, and in conjunction with the length of time that the Site has been closed (approximately 48 years), the contaminants related to the Site appear to be stable. A contour of the dissolved iron concentrations is depicted on *Figure 4, Dissolved Iron Isoconcentration Diagram (Spring 2024).*

Total well depths were compared to previous well depths and the amount of sediment accumulation in each well was calculated. The amount of sediment accumulation was calculated for each well by comparing the total well depths to the well depths from previous testing. As a result, it was determined six (6) monitoring wells (MW-1R, MW-3, MW-13, MW-14, MW-25, and MW-34) accumulated over 1.0 foot of sediment. No other wells had sediment accumulation of greater than one (1) foot. All subsequent monitoring events will include measurement and recording of sediment volume within each monitoring well and purging of water to attempt to lower turbidity to less than 10 NTU before a water sample is collected. Redevelopment of monitoring well MW-25 will be completed before the Fall 2024 sampling event. Monitoring wells MW-1R, MW-3, MW-13, MW-14, and MW-34 will be redeveloped before the Spring 2025 sampling event.

TABLES

Table 1
Proposed Analytes for Semi-Annual Ground Water Monitoring
Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

			Sampling Event 1 (yearly - Spring)			Sampling Event 2 (yearly - Autumn)		
Monitoring Well	Location	Purpose of MW[1]	VOCs	Total Metals[2]	Dissolved Metals[2]	VOCs	Total Metals[2]	Dissolved Metals[2]
USEPA Testing Method			8260	6020A/7470		8260	6020A/7470	
MW-1R[3]	North Perimeter of Site	Hydro Assessment, Metals		√	√			
MW-3[3]	East Perimeter of Site	Hydro Assessment, Metals		√	√			
MW-4	On-Site	Hydro Assessment, Metals		√	√			
MW-5	North West Perimeter of Site	Hydro Assessment, Metals		√	√		√	√
MW-6	On-Site	Hydro Assessment, Metals		√	√			
MW-7	South West Perimeter of Site	Hydro Assessment, Metals		√	√		√	√
MW-8	Ecorse Rd (westbound) ROW	Hydro Assessment, Metals		√	√			
MW-9	West Perimeter of Site	Hydro Assessment, Metals		√	√		√	√
MW-10	North Perimeter of Site	Hydro Assessment, VOCs, Metals	√	√	√	√		
MW-11	North East Perimeter of Site	Hydro Assessment, Metals		√	√			
MW-12[3]	On-Site	Hydro Assessment, Metals		√	√			
MW-13	On-Site	Hydro Assessment						
MW-14	On-Site	Hydro Assessment						
MW-15	On-Site	Hydro Assessment						
MW-16	On-Site	Hydro Assessment						
MW-17[3]	South East Perimeter of Site	Hydro Assessment, Metals		√	√			
MW-18	Ecorse Rd (eastbound) ROW	Hydro Assessment, Metals		√	√		√	√
MW-19	Ecorse Rd (eastbound) ROW	Hydro Assessment, Metals		√	√		√	√
MW-20	Ecorse Rd (eastbound) ROW	Hydro Assessment, Metals		√	√		√	√
MW-21	North of Site (Subaru Property)	Hydro Assessment, Metals		√	√		√	√
MW-22	North of Site (Subaru Property)	Hydro Assessment, Metals		√	√			
MW-23	North of Site (Subaru Property)	Hydro Assessment, VOCs, Metals	√	√	√	√		
MW-24[4]	North of Site (Subaru Property)	Hydro Assessment, VOCs, Metals						
MW-25	North of Site (Subaru Property)	Hydro Assessment, Metals		√	√		√	√
MW-26	North of Site (Subaru Property)	Hydro Assessment, Metals		√	√		√	√
MW-27	East Perimeter of Site	Hydro Assessment, Metals		√	√			
MW-28	On-Site	Hydro Assessment						
MW-29	Michigan Ave (Westbound) ROW	Hydro Assessment, Metals		√	√		√	√
MW-30	Michigan Ave (Westbound) ROW	Hydro Assessment, Metals		√	√		√	√
MW-31	GM Property	Hydro Assessment, Metals		√	√			
MW-32[3]	GM Property	Hydro Assessment, Metals		√	√		√	√
MW-33	GM Property	Hydro Assessment, Metals		√	√			
MW-34[3]	Rawsonville Rd/Michigan Ave	Hydro Assessment, Metals		√	√			
CRA-265M[4]	Willow Run Powertrain Plant	Hydro Assessment						
CRA-266M[4]	Willow Run Powertrain Plant	Hydro Assessment, Metals						
CRA-833M[4]	Willow Run Powertrain Plant	Hydro Assessment						
CRA-834M[4]	Willow Run Powertrain Plant	Hydro Assessment						
Total Number of Samples			2	28	28	2	12	12

Notes:
[1] = Constituents historically and/or currently detected in monitoring well exceeding applicable Michigan Part 201 Generic Cleanup Criteria.
[2] = Al, Fe, Mn (Method 6020A).
[3] = MW -1R, MW-3, MW-12, MW-17, MW-32, and MW-34 sediment accumulation greater than 1.0; recommended well redevelopment
[4] = Abandoned
Green shading indicates MWs included in monitoring events; check mark ☑ indicates analytical parameter

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-1	275331.04	13347841.62	723.83	721.15	10.00	2.67	21.67	712.61	4/29/2013	10.88	712.95
									8/7/2013	11.63	712.20
									11/14/2013	12.72	711.11
									3/24/2014	11.25	712.58
									5/8/2014	9.93	713.90
									11/24/2014	12.86	710.97
									3/16/2015	12.54	711.29
									11/16/2015	13.67	710.16
									4/18/2016	11.23	712.60
									10/31/2016	13.36	710.47
									4/25/2017	9.59	714.24
									10/23/2017	13.45	710.38
									4/24/2018	9.60	714.23
									10/24/2018	12.04	711.79
									5/1/2019	8.01	715.82
									10/28/2019	11.60	712.23
									5/27/2020	8.52	715.31
									11/2/2020	12.56	711.27
									4/15/2021	12.08	711.75
									4/26/2022	Not Collected	
									4/21/2023	14.55	709.28
									5/13/2024	13.7	710.13

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-3	274792.30	13348574.41	714.28	711.00	10.00	3.28	14.80	712.76	4/29/2013	4.25	710.03
									8/7/2013	6.15	708.13
									11/12/2013	6.62	707.66
									3/24/2014	4.22	710.06
									5/8/2014	4.20	710.08
									11/24/2014	6.47	707.81
									3/16/2015	5.69	708.59
									11/16/2015	7.41	706.87
									4/18/2016	4.71	709.57
									10/31/2016	6.85	707.43
									4/25/2017	4.24	710.04
									10/23/2017	7.60	706.68
									4/25/2018	4.21	710.07
									10/26/2018	6.50	707.78
									5/6/2019	4.00	710.28
									10/31/2019	5.61	708.67
									5/21/2020	4.05	710.23
									11/3/2020	6.96	707.32
									4/13/2021	5.15	709.13
									4/25/2022	4.50	709.78
									4/20/2023	5.10	709.18
									5/13/2024	4.00	710.28
									6/28/2024	6.01	708.27

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-4	274332.44	13348192.73	723.72	724.26	10.00	-0.53	21.60	712.12	4/29/2013	10.54	713.18
									8/7/2013	14.00	709.72
									11/12/2013	14.95	708.77
									3/24/2014	10.42	713.30
									5/8/2014	10.79	712.93
									11/24/2014	15.20	708.52
									3/16/2015	14.12	709.60
									11/16/2015	15.92	707.80
									4/18/2016	11.36	712.36
									10/31/2016	15.90	707.82
									4/25/2017	10.55	713.17
									10/23/2017	16.15	707.57
									4//25/2018	10.39	713.33
									10/262018	14.96	708.76
									5/3/2019	8.50	715.22
									10/29/2019	14.80	708.92
									5/20/2020	9.60	714.12
									11/3/2020	15.30	708.42
									4/13/2021	12.06	711.66
									4/26/2022	10.29	713.43
									5/4/2023	11.75	711.97
									5/13/2024	11.80	711.92
									6/28/2024	14.04	709.68

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-5	275074.96	13346833.88	719.62	719.80	10.00	-0.18	30.02	699.60	4/29/2013	9.81	709.81
									8/7/2013	11.08	708.54
									11/12/2013	12.02	707.60
									3/24/2014	9.74	709.88
									5/8/2014	9.55	710.07
									11/24/2014	11.42	708.20
									3/16/2015	11.09	708.53
									11/16/2015	12.02	707.60
									4/18/2016	11.33	708.29
									10/31/2016	11.66	707.96
									4/25/2017	8.91	710.71
									10/23/2017	11.90	707.72
									4/26/2018	8.89	710.73
									10/23/2018	11.04	708.58
									5/1/2019	6.80	712.82
									10/28/2019	10.55	709.07
									5/22/2020	7.94	711.68
									11/3/2020	11.32	708.30
									4/16/2021	10.15	709.47
									4/26/2022	8.43	711.19
									10/27/2022	11.95	707.67
									4/18/2023	10.10	709.52
									11/7/2023	11.30	708.32
									5/13/2024	9.15	710.47

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-6	273963.47	13347317.78	718.47	715.12	10.00	3.35	16.38	712.09	4/29/2013	5.22	713.25
									8/7/2013	7.30	711.17
									11/13/2013	7.75	710.72
									3/24/2014	5.20	713.27
									5/8/2014	4.82	713.65
									11/24/2014	8.07	710.40
									3/16/2015	6.83	711.64
									11/16/2015	9.07	709.40
									4/18/2016	5.71	712.76
									10/31/2016	8.81	709.66
									4/25/2017	6.35	712.12
									10/23/2017	9.32	709.15
									4/25/2018	4.56	713.91
									10/24/2018	7.76	710.71
									5/6/2019	3.02	715.45
									10/29/2019	6.74	711.73
									5/21/2020	3.50	714.97
									11/3/2020	8.05	710.42
									4/13/2021	5.81	712.66
									4/26/2022	4.43	714.04
									5/4/2023	5.65	712.82
									5/13/2024	5.30	713.17
									6/28/2024	7.03	711.44

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-7	274354.61	13346295.14	716.85	717.19	5	-0.34	8.81	713.04	4/29/2013	4.21	712.64
									8/7/2013	5.69	711.16
									11/13/2013	6.80	710.05
									3/24/2014	4.36	712.49
									5/8/2014	3.38	713.47
									11/24/2014	7.00	709.85
									3/16/2015	4.25	712.60
									11/16/2015	7.32	709.53
									4/18/2016	4.33	712.52
									10/31/2016	7.09	709.76
									4/25/2017	4.02	712.83
									10/23/2017	7.37	709.48
									4/23/2018	3.29	713.56
									10/22/2018	5.50	711.35
									4/29/2019	2.40	714.45
									10/28/2019	5.10	711.75
									5/19/2020	1.95	714.90
									11/2/2020	6.25	710.60
									4/14/2021	4.50	712.35
									4/26/2022	2.95	713.90
									10/27/2022	7.50	709.35
									4/18/2023	4.25	712.60
									11/7/2023	6.30	710.55
									5/13/2024	3.50	713.35

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-8	274067.17	13,346,770.57	713.36	713.96	5	-0.60	7.78	710.85	4/29/2013	(FLOWING)	>713.36
									8/7/2013	1.73	711.63
									11/12/2013	1.97	711.39
									3/24/2014	Area Flooded	
									5/8/2014	Area Flooded	
									11/24/2014	1.71	711.65
									3/16/2015	0.15	713.21
									11/16/2015	3.41	709.95
									4/18/2016	0.5	712.86
									10/31/2016	3.08	710.28
									4/25/2017	Area Flooded	
									10/23/2017	3.7	709.66
									4/25/2018	Area Flooded	
									10/23/2018	1.41	711.95
									4/30/2019	Area Flooded	
									10/28/2019	0.58	712.78
									5/19/2020	Area Flooded	
									11/2/2020	2.25	711.11
									4/14/2021	0.4	712.96
									4/26/2022	Not Collected	
									4/18/2023	0.4	712.96
									5/13/2024	0.0	713.36

Table 2
Monitoring Well Construction and Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-9	274824.06	13346622.78	721.17	721.36	5.00	-0.19	14.81	711.43	4/29/2013	8.60	712.57
									8/7/2013	9.15	712.02
									11/14/2013	10.35	710.82
									3/24/2014	8.96	712.21
									5/8/2014	7.36	713.81
									11/24/2014	10.05	711.12
									3/16/2015	10.14	711.03
									11/16/2015	10.90	710.27
									4/18/2016	10.21	710.96
									10/31/2016	11.07	710.10
									4/25/2017	4.94	716.23
									10/23/2017	10.97	710.20
									4/26/2018	6.90	714.27
									10/23/2018	9.60	711.57
									5/1/2019	5.33	715.84
									10/28/2019	9.20	711.97
									5/22/2020	5.87	715.30
									11/3/2020	9.95	711.22
									4/16/2021	9.50	711.67
									4/26/2022	7.09	714.08
									11/1/2022	11.00	710.17
									4/18/2023	8.98	712.193
									11/7/2023	10.15	711.023
									5/13/2024	7.5	713.673

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-10	275236.53	13347440.42	727.87	724.69	5.00	3.19	23.45	709.42	4/29/2013	14.86	713.01
									8/7/2013	15.60	712.27
									11/13/2013	16.68	711.19
									3/24/2014	15.28	712.59
									5/8/2014	13.95	713.92
									11/24/2014	16.68	711.19
									3/16/2015	16.51	711.36
									11/16/2015	17.54	710.33
									4/18/2016	15.24	712.63
									10/31/2016	17.34	710.53
									4/25/2017	13.50	714.37
									10/23/2017	17.25	710.62
									4/24/2018	13.47	714.40
									10/24/2018	15.91	711.96
									5/1/2019	11.60	716.27
									10/28/2019	15.50	712.37
									5/27/2020	12.29	715.58
									11/2/2020	16.43	711.44
									4/15/2021	15.61	712.26
									4/26/2022	13.51	714.36
									10/27/2022	17.58	710.29
									4/19/2023	15.35	712.52
									11/8/203	16.60	711.27
									5/13/2024	13.85	714.02

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-11	275501.53	13348552.50	718.32	715.20	10.00	3.11	18.12	710.22	4/29/2013	7.70	710.62
									8/7/2013	9.02	186.98
									11/12/2013	9.60	708.72
									3/24/2014	7.01	711.31
									5/8/2014	7.39	710.93
									11/24/2014	9.96	708.36
									3/16/2015	8.96	709.36
									11/16/2015	10.60	707.72
									4/18/2016	7.72	710.60
									10/31/2016	9.95	708.37
									4/25/2017	7.00	711.32
									10/23/2017	10.84	707.48
									4/26/2018	7.07	711.25
									10/24/2018	8.79	709.53
									5/6/2019	5.70	712.62
									11/1/2019	9.10	709.22
									5/21/2020	6.65	711.67
									11/3/2020	9.79	708.53
									4/15/2021	8.45	709.87
									4/26/2022	7.23	711.09
									4/20/2023	7.92	710.40
									5/13/2024	Could not access	
									7/1/2024	9.21	709.11

Table 2
Monitoring Well Construction and Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-12	274233.16	13347712.66	721.97	719.31	10.00	2.66	18.66	714.37	4/29/2013	8.43	713.54
									8/7/2013	10.60	711.37
									11/13/2013	11.60	710.37
									3/24/2014	8.76	713.21
									5/8/2014	8.15	713.82
									11/24/2014	11.77	710.20
									3/16/2015	11.14	710.83
									11/16/2015	12.51	709.46
									4/18/2016	9.03	712.94
									10/31/2016	12.55	709.42
									4/25/2017	8.84	713.13
									10/23/2017	12.50	709.47
									4/25/2018	7.79	714.18
									10/26/2018	11.24	710.73
									5/2/2019	6.22	715.75
									10/29/2019	10.89	711.08
									5/20/2020	6.90	715.07
									11/3/2020	11.61	710.36
									4/13/2021	9.58	712.39
									4/26/2022	7.41	714.56
									4/21/2023	9.10	712.87
									5/13/2024	8.60	713.37
									6/28/2024	10.28	711.69

Table 2
Monitoring Well Construction and Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-13	274917.23	13347524.98	727.97	725.03	10.00	2.94	25.94	712.97	12/12/2013	13.80	714.17
									3/24/2014	16.00	711.97
									5/8/2014	13.93	714.04
									11/24/2014	16.52	711.45
									3/16/2015	16.82	711.15
									11/16/2015	17.14	710.83
									4/18/2016	15.43	712.54
									10/31/2016	16.80	711.17
									4/25/2017	13.48	714.49
									4/25/2018	10.56	717.41
									10/26/2018	16.11	711.86
									5/6/2019	11.60	716.37
									10/30/2019	15.52	712.45
									5/21/2020	12.40	715.57
									11/3/2020	16.21	711.76
									4/12/2021	16.00	711.97
									4/26/2022	Not Collected	
									4/18/2023	15.42	712.55
									5/13/2024	13.80	714.17
									6/28/2024	14.59	713.38

Table 2
Monitoring Well Construction and Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-14	274652.50	13347032.25	727.14	724.44	5	2.70	17.70	707.14	5/8/2014	13.14	714.00
									11/24/2014	15.87	711.27
									3/16/2015	15.80	711.34
									4/18/2016	14.45	712.69
									10/31/2016	16.01	711.13
									4/25/2017	8.00	719.14
									4/25/2018	10.39	716.75
									10/26/2018	15.40	711.74
									4/29/2019	11.70	715.44
									10/29/2019	14.84	712.30
									5/20/2020	11.78	715.36
									11/3/2020	15.65	711.49
									4/12/2021	14.99	712.15
									4/26/2022	Not Collected	
									4/18/2023	14.50	712.64
									5/13/2024	13.00	714.14
									6/27/2024	14.11	713.03

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-15	274418.28	13347359.87	726.30	723.58	5.00	2.72	15..72	711.30	5/8/2014	12.31	713.99
									11/24/2014	15.35	710.95
									3/16/2015	15.08	711.22
									11/16/2015	16.08	710.22
									4/18/2016	13.47	712.83
									10/31/2016	16.15	710.15
									4/25/2017	12.10	714.20
									4/25/2018	11.76	714.54
									10/26/2018	14.85	711.45
									4/29/2019	11.10	715.20
									10/29/2019	14.34	711.96
									5/20/2020	11.10	715.20
									11/3/2020	15.20	711.10
									4/12/2021	14.05	712.25
									4/26/2022	Not Collected	
									4/18/2023	13.55	712.75
									5/13/2024	12.50	713.80
									6/28/2024	12.62	713.68

Table 2
Monitoring Well Construction and Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-16	274764.92	13347880.56	725.16	722.38	5.00	2.78	16.28	715.16	5/8/2014	11.15	714.01
									11/24/2014	13.89	711.27
									3/16/2015	15.16	710.00
									11/16/2015	14.60	710.56
									4/18/2016	12.62	712.54
									10/31/2016	14.69	710.47
									4/25/2017	10.83	714.33
									4/25/2018	10.98	714.18
									10/26/2018	13.29	711.87
									5/6/2019	9.00	716.16
									10/30/2019	12.88	712.28
									5/18/2020	10.00	715.16
									11/3/2020	13.61	711.55
									4/12/2021	13.21	711.95
									4/26/2022	Not Collected	
									4/18/2023	12.65	712.51
									5/13/2024	11.20	713.96
									6/28/2024	12.06	713.10

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-17	273590.74	13348433.65	717.08	714.24	5.00	2.84	17.84	710.08	5/8/2014	5.14	711.94
									11/24/2014	8.62	708.46
									3/16/2015	6.62	710.46
									11/16/2015	9.75	707.33
									4/18/2016	5.40	711.68
									10/31/2016	9.18	707.90
									4/25/2017	5.09	711.99
									10/23/2017	10.10	706.98
									4/24/2018	5.10	711.98
									10/22/2018	8.28	708.80
									5/1/2019	4.90	712.18
									10/28/2019	8.25	708.83
									5/19/2020	4.81	712.27
									11/2/2020	8.98	708.10
									4/14/2021	6.00	711.08
									4/26/2022	5.00	712.08
									4/20/2023	3.75	713.33
									7/1/2024	7.75	709.33

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-18	273936.45	13346254.36	714.87	715.21	10.00	-0.34	16.66	712.87	5/8/2014	1.15	713.72
									11/24/2014	2.66	712.21
									3/16/2015	2.31	712.56
									11/16/2015	5.02	709.85
									4/18/2016	1.11	713.76
									10/31/2016	4.14	710.73
									4/25/2017	1.75	713.12
									10/23/2017	5.80	709.07
									4/25/2018	1.91	712.96
									10/26/2018	3.81	711.06
									4/30/2019	0.60	714.27
									10/28/2019	1.99	712.88
									5/22/2020	1.46	713.41
									11/2/2020	2.75	712.12
									4/13/2021	1.06	713.81
									4/26/2022	0.86	714.01
									10/27/2022	6.00	708.87
									4/17/2023	2.61	712.26
									11/6/2023	3.16	711.709
									5/13/2024	1.6	713.269

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-19	273883.36	13346717.38	715.36	715.72	10.00	-0.37	14.63	713.36	5/8/2014	2.12	713.24
									11/24/2014	3.50	711.86
									3/16/2015	2.19	713.17
									11/16/2015	5.51	709.85
									4/18/2016	2.54	712.82
									10/31/2016	4.79	710.57
									4/25/2017	2.23	713.13
									10/23/2017	6.10	709.26
									4/25/2018	2.23	713.13
									10/26/2018	3.21	712.15
									4/30/2019	1.70	713.66
									10/28/2019	2.39	712.97
									5/22/2020	1.92	713.44
									11/2/2020	4.24	711.12
									4/13/2021	2.32	713.04
									4/26/2022	2.10	713.26
									10/27/2022	2.14	713.22
									4/17/2023	2.48	712.88
									11/6/2023	3.58	711.78
									5/13/2024	2.40	712.96

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-20	273489.18	13347561.66	716.51	717.04	10.00	-0.53	15.47	713.51	5/8/2014	4.92	711.59
									11/24/2014	6.00	710.51
									3/16/2015	5.54	710.97
									11/16/2015	7.42	709.09
									4/18/2016	5.36	711.15
									10/31/2016	6.69	709.82
									4/25/2017	4.80	711.71
									10/23/2017	7.70	708.81
									4/25/2018	5.08	711.43
									10/26/2018	6.18	710.33
									4/30/2019	4.60	711.91
									10/28/2019	5.42	711.09
									5/19/2020	4.23	712.28
									11/2/2020	6.60	709.91
									4/13/2021	5.20	711.31
									4/26/2022	4.80	711.71
									10/26/2022	6.30	710.21
									4/17/2023	5.80	710.71
									11/6/2023	6.25	710.26
									5/13/2024	5.10	711.41

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-21	275616.09	13348561.80	717.59	714.73	5.00	2.86	15.36	709.59	5/8/2014	5.98	711.61
									11/24/2014	12.35	705.24
									3/16/2015	7.81	709.78
									11/16/2015	9.77	707.82
									4/18/2016	6.44	711.15
									10/31/2016	8.94	708.65
									4/25/2017	5.70	711.89
									10/23/2017	10.00	707.59
									4/24/2018	5.60	711.99
									10/28/2019	8.56	709.03
									5/20/2020	5.53	712.06
									11/3/2020	8.88	708.71
									4/14/2021	7.56	710.03
									4/26/2022	6.06	711.53
									10/26/2022	10.40	707.19
									4/19/2023	6.78	710.81
									11/8/2023	8.50	709.09
									5/13/2024	7.10	710.49

Table 2
Monitoring Well Construction and Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-22	275440.11	13347791.17	718.84	715.91	5.00	2.92	15.42	710.84	5/8/2014	4.94	713.90
									11/24/2014	7.94	710.90
									3/16/2015	7.31	711.53
									11/16/2015	8.97	709.87
									4/18/2016	6.24	712.60
									10/31/2016	8.43	710.41
									4/25/2017	4.90	713.94
									10/23/2017	8.92	709.92
									4/24/2018	4.40	714.44
									10/28/2019	6.72	712.12
									5/20/2020	4.10	714.74
									11/3/2020	7.87	710.97
									4/14/2021	8.91	709.93
									4/26/2022	4.89	713.95
									4/19/2023	6.87	711.97
									5/13/2024	5.60	713.24

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-23	275364.33	13347366.98	721.07	717.83	5.00	3.24	15.74	713.07	5/8/2014	7.39	713.68
									11/24/2014	10.02	711.05
									3/16/2015	7.11	713.96
									11/16/2015	11.04	710.03
									4/18/2016	8.52	712.55
									10/31/2016	10.71	710.36
									4/25/2017	7.00	714.07
									10/23/2017	10.75	710.32
									4/24/2018	6.83	714.24
									10/28/2019	8.85	712.22
									5/20/2020	5.65	715.42
									11/3/2020	9.95	711.12
									4/14/2021	11.04	710.03
									4/26/2022	6.86	714.21
									10/28/2022	10.90	710.17
									4/20/2023	8.71	712.36
									11/8/2023	10.10	710.97
									5/13/2024	7.60	713.47

Table 2
Monitoring Well Construction and Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-25	276091.12	13347801.85	717.19	714.16	5.00	3.02	16.52	709.19	5/8/2014	6.55	710.64
									11/24/2014	8.68	708.51
									3/16/2015	7.20	709.99
									11/16/2015	9.43	707.76
									4/18/2016	6.80	710.39
									10/31/2016	8.32	708.87
									4/25/2017	6.70	710.49
									10/23/2017	9.61	707.58
									4/24/2018	6.56	710.63
									11/1/2019	6.78	710.41
									5/22/2020	6.50	710.69
									11/3/2020	8.40	708.79
									4/13/2021	7.18	710.01
									4/26/2022	6.57	710.62
									4/20/2023	3.45	713.74
									12/18/2023	3.75	713.44
									5/13/2024	3.60	713.59

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-26	275927.29	13348221.78	719.83	716.63	5.00	3.19	17.19	711.83	5/8/2014	6.73	713.10
									11/24/2014	15.79	704.04
									3/16/2015	9.27	710.56
									11/16/2015	11.10	708.73
									4/18/2016	7.31	712.52
									10/31/2016	9.67	710.16
									4/25/2017	6.60	713.23
									10/23/2017	11.30	708.53
									4/24/2018	6.52	713.31
									11/1/2019	8.63	711.20
									5/20/2020	6.15	713.68
									11/3/2020	9.79	710.04
									4/14/2021	8.71	711.12
									4/26/2022	6.80	713.03
									10/28/2022	11.30	708.53
									4/20/2023	8.10	711.73
									11/8/2023	9.60	710.23
									5/13/2024	8.15	711.68

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-27	274226.41	13348585.54	714.89	712.42	10.00	2.47	13.97	711.40	11/24/2014	6.52	708.37
									3/16/2015	4.33	710.56
									11/16/2015	7.38	707.51
									4/18/2016	3.47	711.42
									10/31/2016	7.05	707.84
									4/25/2017	3.09	711.80
									10/23/2017	7.80	707.09
									4/25/2018	4.91	709.98
									10/26/2018	6.25	708.64
									5/6/2019	2.75	712.14
									10/29/2019	6.09	708.80
									5/21/2020	2.70	712.19
									11/3/2020	6.74	708.15
									4/13/2021	3.50	711.39
									4/26/2022	4.10	710.79
									5/5/2023	3.90	710.99
									5/13/2024	3.50	711.39
									6/28/2024	5.81	709.08

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-28	274359.48	13346916.04	724.54	721.84	10.00	2.70	21.70	712.80	3/16/2015	13.13	711.41
									11/16/2015	14.26	710.28
									4/18/2016	11.71	712.83
									10/31/2016	14.26	710.28
									4/25/2017	10.35	714.19
									10/23/2017	Not Collected	
									4/25/2018	10.35	714.19
									10/25/2018	12.93	711.61
									4/29/2019	9.25	715.29
									10/28/2019	12.55	711.99
									5/20/2020	9.24	715.30
									11/3/2020	13.32	711.22
									4.12.2021	12.21	712.33
									4/26/2022	Not Collected	
									5/13/2024	10.70	713.84
									6/27/2024	11.90	712.64

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-29	275968.62	13347359.81	710.45	710.68	5.00	-0.23	12.22	703.50	3/16/2015	5.13	705.32
									11/16/2015	5.24	705.21
									4/18/2016	4.99	705.46
									10/31/2016	4.21	706.24
									4/25/2017	4.90	705.55
									10/23/2017	5.60	704.85
									4/25/2018	4.32	706.13
									10/23/2018	4.79	705.66
									4/30/2019	4.10	706.35
									10/31/2019	4.73	705.72
									5/19/2020	4.43	706.02
									11/2/2020	4.75	705.70
									4/13/2021	4.56	705.89
									4/26/2022	4.15	706.30
									10/28/2022	5.25	705.20
									4/18/2023	4.80	705.65
									11/7/2023	4.85	705.60
									5/13/2024	4.65	705.80

Table 2
Monitoring Well Construction and
Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-30	275813.90	13347231.54	708.54	708.68	5.00	-0.14	12.36	701.20	3/16/2015	4.56	703.98
									11/16/2015	4.31	704.23
									4/18/2016	5.01	703.53
									10/31/2016	4.73	703.81
									4/24/2017	3.67	704.87
									10/23/2017	4.60	703.94
									4/25/2018	3.89	704.65
									10/23/2018	3.90	704.64
									4/30/2019	3.40	705.14
									10/31/2019	4.12	704.42
									5/19/2020	3.65	704.89
									11/2/2020	3.85	704.69
									4/13/2021	3.87	704.67
									4/26/2022	3.28	705.26
									10/31/2022	4.55	703.99
									4/18/2023	3.70	704.84
									11/7/2023	4.25	704.29
									5/13/2024	3.50	705.04

Table 2
Monitoring Well Construction and Monitoring Data

Well ID	Northing (US State Plane - NAD83[1])	Easting (US State Plane - NAD83)	Top of Casing Elevation (feet above MSL[2])	Ground Surface Elevation (feet above MSL)	Screen Length (feet)	Stickup (feet)	Total Depth of Well from TOC[3] (feet)	Top of Screen Elevation (feet above MSL)	Date	Depth to Water (feet TOC)	Groundwater Elevation (feet above MSL)
MW-34	276491.36	13346112.50	715.18	715.29	5	-0.11	18.89	705.80	6/5/2015	3.92	711.26
									11/16/2015	4.90	710.28
									4/18/2016	3.95	711.23
									10/31/2016	4.42	710.76
									4/24/2017	3.91	711.27
									10/23/2017	5.18	710.00
									4/23/2018	3.74	711.44
									10/22/2018	4.35	710.83
									4/30/2019	3.10	712.08
									10/31/2019	3.75	711.43
									5/19/2020	2.67	712.51
									11/2/2020	4.36	710.82
									4/13/2021	3.51	711.67
									4/26/2022	3.68	711.50
									4/19/2023	3.90	711.28
									5/13/2024	4.05	711.13

Notes:

1. NAD83 = North American Datum 1983.

2. MSL = Mean Sea Level.

3. TOC = Feet from Top of Casing.

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-1[A] (DUP)	W-R2330026-052720-KRM-035	5/27/2020										
MW-1 (DUP)	W-R2330026-052720-KRM-035	5/27/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330026-052720-KRM-035	5/27/2020										
MW-1	W-R2330026-052720-KRM-035	5/27/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330026-110620-KRM-023	11/6/2020										
MW-1	W-R2330026-110620-KRM-023	11/6/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330027-041521-KRM-029	4/15/2021										
MW-1	W-R2330027-041521-KRM-029	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A] (DUP)	W-R2330027-041521-KRM-031	4/15/2021										
MW-1 (DUP)	W-R2330027-041521-KRM-031	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1R[A]	W-R2330031-042123-ERR-027	4/21/2023										
MW-1R	W-R2330031-042123-ERR-027	4/21/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330031-051624-KNK-MW1	5/16/2024										
MW-1	W-R2330031-051624-KNK-MW1	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A] (DUP)	DUP 1	5/16/2024										
MW-1 (DUP)	DUP 1	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-1[A] (DUP)	W-R2330026-052720-KRM-035	5/27/2020										
MW-1 (DUP)	W-R2330026-052720-KRM-035	5/27/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330026-052720-KRM-035	5/27/2020										
MW-1	W-R2330026-052720-KRM-035	5/27/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330026-110620-KRM-023	11/6/2020										
MW-1	W-R2330026-110620-KRM-023	11/6/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330027-041521-KRM-029	4/15/2021										
MW-1	W-R2330027-041521-KRM-029	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A] (DUP)	W-R2330027-041521-KRM-031	4/15/2021										
MW-1 (DUP)	W-R2330027-041521-KRM-031	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1R[A]	W-R2330031-042123-ERR-027	4/21/2023										
MW-1R	W-R2330031-042123-ERR-027	4/21/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330031-051624-KNK-MW1	5/16/2024										
MW-1	W-R2330031-051624-KNK-MW1	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A] (DUP)	DUP 1	5/16/2024										
MW-1 (DUP)	DUP 1	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-1[A] (DUP)	W-R2330026-052720-KRM-035	5/27/2020	19	14,000	200
MW-1 (DUP)	W-R2330026-052720-KRM-035	5/27/2020	<8.0	14,000	200
MW-1[A]	W-R2330026-052720-KRM-035	5/27/2020	17	14,000	230
MW-1	W-R2330026-052720-KRM-035	5/27/2020	<8	13,000	230
MW-1[A]	W-R2330026-110620-KRM-023	11/6/2020	29	15,000	290
MW-1	W-R2330026-110620-KRM-023	11/6/2020	<8.0	15,000	240
MW-1[A]	W-R2330027-041521-KRM-029	4/15/2021	29	19,000	340
MW-1	W-R2330027-041521-KRM-029	4/15/2021	<8.0	18,000	290
MW-1[A] (DUP)	W-R2330027-041521-KRM-031	4/15/2021	19	19,000	320
MW-1 (DUP)	W-R2330027-041521-KRM-031	4/15/2021	<8.0	13,000	290
MW-1R[A]	W-R2330031-042123-ERR-027	4/21/2023	360	15,000	320
MW-1R	W-R2330031-042123-ERR-027	4/21/2023	<10	15,000	540
MW-1[A]	W-R2330031-051624-KNK-MW1	5/16/2024	1,780	15,800	350
MW-1	W-R2330031-051624-KNK-MW1	5/16/2024	37.8	18,600	260
MW-1[A] (DUP)	DUP 1	5/16/2024	1,640	15,000	357
MW-1 (DUP)	DUP 1	5/16/2024	9.13 J	18,400	241

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-3[A]	W-R2330026-110520-KRM-017	11/5/2020										
MW-3	W-R2330026-110520-KRM-017	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A (DUP)]	W-R2330026-110520-KRM-018	11/5/2020										
MW-3 (DUP)	W-R2330026-110520-KRM-018	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330027-041321-KRM-014	4/13/2021										
MW-3	W-R2330027-041321-KRM-014	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330027-042522-KADH-004	4/25/2022										
MW-3	W-R2330027-042522-KADH-004	4/25/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330031-042023-ERR-016	4/20/2023										
MW-3	W-R2330031-042023-ERR-016	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330031-062824-ADH-MW3	6/28/2024										
MW-3	W-R2330031-062824-ADH-MW3	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330026-110520-KRM-015	11/5/2020										
MW-4	W-R2330026-110520-KRM-015	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330027-041321-KRM-010	4/13/2021										
MW-4	W-R2330027-041321-KRM-010	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330027-042622-ADP-008	4/26/2022										
MW-4	W-R2330027-042622-ADP-008	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330031-050423-ERR-007	5/4/2023										
MW-4	W-R2330031-050423-ERR-007	5/4/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330031-062824-ADH-MW4	6/28/2024										
MW-4	W-R2330031-062824-ADH-MW4	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
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Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-3[A]	W-R2330026-110520-KRM-017	11/5/2020										
MW-3	W-R2330026-110520-KRM-017	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A (DUP)]	W-R2330026-110520-KRM-018	11/5/2020										
MW-3 (DUP)	W-R2330026-110520-KRM-018	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330027-041321-KRM-014	4/13/2021										
MW-3	W-R2330027-041321-KRM-014	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330027-042522-KADH-004	4/25/2022										
MW-3	W-R2330027-042522-KADH-004	4/25/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330031-042023-ERR-016	4/20/2023										
MW-3	W-R2330031-042023-ERR-016	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330031-062824-ADH-MW3	6/28/2024										
MW-3	W-R2330031-062824-ADH-MW3	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330026-110520-KRM-015	11/5/2020										
MW-4	W-R2330026-110520-KRM-015	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330027-041321-KRM-010	4/13/2021										
MW-4	W-R2330027-041321-KRM-010	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330027-042622-ADP-008	4/26/2022										
MW-4	W-R2330027-042622-ADP-008	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330031-050423-ERR-007	5/4/2023										
MW-4	W-R2330031-050423-ERR-007	5/4/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330031-062824-ADH-MW4	6/28/2024										
MW-4	W-R2330031-062824-ADH-MW4	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-3[A]	W-R2330026-110520-KRM-017	11/5/2020	2,700	18,000	290
MW-3	W-R2330026-110520-KRM-017	11/5/2020	<8.0	8,600	230
MW-3[A (DUP)]	W-R2330026-110520-KRM-018	11/5/2020	6,100	24,000	360
MW-3 (DUP)	W-R2330026-110520-KRM-018	11/5/2020	48	13,000	140
MW-3[A]	W-R2330027-041321-KRM-014	4/13/2021	73	7,800	100
MW-3	W-R2330027-041321-KRM-014	4/13/2021	<8.0	4,300	98
MW-3[A]	W-R2330027-042522-KADH-004	4/25/2022	65	2,900	120
MW-3	W-R2330027-042522-KADH-004	4/25/2022	11	1,300	130
MW-3[A]	W-R2330031-042023-ERR-016	4/20/2023	23	2,700	29
MW-3	W-R2330031-042023-ERR-016	4/20/2023	<10.0	2,800	29
MW-3[A]	W-R2330031-062824-ADH-MW3	6/28/2024	297 S	4,340	167
MW-3	W-R2330031-062824-ADH-MW3	6/28/2024	6.64 J	3,800	210
MW-4[A]	W-R2330026-110520-KRM-015	11/5/2020	10	14,000	83
MW-4	W-R2330026-110520-KRM-015	11/5/2020	<8.0	14,000	86
MW-4[A]	W-R2330027-041321-KRM-010	4/13/2021	150	16,000	110
MW-4	W-R2330027-041321-KRM-010	4/13/2021	<8.0	14,000	89
MW-4[A]	W-R2330027-042622-ADP-008	4/26/2022	80	6,600	810
MW-4	W-R2330027-042622-ADP-008	4/26/2022	19	5,600	800
MW-4[A]	W-R2330031-050423-ERR-007	5/4/2023	23	80	4.2 J
MW-4	W-R2330031-050423-ERR-007	5/4/2023	<10	<80	2.4 J
MW-4[A]	W-R2330031-062824-ADH-MW4	6/28/2024	26	7,240	283
MW-4	W-R2330031-062824-ADH-MW4	6/28/2024	5.86	10,600	210

Table 3
Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-5[A]	W-R2330027-042622-ADH-011	4/26/2022										
MW-5	W-R2330027-042622-ADH-011	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330028-102722-ADH-006	10/27/2022										
MW-5	W-R2330028-102722-ADH-006	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-041823-ERR-004	4/18/2023										
MW-5	W-R2330031-041823-ERR-004	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-110723-ADH-006	11/7/2023										
MW-5	W-R2330031-110723-ADH-006	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-052424-KNK-MW5	5/24/2024										
MW-5	W-R2330031-052424-KNK-MW5	5/24/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330026-110520-KRM-013	11/5/2020										
MW-6	W-R2330026-110520-KRM-013	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330027-041321-KRM-006	4/13/2021										
MW-6	W-R2330027-041321-KRM-006	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330027-042622-SSR-007	4/26/2022										
MW-6	W-R2330027-042622-SSR-007	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R233003105-0423-ERR-025	5/4/2023										
MW-6	W-R233003105-0423-ERR-025	5/4/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R233003105-062824-ADH-MW6	6/28/2024										
MW-6	W-R233003105-062824-ADH-MW6	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-5[A]	W-R2330027-042622-ADH-011	4/26/2022										
MW-5	W-R2330027-042622-ADH-011	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330028-102722-ADH-006	10/27/2022										
MW-5	W-R2330028-102722-ADH-006	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-041823-ERR-004	4/18/2023										
MW-5	W-R2330031-041823-ERR-004	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-110723-ADH-006	11/7/2023										
MW-5	W-R2330031-110723-ADH-006	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-052424-KNK-MW5	5/24/2024										
MW-5	W-R2330031-052424-KNK-MW5	5/24/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330026-110520-KRM-013	11/5/2020										
MW-6	W-R2330026-110520-KRM-013	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330027-041321-KRM-006	4/13/2021										
MW-6	W-R2330027-041321-KRM-006	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330027-042622-SSR-007	4/26/2022										
MW-6	W-R2330027-042622-SSR-007	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R233003105-0423-ERR-025	5/4/2023										
MW-6	W-R233003105-0423-ERR-025	5/4/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R233003105-062824-ADH-MW6	6/28/2024										
MW-6	W-R233003105-062824-ADH-MW6	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-5[A]	W-R2330027-042622-ADH-011	4/26/2022	630	8,300	100
MW-5	W-R2330027-042622-ADH-011	4/26/2022	76.0	5,700	79
MW-5[A]	W-R2330028-102722-ADH-006	10/27/2022	53.0	6,500	70
MW-5	W-R2330028-102722-ADH-006	10/27/2022	8.5	5,800	68
MW-5[A]	W-R2330031-041823-ERR-004	4/18/2023	52	7,000	70
MW-5	W-R2330031-041823-ERR-004	4/18/2023	<10	6,700	69
MW-5[A]	W-R2330031-110723-ADH-006	11/7/2023	31	6,500	62
MW-5	W-R2330031-110723-ADH-006	11/7/2023	<10	6,700	63
MW-5[A]	W-R2330031-052424-KNK-MW5	5/24/2024	60.1	5,540	61.9
MW-5	W-R2330031-052424-KNK-MW5	5/24/2024	<5.73	6,160	57.9
MW-6[A]	W-R2330026-110520-KRM-013	11/5/2020	1,400	22,000	700
MW-6	W-R2330026-110520-KRM-013	11/5/2020	130	14,000	570
MW-6[A]	W-R2330027-041321-KRM-006	4/13/2021	310	4,300	190
MW-6	W-R2330027-041321-KRM-006	4/13/2021	<8.0	240	25
MW-6[A]	W-R2330027-042622-SSR-007	4/26/2022	74	2,200	190
MW-6	W-R2330027-042622-SSR-007	4/26/2022	<8.0	76	140
MW-6[A]	W-R233003105-0423-ERR-025	5/4/2023	41	210	12
MW-6	W-R233003105-0423-ERR-025	5/4/2023	<10	<80	2.4 J
MW-6[A]	W-R233003105-062824-ADH-MW6	6/28/2024	16.4	7,690	1,660
MW-6	W-R233003105-062824-ADH-MW6	6/28/2024	13.4	6,440	1,610

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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-7[A]	W-R2330027-042622-ADH-013	4/26/2022										
MW-7	W-R2330027-042622-ADH-013	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330028-102722-ADH-003	10/27/2022										
MW-7	W-R2330028-102722-ADH-003	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A] (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022										
MW-7 (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-041823-ERR-005	4/18/2023										
MW-7	W-R2330031-041823-ERR-005	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-110723-ADH-008	11/7/2023										
MW-7	W-R2330031-110723-ADH-008	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-052324-KNK-MW7	5/23/2024										
MW-7	W-R2330031-052324-KNK-MW7	5/23/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330025-103019-SCD-021	10/30/2019										
MW-8	W-R2330025-103019-SCD-021	10/30/2019	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330026-110920-KRM-027	11/9/2020										
MW-8	W-R2330026-110920-KRM-027	11/9/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330027-041421-SSR-025	4/14/2021										
MW-8	W-R2330027-041421-SSR-025	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330031-041823-ERR-010	4/18/2023										
MW-8	W-R2330031-041823-ERR-010	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330031-052324-KNK-MW8	5/23/2024										
MW-8	W-R2330031-052324-KNK-MW8	5/23/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-7[A]	W-R2330027-042622-ADH-013	4/26/2022										
MW-7	W-R2330027-042622-ADH-013	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330028-102722-ADH-003	10/27/2022										
MW-7	W-R2330028-102722-ADH-003	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A] (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022										
MW-7 (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-041823-ERR-005	4/18/2023										
MW-7	W-R2330031-041823-ERR-005	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-110723-ADH-008	11/7/2023										
MW-7	W-R2330031-110723-ADH-008	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-052324-KNK-MW7	5/23/2024										
MW-7	W-R2330031-052324-KNK-MW7	5/23/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330025-103019-SCD-021	10/30/2019										
MW-8	W-R2330025-103019-SCD-021	10/30/2019	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330026-110920-KRM-027	11/9/2020										
MW-8	W-R2330026-110920-KRM-027	11/9/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330027-041421-SSR-025	4/14/2021										
MW-8	W-R2330027-041421-SSR-025	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330031-041823-ERR-010	4/18/2023										
MW-8	W-R2330031-041823-ERR-010	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330031-052324-KNK-MW8	5/23/2024										
MW-8	W-R2330031-052324-KNK-MW8	5/23/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-7[A]	W-R2330027-042622-ADH-013	4/26/2022	27	2,000	880
MW-7	W-R2330027-042622-ADH-013	4/26/2022	8	1,900	880
MW-7[A]	W-R2330028-102722-ADH-003	10/27/2022	31	7,000	520
MW-7	W-R2330028-102722-ADH-003	10/27/2022	6.7	4,000	490
MW-7[A] (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022	18	7,000	540
MW-7 (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022	8.9	6,600	540
MW-7[A]	W-R2330031-041823-ERR-005	4/18/2023	17	5,300	380
MW-7	W-R2330031-041823-ERR-005	4/18/2023	<10	5,400	390
MW-7[A]	W-R2330031-110723-ADH-008	11/7/2023	64	3,000	370
MW-7	W-R2330031-110723-ADH-008	11/7/2023	11	210	360
MW-7[A]	W-R2330031-052324-KNK-MW7	5/23/2024	28.6	5,170	528
MW-7	W-R2330031-052324-KNK-MW7	5/23/2024	6.75 J	4,690	498
MW-8[A]	W-R2330025-103019-SCD-021	10/30/2019	11	8,700	330
MW-8	W-R2330025-103019-SCD-021	10/30/2019	<8.0	8,500	330
MW-8[A]	W-R2330026-110920-KRM-027	11/9/2020	95	8,700	300
MW-8	W-R2330026-110920-KRM-027	11/9/2020	<8.0	8,000	290
MW-8[A]	W-R2330027-041421-SSR-025	4/14/2021	130	7,300	250
MW-8	W-R2330027-041421-SSR-025	4/14/2021	<8.0	6,600	240
MW-8[A]	W-R2330031-041823-ERR-010	4/18/2023	10	3,400	180
MW-8	W-R2330031-041823-ERR-010	4/18/2023	<10	3,300	180
MW-8[A]	W-R2330031-052324-KNK-MW8	5/23/2024	18.4	1,890	167
MW-8	W-R2330031-052324-KNK-MW8	5/23/2024	<5.73	1,800	173

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-9[A]	W-R2330027-042622-SSR-012	4/26/2022										
MW-9	W-R2330027-042622-SSR-012	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330028-11122-ADH-013	11/1/2022										
MW-9	W-R2330028-11122-ADH-013	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-041823-ERR-006	4/18/2023										
MW-9	W-R2330031-041823-ERR-006	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-110723-ADH-007	11/7/2023										
MW-9	W-R2330031-110723-ADH-007	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-052424-KNK-MW9	5/24/2024										
MW-9	W-R2330031-052424-KNK-MW9	5/24/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330027-042622-ADP-010	4/26/2022										
MW-10	W-R2330027-042622-ADP-010	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330028-102722-ADH-007	10/27/2022										
MW-10	W-R2330028-102722-ADH-007	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	31	NS
MW-10[A]	W-R2330031-041923-ERR-013	4/19/2023										
MW-10	W-R2330031-041923-ERR-013	4/19/2023	<5.0	<1.0	<1.0	<1.0	7.4 J	3.20	NS	NS	29	<1.0
MW-10[A] (DUP)	W-R2330031-042123-ERR-028	4/21/2023										
MW-10 (DUP)	W-R2330031-042123-ERR-028	4/21/2023	<5.0	<1.0	<1.0	<1.0	<10	2.40	<1.0	<1.0	21.00	<1.0
MW-10[A]	W-R2330031-110823-ERR-009	11/8/2023										
MW-10	W-R2330031-110823-ERR-009	11/8/2023	<25	<1.0	<1.0	<50	32 J	0.48 J	<1.0	<5.0	<1.0	<5.0
MW-10[A] (DUP)	DUP-01	11/8/2023										
MW-10 (DUP)	DUP-01	11/8/2023	<25	<1.0	<1.0	<50	50 J	0.47 J	<1.0	<5.0	<1.0	<5.0
MW-10[A]	W-R2330031-051624-KNK-MW10	5/16/2024										
MW-10	W-R2330031-051624-KNK-MW10	5/16/2024	<2.43	<0.32	<0.35	<0.52	<4.5	2.62	<0.49	<0.56	24.80	<0.68

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-9[A]	W-R2330027-042622-SSR-012	4/26/2022										
MW-9	W-R2330027-042622-SSR-012	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330028-11122-ADH-013	11/1/2022										
MW-9	W-R2330028-11122-ADH-013	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-041823-ERR-006	4/18/2023										
MW-9	W-R2330031-041823-ERR-006	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-110723-ADH-007	11/7/2023										
MW-9	W-R2330031-110723-ADH-007	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-052424-KNK-MW9	5/24/2024										
MW-9	W-R2330031-052424-KNK-MW9	5/24/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330027-042622-ADP-010	4/26/2022										
MW-10	W-R2330027-042622-ADP-010	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330028-102722-ADH-007	10/27/2022										
MW-10	W-R2330028-102722-ADH-007	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330031-041923-ERR-013	4/19/2023										
MW-10	W-R2330031-041923-ERR-013	4/19/2023	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
MW-10[A] (DUP)	W-R2330031-042123-ERR-028	4/21/2023										
MW-10 (DUP)	W-R2330031-042123-ERR-028	4/21/2023	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
MW-10[A]	W-R2330031-110823-ERR-009	11/8/2023										
MW-10	W-R2330031-110823-ERR-009	11/8/2023	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10[A] (DUP)	DUP-01	11/8/2023										
MW-10 (DUP)	DUP-01	11/8/2023	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10[A]	W-R2330031-051624-KNK-MW10	5/16/2024										
MW-10	W-R2330031-051624-KNK-MW10	5/16/2024	<0.68	<0.46	<0.63	NS	<0.68	<0.34	<0.35	<0.35	<0.45	<0.81

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-9[A]	W-R2330027-042622-SSR-012	4/26/2022	910	65,000	590
MW-9	W-R2330027-042622-SSR-012	4/26/2022	<10	26,000	240
MW-9[A]	W-R2330028-11122-ADH-013	11/1/2022	11	24,000	230
MW-9	W-R2330028-11122-ADH-013	11/1/2022	7.30	24,000	230
MW-9[A]	W-R2330031-041823-ERR-006	4/18/2023	6.8 J	17,000	260
MW-9	W-R2330031-041823-ERR-006	4/18/2023	8.7 J	18,000	290
MW-9[A]	W-R2330031-110723-ADH-007	11/7/2023	17	29,000	240
MW-9	W-R2330031-110723-ADH-007	11/7/2023	6.2 J	25,000	210
MW-9[A]	W-R2330031-052424-KNK-MW9	5/24/2024	26.4	29,000	243
MW-9	W-R2330031-052424-KNK-MW9	5/24/2024	5.98 BJ	24,300	233
MW-10[A]	W-R2330027-042622-ADP-010	4/26/2022	1,200	31,000	620
MW-10	W-R2330027-042622-ADP-010	4/26/2022	13	18,000	530
MW-10[A]	W-R2330028-102722-ADH-007	10/27/2022	NS	NS	NS
MW-10	W-R2330028-102722-ADH-007	10/27/2022	NS	NS	NS
MW-10[A]	W-R2330031-041923-ERR-013	4/19/2023	88	19,000	500
MW-10	W-R2330031-041923-ERR-013	4/19/2023	33	20,000	510
MW-10[A] (DUP)	W-R2330031-042123-ERR-028	4/21/2023	450	19,000	550
MW-10 (DUP)	W-R2330031-042123-ERR-028	4/21/2023	8.2	21,000	670
MW-10[A]	W-R2330031-110823-ERR-009	11/8/2023	NS	NS	NS
MW-10	W-R2330031-110823-ERR-009	11/8/2023	NS	NS	NS
MW-10[A] (DUP)	DUP-01	11/8/2023	NS	NS	NS
MW-10 (DUP)	DUP-01	11/8/2023	NS	NS	NS
MW-10[A]	W-R2330031-051624-KNK-MW10	5/16/2024	19.9	18,200	598
MW-10	W-R2330031-051624-KNK-MW10	5/16/2024	6.0 J	19,000	599

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-11[A]	W-R2330026-110620-KRM-020	11/6/2020										
MW-11	W-R2330026-110620-KRM-020	11/6/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330027-041521-KRM-032	4/15/2021										
MW-11	W-R2330027-041521-KRM-032	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330027-042622-ADP-017	4/26/2022										
MW-11	W-R2330027-042622-ADP-017	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330031-042023-ERR-020	4/20/2023										
MW-11	W-R2330031-042023-ERR-020	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330031-070124-ADH-MW11	7/1/2024										
MW-11	W-R2330031-070124-ADH-MW11	7/1/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330026-110520-KRM-014	11/5/2020										
MW-12	W-R2330026-110520-KRM-014	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330027-041321-KRM-008	4/13/2021										
MW-12	W-R2330027-041321-KRM-008	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330027-042622-SSR-009	4/26/2022										
MW-12	W-R2330027-042622-SSR-009	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330031-042123-ERR-026	4/21/2023										
MW-12	W-R2330031-042123-ERR-026	4/21/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330031-062824-ADH-MW12	6/28/2024										
MW-12	W-R2330031-062824-ADH-MW12	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-11[A]	W-R2330026-110620-KRM-020	11/6/2020										
MW-11	W-R2330026-110620-KRM-020	11/6/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330027-041521-KRM-032	4/15/2021										
MW-11	W-R2330027-041521-KRM-032	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330027-042622-ADP-017	4/26/2022										
MW-11	W-R2330027-042622-ADP-017	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330031-042023-ERR-020	4/20/2023										
MW-11	W-R2330031-042023-ERR-020	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330031-070124-ADH-MW11	7/1/2024										
MW-11	W-R2330031-070124-ADH-MW11	7/1/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330026-110520-KRM-014	11/5/2020										
MW-12	W-R2330026-110520-KRM-014	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330027-041321-KRM-008	4/13/2021										
MW-12	W-R2330027-041321-KRM-008	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330027-042622-SSR-009	4/26/2022										
MW-12	W-R2330027-042622-SSR-009	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330031-042123-ERR-026	4/21/2023										
MW-12	W-R2330031-042123-ERR-026	4/21/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330031-062824-ADH-MW12	6/28/2024										
MW-12	W-R2330031-062824-ADH-MW12	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-11[A]	W-R2330026-110620-KRM-020	11/6/2020	12	2,000	200
MW-11	W-R2330026-110620-KRM-020	11/6/2020	<8.0	1,500	180
MW-11[A]	W-R2330027-041521-KRM-032	4/15/2021	14	1,400	99
MW-11	W-R2330027-041521-KRM-032	4/15/2021	<8.0	1,300	91
MW-11[A]	W-R2330027-042622-ADP-017	4/26/2022	42	4,000	340
MW-11	W-R2330027-042622-ADP-017	4/26/2022	<10	75	48
MW-11[A]	W-R2330031-042023-ERR-020	4/20/2023	100	9,100	860
MW-11	W-R2330031-042023-ERR-020	4/20/2023	<10	<80	24
MW-11[A]	W-R2330031-070124-ADH-MW11	7/1/2024	13	2,630	157
MW-11	W-R2330031-070124-ADH-MW11	7/1/2024	<5.71	2,400	141
MW-12[A]	W-R2330026-110520-KRM-014	11/5/2020	400	13,000	230
MW-12	W-R2330026-110520-KRM-014	11/5/2020	<8.0	13,000	290
MW-12[A]	W-R2330027-041321-KRM-008	4/13/2021	83	10,000	160
MW-12	W-R2330027-041321-KRM-008	4/13/2021	<8.0	9,600	170
MW-12[A]	W-R2330027-042622-SSR-009	4/26/2022	220	1,100	790
MW-12	W-R2330027-042622-SSR-009	4/26/2022	11	4,000	530
MW-12[A]	W-R2330031-042123-ERR-026	4/21/2023	39	5,800	230
MW-12	W-R2330031-042123-ERR-026	4/21/2023	6.2 J	4,000	230
MW-12[A]	W-R2330031-062824-ADH-MW12	6/28/2024	67.3	12,900	298
MW-12	W-R2330031-062824-ADH-MW12	6/28/2024	<5.73	8,520	290

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Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-17[A]	W-R2330026-110920-KRM-028	11/9/2020										
MW-17	W-R2330026-110920-KRM-028	11/9/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330027-041421-SSR-023	4/14/2021										
MW-17	W-R2330027-041421-SSR-023	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330027-0426221-SSR-015	4/26/2022										
MW-17	W-R2330027-0426221-SSR-015	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330031-042023-ERR-015	4/20/2023										
MW-17	W-R2330031-042023-ERR-015	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330031-070124-ADH-MW17	7/1/2024										
MW-17	W-R2330031-070124-ADH-MW17	7/1/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330027-042622-ADP-014	4/26/2022										
MW-18	W-R2330027-042622-ADP-014	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330028-102722-ADH-004	10/27/2022										
MW-18	W-R2330028-102722-ADH-004	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R23300310-41723-ERR-001	4/17/2023										
MW-18	W-R23300310-41723-ERR-001	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330031-110623-ERR-001	11/6/2023										
MW-18	W-R2330031-110623-ERR-001	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	DUP-02	11/6/2023										
MW-18	DUP-02	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330012-051424-KNK-MW18	5/14/2024										
MW-18	W-R2330012-051424-KNK-MW18	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-17[A]	W-R2330026-110920-KRM-028	11/9/2020										
MW-17	W-R2330026-110920-KRM-028	11/9/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330027-041421-SSR-023	4/14/2021										
MW-17	W-R2330027-041421-SSR-023	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330027-0426221-SSR-015	4/26/2022										
MW-17	W-R2330027-0426221-SSR-015	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330031-042023-ERR-015	4/20/2023										
MW-17	W-R2330031-042023-ERR-015	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330031-070124-ADH-MW17	7/1/2024										
MW-17	W-R2330031-070124-ADH-MW17	7/1/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330027-042622-ADP-014	4/26/2022										
MW-18	W-R2330027-042622-ADP-014	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330028-102722-ADH-004	10/27/2022										
MW-18	W-R2330028-102722-ADH-004	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R23300310-41723-ERR-001	4/17/2023										
MW-18	W-R23300310-41723-ERR-001	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330031-110623-ERR-001	11/6/2023										
MW-18	W-R2330031-110623-ERR-001	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	DUP-02	11/6/2023										
MW-18	DUP-02	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330012-051424-KNK-MW18	5/14/2024										
MW-18	W-R2330012-051424-KNK-MW18	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-17[A]	W-R2330026-110920-KRM-028	11/9/2020	42	3,100	320
MW-17	W-R2330026-110920-KRM-028	11/9/2020	<8.0	2,600	310
MW-17[A]	W-R2330027-041421-SSR-023	4/14/2021	85	2,500	370
MW-17	W-R2330027-041421-SSR-023	4/14/2021	<8.0	2,100	340
MW-17[A]	W-R2330027-0426221-SSR-015	4/26/2022	1,900	8,600	470
MW-17	W-R2330027-0426221-SSR-015	4/26/2022	<10.0	2,800	370
MW-17[A]	W-R2330031-042023-ERR-015	4/20/2023	130	11,000	110
MW-17	W-R2330031-042023-ERR-015	4/20/2023	<10	2,100	77
MW-17[A]	W-R2330031-070124-ADH-MW17	7/1/2024	29.5	3,060	384
MW-17	W-R2330031-070124-ADH-MW17	7/1/2024	5.97 J	2,940	428
MW-18[A]	W-R2330027-042622-ADP-014	4/26/2022	1,500	9,200	550
MW-18	W-R2330027-042622-ADP-014	4/26/2022	22	370	220
MW-18[A]	W-R2330028-102722-ADH-004	10/27/2022	410	6,300	290
MW-18	W-R2330028-102722-ADH-004	10/27/2022	13	4,100	290
MW-18[A]	W-R23300310-41723-ERR-001	4/17/2023	220	1,200	290
MW-18	W-R23300310-41723-ERR-001	4/17/2023	11	580	310
MW-18[A]	W-R2330031-110623-ERR-001	11/6/2023	69	1,100	240
MW-18	W-R2330031-110623-ERR-001	11/6/2023	<10	130	240
MW-18[A]	DUP-02	11/6/2023	2,800	7,500	400
MW-18	DUP-02	11/6/2023	36	2,600	250
MW-18[A]	W-R2330012-051424-KNK-MW18	5/14/2024	64.8	1,630	424
MW-18	W-R2330012-051424-KNK-MW18	5/14/2024	<5.73	1,470	397

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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-19[A]	W-R2330027-042622-SSR-030	4/26/2022										
MW-19	W-R2330027-042622-SSR-030	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R233028-102722-ADH-005	10/27/2022										
MW-19	W-R233028-102722-ADH-005	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R233031-041723-ERR-002	4/17/2023										
MW-19	W-R233031-041723-ERR-002	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R2330031-110623-ERR-002	11/6/2023										
MW-19	W-R2330031-110623-ERR-002	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R2330031-051424-KNK-MW19	5/14/2024										
MW-19	W-R2330031-051424-KNK-MW19	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330027-042622-SSR-029	4/26/2022										
MW-20	W-R2330027-042622-SSR-029	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330028-10/26/22-ADH-001	10/26/2022										
MW-20	W-R2330028-10/26/22-ADH-001	10/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-041723-ERR-003	4/17/2023										
MW-20	W-R2330031-041723-ERR-003	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-110623-ERR-003	11/6/2023										
MW-20	W-R2330031-110623-ERR-003	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-051624-KNK-MW20	5/16/2024										
MW-20	W-R2330031-051624-KNK-MW20	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-19[A]	W-R2330027-042622-SSR-030	4/26/2022										
MW-19	W-R2330027-042622-SSR-030	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R233028-102722-ADH-005	10/27/2022										
MW-19	W-R233028-102722-ADH-005	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R233031-041723-ERR-002	4/17/2023										
MW-19	W-R233031-041723-ERR-002	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R2330031-110623-ERR-002	11/6/2023										
MW-19	W-R2330031-110623-ERR-002	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R2330031-051424-KNK-MW19	5/14/2024										
MW-19	W-R2330031-051424-KNK-MW19	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330027-042622-SSR-029	4/26/2022										
MW-20	W-R2330027-042622-SSR-029	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330028-10/26/22-ADH-001	10/26/2022										
MW-20	W-R2330028-10/26/22-ADH-001	10/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-041723-ERR-003	4/17/2023										
MW-20	W-R2330031-041723-ERR-003	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-110623-ERR-003	11/6/2023										
MW-20	W-R2330031-110623-ERR-003	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-051624-KNK-MW20	5/16/2024										
MW-20	W-R2330031-051624-KNK-MW20	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-19[A]	W-R2330027-042622-SSR-030	4/26/2022	1,900	8,900	620
MW-19	W-R2330027-042622-SSR-030	4/26/2022	14	4,700	580
MW-19[A]	W-R233028-102722-ADH-005	10/27/2022	270	3,800	450
MW-19	W-R233028-102722-ADH-005	10/27/2022	45	3,200	460
MW-19[A]	W-R233031-041723-ERR-002	4/17/2023	490	2,200	460
MW-19	W-R233031-041723-ERR-002	4/17/2023	46	1,500	470
MW-19[A]	W-R2330031-110623-ERR-002	11/6/2023	180	2,900	440
MW-19	W-R2330031-110623-ERR-002	11/6/2023	<10	2,600	400
MW-19[A]	W-R2330031-051424-KNK-MW19	5/14/2024	161	3,400	489
MW-19	W-R2330031-051424-KNK-MW19	5/14/2024	8.99 J	2,680	485
MW-20[A]	W-R2330027-042622-SSR-029	4/26/2022	2,600	12,000	410
MW-20	W-R2330027-042622-SSR-029	4/26/2022	150	4,200	180
MW-20[A]	W-R2330028-10/26/22-ADH-001	10/26/2022	8,700	35,000	1,100
MW-20	W-R2330028-10/26/22-ADH-001	10/26/2022	43	91	150
MW-20[A]	W-R2330031-041723-ERR-003	4/17/2023	270	5,600	200
MW-20	W-R2330031-041723-ERR-003	4/17/2023	11	5,000	180
MW-20[A]	W-R2330031-110623-ERR-003	11/6/2023	220	4,300	180
MW-20	W-R2330031-110623-ERR-003	11/6/2023	11	3,600	160
MW-20[A]	W-R2330031-051624-KNK-MW20	5/16/2024	111	4,850	162
MW-20	W-R2330031-051624-KNK-MW20	5/16/2024	10.2	4,010	156

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Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-21[A] (DUP)	DUP 1	4/27/2022										
MW-21 (DUP)	DUP 1	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330027-042722-SSR-024	4/27/2022										
MW-21	W-R2330027-042722-SSR-024	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330028-102622-ADH-002	10/26/2022										
MW-21	W-R2330028-102622-ADH-002	10/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-041923-ERR-011	4/19/2023										
MW-21	W-R2330031-041923-ERR-011	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-110823-ERR-010	11/8/2023										
MW-21	W-R2330031-110823-ERR-010	11/8/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-051624-KNK-MW21	5/16/2024										
MW-21	W-R2330031-051624-KNK-MW21	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330026-110420-SSR-008	11/4/2020										
MW-22	W-R2330026-110420-SSR-008	11/4/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330027-041421-KRM-026	4/14/2021										
MW-22	W-R2330027-041421-KRM-026	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330027-042722-SSR-023	4/27/2022										
MW-22	W-R2330027-042722-SSR-023	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330031-041923-ERR-012	4/19/2023										
MW-22	W-R2330031-041923-ERR-012	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330031-051624-KNK-MW22	5/16/2024										
MW-22	W-R2330031-051624-KNK-MW22	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-21[A] (DUP)	DUP 1	4/27/2022										
MW-21 (DUP)	DUP 1	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330027-042722-SSR-024	4/27/2022										
MW-21	W-R2330027-042722-SSR-024	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330028-102622-ADH-002	10/26/2022										
MW-21	W-R2330028-102622-ADH-002	10/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-041923-ERR-011	4/19/2023										
MW-21	W-R2330031-041923-ERR-011	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-110823-ERR-010	11/8/2023										
MW-21	W-R2330031-110823-ERR-010	11/8/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-051624-KNK-MW21	5/16/2024										
MW-21	W-R2330031-051624-KNK-MW21	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330026-110420-SSR-008	11/4/2020										
MW-22	W-R2330026-110420-SSR-008	11/4/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330027-041421-KRM-026	4/14/2021										
MW-22	W-R2330027-041421-KRM-026	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330027-042722-SSR-023	4/27/2022										
MW-22	W-R2330027-042722-SSR-023	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330031-041923-ERR-012	4/19/2023										
MW-22	W-R2330031-041923-ERR-012	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330031-051624-KNK-MW22	5/16/2024										
MW-22	W-R2330031-051624-KNK-MW22	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-21[A] (DUP)	DUP 1	4/27/2022	16,000	19,000	1,200
MW-21 (DUP)	DUP 1	4/27/2022	130	83	60
MW-21[A]	W-R2330027-042722-SSR-024	4/27/2022	18,000	21,000	1,000
MW-21	W-R2330027-042722-SSR-024	4/27/2022	46	82	53
MW-21[A]	W-R2330028-102622-ADH-002	10/26/2022	850	4,900	610
MW-21	W-R2330028-102622-ADH-002	10/26/2022	32	250	60
MW-21[A]	W-R2330031-041923-ERR-011	4/19/2023	470	3,200	520
MW-21	W-R2330031-041923-ERR-011	4/19/2023	30	240	110
MW-21[A]	W-R2330031-110823-ERR-010	11/8/2023	55	440	190
MW-21	W-R2330031-110823-ERR-010	11/8/2023	<10	200	150
MW-21[A]	W-R2330031-051624-KNK-MW21	5/16/2024	50.8	436	256
MW-21	W-R2330031-051624-KNK-MW21	5/16/2024	<5.73	274	215
MW-22[A]	W-R2330026-110420-SSR-008	11/4/2020	330	11,000	98
MW-22	W-R2330026-110420-SSR-008	11/4/2020	170	10,000	87
MW-22[A]	W-R2330027-041421-KRM-026	4/14/2021	54	8,500	110
MW-22	W-R2330027-041421-KRM-026	4/14/2021	<8.0	7,200	120
MW-22[A]	W-R2330027-042722-SSR-023	4/27/2022	730	11,000	180
MW-22	W-R2330027-042722-SSR-023	4/27/2022	<10	6,800	150
MW-22[A]	W-R2330031-041923-ERR-012	4/19/2023	29	3,500	55
MW-22	W-R2330031-041923-ERR-012	4/19/2023	<10	2,900	52
MW-22[A]	W-R2330031-051624-KNK-MW22	5/16/2024	33	6,850	212
MW-22	W-R2330031-051624-KNK-MW22	5/16/2024	<5.73	6,350	211

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Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-23[A]	W-R2330027-042722-SSR-021	4/27/2022										
MW-23	W-R2330027-042722-SSR-021	4/27/2022	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	31	<1.0
MW-23[A]	W-R2330028-1028/22-ADH-010	10/28/2022										
MW-23	W-R2330028-1028/22-ADH-010	10/28/2022	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	61	<1.0
MW-23[A]	W-R2330031-042023-ERR-018	4/20/2023										
MW-23	W-R2330031-042023-ERR-018	4/20/2023	NS	NS	NS	NS	NS	1.20	NS	NS	39	NS
MW-23[A]	W-R230031-110923-ERR-012	11/9/2023										
MW-23	W-R230031-110923-ERR-012	11/9/2023	<25	<1.0	<1.0	<50	17 J	0.93 J	<1.0	<5.0	2.10	<5.0
MW-23[A]	W-R230031-051624-KNK-MW23	5/16/2024										
MW-23	W-R230031-051624-KNK-MW23	5/16/2024	<2.43	<0.320	<0.350	<0.52	<4.53	1.28	<0.49	<0.56	41.50	<0.68
MW-25[A]	W-R2330027-041421-KRM-020	4/14/2021										
MW-25	W-R2330027-041421-KRM-020	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330027-042722-SRS-020	4/27/2022										
MW-25	W-R2330027-042722-SRS-020	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-042023-ERR-017	4/20/2023										
MW-25	W-R2330031-042023-ERR-017	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-121823-ERR-014	12/18/2023										
MW-25	W-R2330031-121823-ERR-014	12/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-051624-KNK-MW25	5/16/2024										
MW-25	W-R2330031-051624-KNK-MW25	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-23[A]	W-R2330027-042722-SSR-021	4/27/2022										
MW-23	W-R2330027-042722-SSR-021	4/27/2022	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-23[A]	W-R2330028-1028/22-ADH-010	10/28/2022										
MW-23	W-R2330028-1028/22-ADH-010	10/28/2022	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-23[A]	W-R2330031-042023-ERR-018	4/20/2023										
MW-23	W-R2330031-042023-ERR-018	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23[A]	W-R230031-110923-ERR-012	11/9/2023										
MW-23	W-R230031-110923-ERR-012	11/9/2023	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23[A]	W-R230031-051624-KNK-MW23	5/16/2024										
MW-23	W-R230031-051624-KNK-MW23	5/16/2024	NS	<0.46	<0.63	NS	<0.68	<0.34	<0.35	<0.35	<0.45	<0.81
MW-25[A]	W-R2330027-041421-KRM-020	4/14/2021										
MW-25	W-R2330027-041421-KRM-020	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330027-042722-SRS-020	4/27/2022										
MW-25	W-R2330027-042722-SRS-020	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-042023-ERR-017	4/20/2023										
MW-25	W-R2330031-042023-ERR-017	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-121823-ERR-014	12/18/2023										
MW-25	W-R2330031-121823-ERR-014	12/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-051624-KNK-MW25	5/16/2024										
MW-25	W-R2330031-051624-KNK-MW25	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-23[A]	W-R2330027-042722-SSR-021	4/27/2022	78	9,700	74
MW-23	W-R2330027-042722-SSR-021	4/27/2022	<10	8,000	74
MW-23[A]	W-R2330028-1028/22-ADH-010	10/28/2022	NS	NS	NS
MW-23	W-R2330028-1028/22-ADH-010	10/28/2022	NS	NS	NS
MW-23[A]	W-R2330031-042023-ERR-018	4/20/2023	130	13,000	95
MW-23	W-R2330031-042023-ERR-018	4/20/2023	13	13,000	88
MW-23[A]	W-R230031-110923-ERR-012	11/9/2023	NS	NS	NS
MW-23	W-R230031-110923-ERR-012	11/9/2023	NS	NS	NS
MW-23[A]	W-R230031-051624-KNK-MW23	5/16/2024	112	11,800	107
MW-23	W-R230031-051624-KNK-MW23	5/16/2024	10.5	10,900	85.2
MW-25[A]	W-R2330027-041421-KRM-020	4/14/2021	120	410	580
MW-25	W-R2330027-041421-KRM-020	4/14/2021	<8.0	<50	380
MW-25[A]	W-R2330027-042722-SRS-020	4/27/2022	61	1,200	570
MW-25	W-R2330027-042722-SRS-020	4/27/2022	<10	130	280
MW-25[A]	W-R2330031-042023-ERR-017	4/20/2023	3,200	6,900	4,200
MW-25	W-R2330031-042023-ERR-017	4/20/2023	11	<80	200
MW-25[A]	W-R2330031-121823-ERR-014	12/18/2023	420	890	440
MW-25	W-R2330031-121823-ERR-014	12/18/2023	<10	470	390
MW-25[A]	W-R2330031-051624-KNK-MW25	5/16/2024	720	1,780	617
MW-25	W-R2330031-051624-KNK-MW25	5/16/2024	8.14 J	387	597

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Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-26[A]	W-R2330027-042722-SSR-022	4/27/2022										
MW-26	W-R2330027-042722-SSR-022	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R2330028-102822-ADH-009	10/28/2022										
MW-26	W-R2330028-102822-ADH-009	10/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R2330031-042023-ERR-019	4/20/2023										
MW-26	W-R2330031-042023-ERR-019	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R230031-110823-ERR-011	11/8/2023										
MW-26	W-R230031-110823-ERR-011	11/8/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R230031-051624-KNK-MW26	5/16/2024										
MW-26	W-R230031-051624-KNK-MW26	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330026-110520-KRM-016	11/5/2020										
MW-27	W-R2330026-110520-KRM-016	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330027-041321-KRM-0012	4/13/2021										
MW-27	W-R2330027-041321-KRM-0012	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330027-042522-ADP-005	4/25/2022										
MW-27	W-R2330027-042522-ADP-005	4/25/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330031-042023-ERR-023	5/5/2023										
MW-27	W-R2330031-042023-ERR-023	5/5/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330031-062824-ADH-MW27	6/28/2024										
MW-27	W-R2330031-062824-ADH-MW27	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-28[A]	W-R2330031-062724-ADH-MW28	6/27/2024										
MW-28	W-R2330031-062724-ADH- MW28	6/27/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-26[A]	W-R2330027-042722-SSR-022	4/27/2022										
MW-26	W-R2330027-042722-SSR-022	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R2330028-102822-ADH-009	10/28/2022										
MW-26	W-R2330028-102822-ADH-009	10/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R2330031-042023-ERR-019	4/20/2023										
MW-26	W-R2330031-042023-ERR-019	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R230031-110823-ERR-011	11/8/2023										
MW-26	W-R230031-110823-ERR-011	11/8/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R230031-051624-KNK-MW26	5/16/2024										
MW-26	W-R230031-051624-KNK-MW26	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330026-110520-KRM-016	11/5/2020										
MW-27	W-R2330026-110520-KRM-016	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330027-041321-KRM-0012	4/13/2021										
MW-27	W-R2330027-041321-KRM-0012	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330027-042522-ADP-005	4/25/2022										
MW-27	W-R2330027-042522-ADP-005	4/25/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330031-042023-ERR-023	5/5/2023										
MW-27	W-R2330031-042023-ERR-023	5/5/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330031-062824-ADH-MW27	6/28/2024										
MW-27	W-R2330031-062824-ADH-MW27	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-28[A]	W-R2330031-062724-ADH-MW28	6/27/2024										
MW-28	W-R2330031-062724-ADH- MW28	6/27/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-26[A]	W-R2330027-042722-SSR-022	4/27/2022	300	370	9
MW-26	W-R2330027-042722-SSR-022	4/27/2022	9	<80	<5
MW-26[A]	W-R2330028-102822-ADH-009	10/28/2022	120	340	NS
MW-26	W-R2330028-102822-ADH-009	10/28/2022	16	<1.0	NS
MW-26[A]	W-R2330031-042023-ERR-019	4/20/2023	15	61 J	<5.0
MW-26	W-R2330031-042023-ERR-019	4/20/2023	<10	<80	<5.0
MW-26[A]	W-R230031-110823-ERR-011	11/8/2023	65	410	140
MW-26	W-R230031-110823-ERR-011	11/8/2023	<10	<80	45
MW-26[A]	W-R230031-051624-KNK-MW26	5/16/2024	46.9	172	6.82
MW-26	W-R230031-051624-KNK-MW26	5/16/2024	<5.73	<47	<1.67
MW-27[A]	W-R2330026-110520-KRM-016	11/5/2020	630	6,300	100
MW-27	W-R2330026-110520-KRM-016	11/5/2020	<8.0	4,100	96
MW-27[A]	W-R2330027-041321-KRM-0012	4/13/2021	28	2,600	110
MW-27	W-R2330027-041321-KRM-0012	4/13/2021	<8	2,400	110
MW-27[A]	W-R2330027-042522-ADP-005	4/25/2022	730	11,000	180
MW-27	W-R2330027-042522-ADP-005	4/25/2022	<10	6,800	150
MW-27[A]	W-R2330031-042023-ERR-023	5/5/2023	160	7,100	93
MW-27	W-R2330031-042023-ERR-023	5/5/2023	<10	1,900	83
MW-27[A]	W-R2330031-062824-ADH-MW27	6/28/2024	5.97 J	3,100	79.1
MW-27	W-R2330031-062824-ADH-MW27	6/28/2024	<5.71	2,840	90.2
MW-28[A]	W-R2330031-062724-ADH-MW28	6/27/2024	8.89 J	11,000	469
MW-28	W-R2330031-062724-ADH- MW28	6/27/2024	5.8	19,900	450

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-29[A]	W-R2330027-042822-SSR-027	4/28/2022										
MW-29	W-R2330027-042822-SSR-027	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330028-11/1/22-ADH-011	11/1/2022										
MW-29	W-R2330028-11/1/22-ADH-011	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-041823-ERR-008	4/18/2023										
MW-29	W-R2330031-041823-ERR-008	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-110723-ERR-004	11/7/2023										
MW-29	W-R2330031-110723-ERR-004	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-051424-KNK-MW29	5/14/2024										
MW-29	W-R2330031-051424-KNK-MW29	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330027-042822-SSR-028	4/28/2022										
MW-30	W-R2330027-042822-SSR-028	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330028-11122-ADH-012	11/1/2022										
MW-30	W-R2330028-11122-ADH-012	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-041823-ERR-009	4/18/2023										
MW-30	W-R2330031-041823-ERR-009	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-110723-ERR-005	11/7/2023										
MW-30	W-R2330031-110723-ERR-005	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-0514243-KNK-MW30	5/14/2024										
MW-30	W-R2330031-0514243-KNK-MW30	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-29[A]	W-R2330027-042822-SSR-027	4/28/2022										
MW-29	W-R2330027-042822-SSR-027	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330028-11/1/22-ADH-011	11/1/2022										
MW-29	W-R2330028-11/1/22-ADH-011	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-041823-ERR-008	4/18/2023										
MW-29	W-R2330031-041823-ERR-008	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-110723-ERR-004	11/7/2023										
MW-29	W-R2330031-110723-ERR-004	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-051424-KNK-MW29	5/14/2024										
MW-29	W-R2330031-051424-KNK-MW29	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330027-042822-SSR-028	4/28/2022										
MW-30	W-R2330027-042822-SSR-028	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330028-11122-ADH-012	11/1/2022										
MW-30	W-R2330028-11122-ADH-012	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-041823-ERR-009	4/18/2023										
MW-30	W-R2330031-041823-ERR-009	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-110723-ERR-005	11/7/2023										
MW-30	W-R2330031-110723-ERR-005	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-0514243-KNK-MW30	5/14/2024										
MW-30	W-R2330031-0514243-KNK-MW30	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-29[A]	W-R2330027-042822-SSR-027	4/28/2022	1,700	34,000	180
MW-29	W-R2330027-042822-SSR-027	4/28/2022	10	1,200	57
MW-29[A]	W-R2330028-11/1/22-ADH-011	11/1/2022	18	3,000	170
MW-29	W-R2330028-11/1/22-ADH-011	11/1/2022	5.8	2,600	190
MW-29[A]	W-R2330031-041823-ERR-008	4/18/2023	11	4,500	140
MW-29	W-R2330031-041823-ERR-008	4/18/2023	<10	4,300	140
MW-29[A]	W-R2330031-110723-ERR-004	11/7/2023	<10	3,100	85
MW-29	W-R2330031-110723-ERR-004	11/7/2023	<10	2,600	89
MW-29[A]	W-R2330031-051424-KNK-MW29	5/14/2024	5.93	1,660	118
MW-29	W-R2330031-051424-KNK-MW29	5/14/2024	<5.73	1,400	117
MW-30[A]	W-R2330027-042822-SSR-028	4/28/2022	1,400	3,600	250
MW-30	W-R2330027-042822-SSR-028	4/28/2022	8.8	67	29
MW-30[A]	W-R2330028-11122-ADH-012	11/1/2022	13	210	41
MW-30	W-R2330028-11122-ADH-012	11/1/2022	20	230	50
MW-30[A]	W-R2330031-041823-ERR-009	4/18/2023	360	670	100
MW-30	W-R2330031-041823-ERR-009	4/18/2023	17	300	65
MW-30[A]	W-R2330031-110723-ERR-005	11/7/2023	55	630	26
MW-30	W-R2330031-110723-ERR-005	11/7/2023	<10	70 J	17
MW-30[A]	W-R2330031-0514243-KNK-MW30	5/14/2024	63.9	474	152
MW-30	W-R2330031-0514243-KNK-MW30	5/14/2024	<5.73	<47	42.1

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			1.8E+07	32,000	380	1.1E+06	3.4E+07	140	NA	9,900	4,600	1.80E+05
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-34[A]	W-R2330026-111020-SSR-036	11/10/2020										
MW-34	W-R2330026-111020-SSR-036	11/10/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330027-041221-SSR-015	4/13/2021										
MW-34	W-R2330027-041221-SSR-015	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A] (DUP)	W-R2330027-041221-SSR-017	4/13/2021										
MW-34 (DUP)	W-R2330027-041221-SSR-017	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330027-042822-SSR-031	4/28/2022										
MW-34	W-R2330027-042822-SSR-031	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330031-041923-ERR-014	4/19/2023										
MW-34	W-R2330031-041923-ERR-014	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R230031-051424-KNK-MW34	5/14/2024										
MW-34	W-R230031-051424-KNK-MW34	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of NREPA.

G = Calculated value based on a hardness of 150 mg/L.

H = Analyzed outside of holding time.

J = Analyte detected below quantitation limit.

NS = Not Sampled or Not Analyzed.

Exceeds Generic Drinking Water Cleanup Criteria (II)

Exceeds Generic Drinking Water Cleanup Criteria (II) and the Generic Health-Based Drinking Water Value (E)

Exceeds Generic Ground Water Surface Water Interface Criteria (III)

Exceeds Two or More DW (II), GSI (III) and/or Generic Health-Based Drinking Water Value (E)

Exceeds GSI Final Acute Value (FAV), also exceeds others

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Non-residential Drinking Water Criteria (II)			1,100	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	280 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			4.5E+04	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NA	720	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NA	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-34[A]	W-R2330026-111020-SSR-036	11/10/2020										
MW-34	W-R2330026-111020-SSR-036	11/10/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330027-041221-SSR-015	4/13/2021										
MW-34	W-R2330027-041221-SSR-015	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A] (DUP)	W-R2330027-041221-SSR-017	4/13/2021										
MW-34 (DUP)	W-R2330027-041221-SSR-017	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330027-042822-SSR-031	4/28/2022										
MW-34	W-R2330027-042822-SSR-031	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330031-041923-ERR-014	4/19/2023										
MW-34	W-R2330031-041923-ERR-014	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R230031-051424-KNK-MW34	5/14/2024										
MW-34	W-R230031-051424-KNK-MW34	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of NREPA.

G = Calculated value based on a hardness of 150 mg/L.

H = Analyzed outside of holding time.

J = Analyte detected below quantitation limit.

NS = Not Sampled or Not Analyzed.

Exceeds Generic Drinking Water Cleanup Criteria (II)

Exceeds Generic Drinking Water Cleanup Criteria (II) and the Generic Health-Based Drinking Water Value (E)

Exceeds Generic Ground Water Surface Water Interface Criteria (III)

Exceeds Two or More DW (II), GSI (III) and/or Generic Health-Based Drinking Water Value (E)

Exceeds GSI Final Acute Value (FAV), also exceeds others

Table 3
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Non-residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Non-residential Health-Based Drinking Water Value (E)			4,100	5,600	2,500
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{iv}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}nr}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-34[A]	W-R2330026-111020-SSR-036	11/10/2020	100	2,700	420
MW-34	W-R2330026-111020-SSR-036	11/10/2020	<8.0	2,500	420
MW-34[A]	W-R2330027-041221-SSR-015	4/13/2021	110	2,000	190
MW-34	W-R2330027-041221-SSR-015	4/13/2021	<8.0	1,400	200
MW-34[A] (DUP)	W-R2330027-041221-SSR-017	4/13/2021	140	2,000	200
MW-34 (DUP)	W-R2330027-041221-SSR-017	4/13/2021	10	1,400	180
MW-34[A]	W-R2330027-042822-SSR-031	4/28/2022	2,400	7,300	260
MW-34	W-R2330027-042822-SSR-031	4/28/2022	14	2,700	170
MW-34[A]	W-R2330031-041923-ERR-014	4/19/2023	18	2,600	290
MW-34	W-R2330031-041923-ERR-014	4/19/2023	<10	2,200	300
MW-34[A]	W-R230031-051424-KNK-MW34	5/14/2024	57.5	2,700	246
MW-34	W-R230031-051424-KNK-MW34	5/14/2024	<5.73	1,790	228

Notes:

E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of NREPA.

G = Calculated value based on a hardness of 150 mg/L.

H = Analyzed outside of holding time.

J = Analyte detected below quantitation limit.

NS = Not Sampled or Not Analyzed.

Exceeds Generic Drinking Water Cleanup Criteria (II)

Exceeds Generic Drinking Water Cleanup Criteria (II) and the Generic Health-Based Drinking Water Value (E)

Exceeds Generic Ground Water Surface Water Interface Criteria (III)

Exceeds Two or More DW (II), GSI (III) and/or Generic Health-Based Drinking Water Value (E)

Exceeds GSI Final Acute Value (FAV), also exceeds others

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-1[A] (DUP)	W-R2330026-052720-KRM-035	5/27/2020										
MW-1 (DUP)	W-R2330026-052720-KRM-035	5/27/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330026-052720-KRM-035	5/27/2020										
MW-1	W-R2330026-052720-KRM-035	5/27/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330026-110620-KRM-023	11/6/2020										
MW-1	W-R2330026-110620-KRM-023	11/6/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330027-041521-KRM-029	4/15/2021										
MW-1	W-R2330027-041521-KRM-029	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A] (DUP)	W-R2330027-041521-KRM-031	4/15/2021										
MW-1 (DUP)	W-R2330027-041521-KRM-031	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1R[A]	W-R2330031-042123-ERR-027	4/21/2023										
MW-1R	W-R2330031-042123-ERR-027	4/21/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330031-051624-KNK-MW1	5/16/2024										
MW-1	W-R2330031-051624-KNK-MW1	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A] (DUP)	DUP 1	5/16/2024										
MW-1 (DUP)	DUP 1	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-1[A] (DUP)	W-R2330026-052720-KRM-035	5/27/2020										
MW-1 (DUP)	W-R2330026-052720-KRM-035	5/27/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330026-052720-KRM-035	5/27/2020										
MW-1	W-R2330026-052720-KRM-035	5/27/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330026-110620-KRM-023	11/6/2020										
MW-1	W-R2330026-110620-KRM-023	11/6/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330027-041521-KRM-029	4/15/2021										
MW-1	W-R2330027-041521-KRM-029	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A] (DUP)	W-R2330027-041521-KRM-031	4/15/2021										
MW-1 (DUP)	W-R2330027-041521-KRM-031	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1R[A]	W-R2330031-042123-ERR-027	4/21/2023										
MW-1R	W-R2330031-042123-ERR-027	4/21/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A]	W-R2330031-051624-KNK-MW1	5/16/2024										
MW-1	W-R2330031-051624-KNK-MW1	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1[A] (DUP)	DUP 1	5/16/2024										
MW-1 (DUP)	DUP 1	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-1[A] (DUP)	W-R2330026-052720-KRM-035	5/27/2020	19	14,000	200
MW-1 (DUP)	W-R2330026-052720-KRM-035	5/27/2020	<8.0	14,000	200
MW-1[A]	W-R2330026-052720-KRM-035	5/27/2020	17	14,000	230
MW-1	W-R2330026-052720-KRM-035	5/27/2020	<8	13,000	230
MW-1[A]	W-R2330026-110620-KRM-023	11/6/2020	29	15,000	290
MW-1	W-R2330026-110620-KRM-023	11/6/2020	<8.0	15,000	240
MW-1[A]	W-R2330027-041521-KRM-029	4/15/2021	29	19,000	340
MW-1	W-R2330027-041521-KRM-029	4/15/2021	<8.0	18,000	290
MW-1[A] (DUP)	W-R2330027-041521-KRM-031	4/15/2021	19	19,000	320
MW-1 (DUP)	W-R2330027-041521-KRM-031	4/15/2021	<8.0	13,000	290
MW-1R[A]	W-R2330031-042123-ERR-027	4/21/2023	360	15,000	320
MW-1R	W-R2330031-042123-ERR-027	4/21/2023	<10	15,000	540
MW-1[A]	W-R2330031-051624-KNK-MW1	5/16/2024	1,780	15,800	350
MW-1	W-R2330031-051624-KNK-MW1	5/16/2024	37.8	18,600	260
MW-1[A] (DUP)	DUP 1	5/16/2024	1,640	15,000	357
MW-1 (DUP)	DUP 1	5/16/2024	9.13 J	18,400	241

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-3[A]	W-R2330026-110520-KRM-017	11/5/2020										
MW-3	W-R2330026-110520-KRM-017	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A (DUP)]	W-R2330026-110520-KRM-018	11/5/2020										
MW-3 (DUP)	W-R2330026-110520-KRM-018	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330027-041321-KRM-014	4/13/2021										
MW-3	W-R2330027-041321-KRM-014	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330027-042522-KADH-004	4/25/2022										
MW-3	W-R2330027-042522-KADH-004	4/25/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330031-042023-ERR-016	4/20/2023										
MW-3	W-R2330031-042023-ERR-016	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330031-062824-ADH-MW3	6/28/2024										
MW-3	W-R2330031-062824-ADH-MW3	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330026-110520-KRM-015	11/5/2020										
MW-4	W-R2330026-110520-KRM-015	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330027-041321-KRM-010	4/13/2021										
MW-4	W-R2330027-041321-KRM-010	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330027-042622-ADP-008	4/26/2022										
MW-4	W-R2330027-042622-ADP-008	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330031-050423-ERR-007	5/4/2023										
MW-4	W-R2330031-050423-ERR-007	5/4/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330031-062824-ADH-MW4	6/28/2024										
MW-4	W-R2330031-062824-ADH-MW4	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-3[A]	W-R2330026-110520-KRM-017	11/5/2020										
MW-3	W-R2330026-110520-KRM-017	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A (DUP)]	W-R2330026-110520-KRM-018	11/5/2020										
MW-3 (DUP)	W-R2330026-110520-KRM-018	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330027-041321-KRM-014	4/13/2021										
MW-3	W-R2330027-041321-KRM-014	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330027-042522-KADH-004	4/25/2022										
MW-3	W-R2330027-042522-KADH-004	4/25/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330031-042023-ERR-016	4/20/2023										
MW-3	W-R2330031-042023-ERR-016	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3[A]	W-R2330031-062824-ADH-MW3	6/28/2024										
MW-3	W-R2330031-062824-ADH-MW3	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330026-110520-KRM-015	11/5/2020										
MW-4	W-R2330026-110520-KRM-015	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330027-041321-KRM-010	4/13/2021										
MW-4	W-R2330027-041321-KRM-010	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330027-042622-ADP-008	4/26/2022										
MW-4	W-R2330027-042622-ADP-008	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330031-050423-ERR-007	5/4/2023										
MW-4	W-R2330031-050423-ERR-007	5/4/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4[A]	W-R2330031-062824-ADH-MW4	6/28/2024										
MW-4	W-R2330031-062824-ADH-MW4	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-3[A]	W-R2330026-110520-KRM-017	11/5/2020	2,700	18,000	290
MW-3	W-R2330026-110520-KRM-017	11/5/2020	<8.0	8,600	230
MW-3[A (DUP)]	W-R2330026-110520-KRM-018	11/5/2020	6,100	24,000	360
MW-3 (DUP)	W-R2330026-110520-KRM-018	11/5/2020	48	13,000	140
MW-3[A]	W-R2330027-041321-KRM-014	4/13/2021	73	7,800	100
MW-3	W-R2330027-041321-KRM-014	4/13/2021	<8.0	4,300	98
MW-3[A]	W-R2330027-042522-KADH-004	4/25/2022	65	2,900	120
MW-3	W-R2330027-042522-KADH-004	4/25/2022	11	1,300	130
MW-3[A]	W-R2330031-042023-ERR-016	4/20/2023	23	2,700	29
MW-3	W-R2330031-042023-ERR-016	4/20/2023	<10.0	2,800	29
MW-3[A]	W-R2330031-062824-ADH-MW3	6/28/2024	297 S	4,340	167
MW-3	W-R2330031-062824-ADH-MW3	6/28/2024	6.64 J	3,800	210
MW-4[A]	W-R2330026-110520-KRM-015	11/5/2020	10	14,000	83
MW-4	W-R2330026-110520-KRM-015	11/5/2020	<8.0	14,000	86
MW-4[A]	W-R2330027-041321-KRM-010	4/13/2021	150	16,000	110
MW-4	W-R2330027-041321-KRM-010	4/13/2021	<8.0	14,000	89
MW-4[A]	W-R2330027-042622-ADP-008	4/26/2022	80	6,600	810
MW-4	W-R2330027-042622-ADP-008	4/26/2022	19	5,600	800
MW-4[A]	W-R2330031-050423-ERR-007	5/4/2023	23	80	4.2 J
MW-4	W-R2330031-050423-ERR-007	5/4/2023	<10	<80	2.4 J
MW-4[A]	W-R2330031-062824-ADH-MW4	6/28/2024	26	7,240	283
MW-4	W-R2330031-062824-ADH-MW4	6/28/2024	5.86	10,600	210

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-5[A]	W-R2330027-042622-ADH-011	4/26/2022										
MW-5	W-R2330027-042622-ADH-011	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330028-102722-ADH-006	10/27/2022										
MW-5	W-R2330028-102722-ADH-006	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-041823-ERR-004	4/18/2023										
MW-5	W-R2330031-041823-ERR-004	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-110723-ADH-006	11/7/2023										
MW-5	W-R2330031-110723-ADH-006	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-052424-KNK-MW5	5/24/2024										
MW-5	W-R2330031-052424-KNK-MW5	5/24/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330026-110520-KRM-013	11/5/2020										
MW-6	W-R2330026-110520-KRM-013	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330027-041321-KRM-006	4/13/2021										
MW-6	W-R2330027-041321-KRM-006	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330027-042622-SSR-007	4/26/2022										
MW-6	W-R2330027-042622-SSR-007	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R233003105-0423-ERR-025	5/4/2023										
MW-6	W-R233003105-0423-ERR-025	5/4/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R233003105-062824-ADH-MW6	6/28/2024										
MW-6	W-R233003105-062824-ADH-MW6	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-5[A]	W-R2330027-042622-ADH-011	4/26/2022										
MW-5	W-R2330027-042622-ADH-011	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330028-102722-ADH-006	10/27/2022										
MW-5	W-R2330028-102722-ADH-006	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-041823-ERR-004	4/18/2023										
MW-5	W-R2330031-041823-ERR-004	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-110723-ADH-006	11/7/2023										
MW-5	W-R2330031-110723-ADH-006	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5[A]	W-R2330031-052424-KNK-MW5	5/24/2024										
MW-5	W-R2330031-052424-KNK-MW5	5/24/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330026-110520-KRM-013	11/5/2020										
MW-6	W-R2330026-110520-KRM-013	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330027-041321-KRM-006	4/13/2021										
MW-6	W-R2330027-041321-KRM-006	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R2330027-042622-SSR-007	4/26/2022										
MW-6	W-R2330027-042622-SSR-007	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R233003105-0423-ERR-025	5/4/2023										
MW-6	W-R233003105-0423-ERR-025	5/4/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6[A]	W-R233003105-062824-ADH-MW6	6/28/2024										
MW-6	W-R233003105-062824-ADH-MW6	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-5[A]	W-R2330027-042622-ADH-011	4/26/2022	630	8,300	100
MW-5	W-R2330027-042622-ADH-011	4/26/2022	76.0	5,700	79
MW-5[A]	W-R2330028-102722-ADH-006	10/27/2022	53.0	6,500	70
MW-5	W-R2330028-102722-ADH-006	10/27/2022	8.5	5,800	68
MW-5[A]	W-R2330031-041823-ERR-004	4/18/2023	52	7,000	70
MW-5	W-R2330031-041823-ERR-004	4/18/2023	<10	6,700	69
MW-5[A]	W-R2330031-110723-ADH-006	11/7/2023	31	6,500	62
MW-5	W-R2330031-110723-ADH-006	11/7/2023	<10	6,700	63
MW-5[A]	W-R2330031-052424-KNK-MW5	5/24/2024	60.1	5,540	61.9
MW-5	W-R2330031-052424-KNK-MW5	5/24/2024	<5.73	6,160	57.9
MW-6[A]	W-R2330026-110520-KRM-013	11/5/2020	1,400	22,000	700
MW-6	W-R2330026-110520-KRM-013	11/5/2020	130	14,000	570
MW-6[A]	W-R2330027-041321-KRM-006	4/13/2021	310	4,300	190
MW-6	W-R2330027-041321-KRM-006	4/13/2021	<8.0	240	25
MW-6[A]	W-R2330027-042622-SSR-007	4/26/2022	74	2,200	190
MW-6	W-R2330027-042622-SSR-007	4/26/2022	<8.0	76	140
MW-6[A]	W-R233003105-0423-ERR-025	5/4/2023	41	210	12
MW-6	W-R233003105-0423-ERR-025	5/4/2023	<10	<80	2.4 J
MW-6[A]	W-R233003105-062824-ADH-MW6	6/28/2024	16.4	7,690	1,660
MW-6	W-R233003105-062824-ADH-MW6	6/28/2024	13.4	6,440	1,610

Table 4
Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-7[A]	W-R2330027-042622-ADH-013	4/26/2022										
MW-7	W-R2330027-042622-ADH-013	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330028-102722-ADH-003	10/27/2022										
MW-7	W-R2330028-102722-ADH-003	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A] (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022										
MW-7 (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-041823-ERR-005	4/18/2023										
MW-7	W-R2330031-041823-ERR-005	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-110723-ADH-008	11/7/2023										
MW-7	W-R2330031-110723-ADH-008	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-052324-KNK-MW7	5/23/2024										
MW-7	W-R2330031-052324-KNK-MW7	5/23/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330025-103019-SCD-021	10/30/2019										
MW-8	W-R2330025-103019-SCD-021	10/30/2019	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330026-110920-KRM-027	11/9/2020										
MW-8	W-R2330026-110920-KRM-027	11/9/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330027-041421-SSR-025	4/14/2021										
MW-8	W-R2330027-041421-SSR-025	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330031-041823-ERR-010	4/18/2023										
MW-8	W-R2330031-041823-ERR-010	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330031-052324-KNK-MW8	5/23/2024										
MW-8	W-R2330031-052324-KNK-MW8	5/23/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-7[A]	W-R2330027-042622-ADH-013	4/26/2022										
MW-7	W-R2330027-042622-ADH-013	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330028-102722-ADH-003	10/27/2022										
MW-7	W-R2330028-102722-ADH-003	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A] (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022										
MW-7 (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-041823-ERR-005	4/18/2023										
MW-7	W-R2330031-041823-ERR-005	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-110723-ADH-008	11/7/2023										
MW-7	W-R2330031-110723-ADH-008	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7[A]	W-R2330031-052324-KNK-MW7	5/23/2024										
MW-7	W-R2330031-052324-KNK-MW7	5/23/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330025-103019-SCD-021	10/30/2019										
MW-8	W-R2330025-103019-SCD-021	10/30/2019	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330026-110920-KRM-027	11/9/2020										
MW-8	W-R2330026-110920-KRM-027	11/9/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330027-041421-SSR-025	4/14/2021										
MW-8	W-R2330027-041421-SSR-025	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330031-041823-ERR-010	4/18/2023										
MW-8	W-R2330031-041823-ERR-010	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8[A]	W-R2330031-052324-KNK-MW8	5/23/2024										
MW-8	W-R2330031-052324-KNK-MW8	5/23/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-7[A]	W-R2330027-042622-ADH-013	4/26/2022	27	2,000	880
MW-7	W-R2330027-042622-ADH-013	4/26/2022	8	1,900	880
MW-7[A]	W-R2330028-102722-ADH-003	10/27/2022	31	7,000	520
MW-7	W-R2330028-102722-ADH-003	10/27/2022	6.7	4,000	490
MW-7[A] (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022	18	7,000	540
MW-7 (DUP)	W-R2330028-11/1/22-ADH-014	11/1/2022	8.9	6,600	540
MW-7[A]	W-R2330031-041823-ERR-005	4/18/2023	17	5,300	380
MW-7	W-R2330031-041823-ERR-005	4/18/2023	<10	5,400	390
MW-7[A]	W-R2330031-110723-ADH-008	11/7/2023	64	3,000	370
MW-7	W-R2330031-110723-ADH-008	11/7/2023	11	210	360
MW-7[A]	W-R2330031-052324-KNK-MW7	5/23/2024	28.6	5,170	528
MW-7	W-R2330031-052324-KNK-MW7	5/23/2024	6.75 J	4,690	498
MW-8[A]	W-R2330025-103019-SCD-021	10/30/2019	11	8,700	330
MW-8	W-R2330025-103019-SCD-021	10/30/2019	<8.0	8,500	330
MW-8[A]	W-R2330026-110920-KRM-027	11/9/2020	95	8,700	300
MW-8	W-R2330026-110920-KRM-027	11/9/2020	<8.0	8,000	290
MW-8[A]	W-R2330027-041421-SSR-025	4/14/2021	130	7,300	250
MW-8	W-R2330027-041421-SSR-025	4/14/2021	<8.0	6,600	240
MW-8[A]	W-R2330031-041823-ERR-010	4/18/2023	10	3,400	180
MW-8	W-R2330031-041823-ERR-010	4/18/2023	<10	3,300	180
MW-8[A]	W-R2330031-052324-KNK-MW8	5/23/2024	18.4	1,890	167
MW-8	W-R2330031-052324-KNK-MW8	5/23/2024	<5.73	1,800	173

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-9[A]	W-R2330027-042622-SSR-012	4/26/2022										
MW-9	W-R2330027-042622-SSR-012	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330028-11122-ADH-013	11/1/2022										
MW-9	W-R2330028-11122-ADH-013	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-041823-ERR-006	4/18/2023										
MW-9	W-R2330031-041823-ERR-006	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-110723-ADH-007	11/7/2023										
MW-9	W-R2330031-110723-ADH-007	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-052424-KNK-MW9	5/24/2024										
MW-9	W-R2330031-052424-KNK-MW9	5/24/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330027-042622-ADP-010	4/26/2022										
MW-10	W-R2330027-042622-ADP-010	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330028-102722-ADH-007	10/27/2022										
MW-10	W-R2330028-102722-ADH-007	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	31	NS
MW-10[A]	W-R2330031-041923-ERR-013	4/19/2023										
MW-10	W-R2330031-041923-ERR-013	4/19/2023	<5.0	<1.0	<1.0	<1.0	7.4 J	3.20	NS	NS	29	<1.0
MW-10[A] (DUP)	W-R2330031-042123-ERR-028	4/21/2023										
MW-10 (DUP)	W-R2330031-042123-ERR-028	4/21/2023	<5.0	<1.0	<1.0	<1.0	<10	2.40	<1.0	<1.0	21.00	<1.0
MW-10[A]	W-R2330031-110823-ERR-009	11/8/2023										
MW-10	W-R2330031-110823-ERR-009	11/8/2023	<25	<1.0	<1.0	<50	32 J	0.48 J	<1.0	<5.0	<1.0	<5.0
MW-10[A] (DUP)	DUP-01	11/8/2023										
MW-10 (DUP)	DUP-01	11/8/2023	<25	<1.0	<1.0	<50	50 J	0.47 J	<1.0	<5.0	<1.0	<5.0
MW-10[A]	W-R2330031-051624-KNK-MW10	5/16/2024										
MW-10	W-R2330031-051624-KNK-MW10	5/16/2024	<2.43	<0.32	<0.35	<0.52	<4.5	2.62	<0.49	<0.56	24.80	<0.68

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-9[A]	W-R2330027-042622-SSR-012	4/26/2022										
MW-9	W-R2330027-042622-SSR-012	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330028-11122-ADH-013	11/1/2022										
MW-9	W-R2330028-11122-ADH-013	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-041823-ERR-006	4/18/2023										
MW-9	W-R2330031-041823-ERR-006	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-110723-ADH-007	11/7/2023										
MW-9	W-R2330031-110723-ADH-007	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9[A]	W-R2330031-052424-KNK-MW9	5/24/2024										
MW-9	W-R2330031-052424-KNK-MW9	5/24/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330027-042622-ADP-010	4/26/2022										
MW-10	W-R2330027-042622-ADP-010	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330028-102722-ADH-007	10/27/2022										
MW-10	W-R2330028-102722-ADH-007	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10[A]	W-R2330031-041923-ERR-013	4/19/2023										
MW-10	W-R2330031-041923-ERR-013	4/19/2023	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
MW-10[A] (DUP)	W-R2330031-042123-ERR-028	4/21/2023										
MW-10 (DUP)	W-R2330031-042123-ERR-028	4/21/2023	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
MW-10[A]	W-R2330031-110823-ERR-009	11/8/2023										
MW-10	W-R2330031-110823-ERR-009	11/8/2023	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10[A] (DUP)	DUP-01	11/8/2023										
MW-10 (DUP)	DUP-01	11/8/2023	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10[A]	W-R2330031-051624-KNK-MW10	5/16/2024										
MW-10	W-R2330031-051624-KNK-MW10	5/16/2024	<0.68	<0.46	<0.63	NS	<0.68	<0.34	<0.35	<0.35	<0.45	<0.81

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-9[A]	W-R2330027-042622-SSR-012	4/26/2022	910	65,000	590
MW-9	W-R2330027-042622-SSR-012	4/26/2022	<10	26,000	240
MW-9[A]	W-R2330028-11122-ADH-013	11/1/2022	11	24,000	230
MW-9	W-R2330028-11122-ADH-013	11/1/2022	7.30	24,000	230
MW-9[A]	W-R2330031-041823-ERR-006	4/18/2023	6.8 J	17,000	260
MW-9	W-R2330031-041823-ERR-006	4/18/2023	8.7 J	18,000	290
MW-9[A]	W-R2330031-110723-ADH-007	11/7/2023	17	29,000	240
MW-9	W-R2330031-110723-ADH-007	11/7/2023	6.2 J	25,000	210
MW-9[A]	W-R2330031-052424-KNK-MW9	5/24/2024	26.4	29,000	243
MW-9	W-R2330031-052424-KNK-MW9	5/24/2024	5.98 BJ	24,300	233
MW-10[A]	W-R2330027-042622-ADP-010	4/26/2022	1,200	31,000	620
MW-10	W-R2330027-042622-ADP-010	4/26/2022	13	18,000	530
MW-10[A]	W-R2330028-102722-ADH-007	10/27/2022	NS	NS	NS
MW-10	W-R2330028-102722-ADH-007	10/27/2022	NS	NS	NS
MW-10[A]	W-R2330031-041923-ERR-013	4/19/2023	88	19,000	500
MW-10	W-R2330031-041923-ERR-013	4/19/2023	33	20,000	510
MW-10[A] (DUP)	W-R2330031-042123-ERR-028	4/21/2023	450	19,000	550
MW-10 (DUP)	W-R2330031-042123-ERR-028	4/21/2023	8.2	21,000	670
MW-10[A]	W-R2330031-110823-ERR-009	11/8/2023	NS	NS	NS
MW-10	W-R2330031-110823-ERR-009	11/8/2023	NS	NS	NS
MW-10[A] (DUP)	DUP-01	11/8/2023	NS	NS	NS
MW-10 (DUP)	DUP-01	11/8/2023	NS	NS	NS
MW-10[A]	W-R2330031-051624-KNK-MW10	5/16/2024	19.9	18,200	598
MW-10	W-R2330031-051624-KNK-MW10	5/16/2024	6.0 J	19,000	599

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-11[A]	W-R2330026-110620-KRM-020	11/6/2020										
MW-11	W-R2330026-110620-KRM-020	11/6/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330027-041521-KRM-032	4/15/2021										
MW-11	W-R2330027-041521-KRM-032	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330027-042622-ADP-017	4/26/2022										
MW-11	W-R2330027-042622-ADP-017	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330031-042023-ERR-020	4/20/2023										
MW-11	W-R2330031-042023-ERR-020	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330031-070124-ADH-MW11	7/1/2024										
MW-11	W-R2330031-070124-ADH-MW11	7/1/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330026-110520-KRM-014	11/5/2020										
MW-12	W-R2330026-110520-KRM-014	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330027-041321-KRM-008	4/13/2021										
MW-12	W-R2330027-041321-KRM-008	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330027-042622-SSR-009	4/26/2022										
MW-12	W-R2330027-042622-SSR-009	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330031-042123-ERR-026	4/21/2023										
MW-12	W-R2330031-042123-ERR-026	4/21/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330031-062824-ADH-MW12	6/28/2024										
MW-12	W-R2330031-062824-ADH-MW12	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-11[A]	W-R2330026-110620-KRM-020	11/6/2020										
MW-11	W-R2330026-110620-KRM-020	11/6/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330027-041521-KRM-032	4/15/2021										
MW-11	W-R2330027-041521-KRM-032	4/15/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330027-042622-ADP-017	4/26/2022										
MW-11	W-R2330027-042622-ADP-017	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330031-042023-ERR-020	4/20/2023										
MW-11	W-R2330031-042023-ERR-020	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11[A]	W-R2330031-070124-ADH-MW11	7/1/2024										
MW-11	W-R2330031-070124-ADH-MW11	7/1/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330026-110520-KRM-014	11/5/2020										
MW-12	W-R2330026-110520-KRM-014	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330027-041321-KRM-008	4/13/2021										
MW-12	W-R2330027-041321-KRM-008	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330027-042622-SSR-009	4/26/2022										
MW-12	W-R2330027-042622-SSR-009	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330031-042123-ERR-026	4/21/2023										
MW-12	W-R2330031-042123-ERR-026	4/21/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12[A]	W-R2330031-062824-ADH-MW12	6/28/2024										
MW-12	W-R2330031-062824-ADH-MW12	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-11[A]	W-R2330026-110620-KRM-020	11/6/2020	12	2,000	200
MW-11	W-R2330026-110620-KRM-020	11/6/2020	<8.0	1,500	180
MW-11[A]	W-R2330027-041521-KRM-032	4/15/2021	14	1,400	99
MW-11	W-R2330027-041521-KRM-032	4/15/2021	<8.0	1,300	91
MW-11[A]	W-R2330027-042622-ADP-017	4/26/2022	42	4,000	340
MW-11	W-R2330027-042622-ADP-017	4/26/2022	<10	75	48
MW-11[A]	W-R2330031-042023-ERR-020	4/20/2023	100	9,100	860
MW-11	W-R2330031-042023-ERR-020	4/20/2023	<10	<80	24
MW-11[A]	W-R2330031-070124-ADH-MW11	7/1/2024	13	2,630	157
MW-11	W-R2330031-070124-ADH-MW11	7/1/2024	<5.71	2,400	141
MW-12[A]	W-R2330026-110520-KRM-014	11/5/2020	400	13,000	230
MW-12	W-R2330026-110520-KRM-014	11/5/2020	<8.0	13,000	290
MW-12[A]	W-R2330027-041321-KRM-008	4/13/2021	83	10,000	160
MW-12	W-R2330027-041321-KRM-008	4/13/2021	<8.0	9,600	170
MW-12[A]	W-R2330027-042622-SSR-009	4/26/2022	220	1,100	790
MW-12	W-R2330027-042622-SSR-009	4/26/2022	11	4,000	530
MW-12[A]	W-R2330031-042123-ERR-026	4/21/2023	39	5,800	230
MW-12	W-R2330031-042123-ERR-026	4/21/2023	6.2 J	4,000	230
MW-12[A]	W-R2330031-062824-ADH-MW12	6/28/2024	67.3	12,900	298
MW-12	W-R2330031-062824-ADH-MW12	6/28/2024	<5.73	8,520	290

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-17[A]	W-R2330026-110920-KRM-028	11/9/2020										
MW-17	W-R2330026-110920-KRM-028	11/9/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330027-041421-SSR-023	4/14/2021										
MW-17	W-R2330027-041421-SSR-023	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330027-0426221-SSR-015	4/26/2022										
MW-17	W-R2330027-0426221-SSR-015	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330031-042023-ERR-015	4/20/2023										
MW-17	W-R2330031-042023-ERR-015	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330031-070124-ADH-MW17	7/1/2024										
MW-17	W-R2330031-070124-ADH-MW17	7/1/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330027-042622-ADP-014	4/26/2022										
MW-18	W-R2330027-042622-ADP-014	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330028-102722-ADH-004	10/27/2022										
MW-18	W-R2330028-102722-ADH-004	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R23300310-41723-ERR-001	4/17/2023										
MW-18	W-R23300310-41723-ERR-001	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330031-110623-ERR-001	11/6/2023										
MW-18	W-R2330031-110623-ERR-001	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	DUP-02	11/6/2023										
MW-18	DUP-02	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330012-051424-KNK-MW18	5/14/2024										
MW-18	W-R2330012-051424-KNK-MW18	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-17[A]	W-R2330026-110920-KRM-028	11/9/2020										
MW-17	W-R2330026-110920-KRM-028	11/9/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330027-041421-SSR-023	4/14/2021										
MW-17	W-R2330027-041421-SSR-023	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330027-0426221-SSR-015	4/26/2022										
MW-17	W-R2330027-0426221-SSR-015	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330031-042023-ERR-015	4/20/2023										
MW-17	W-R2330031-042023-ERR-015	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17[A]	W-R2330031-070124-ADH-MW17	7/1/2024										
MW-17	W-R2330031-070124-ADH-MW17	7/1/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330027-042622-ADP-014	4/26/2022										
MW-18	W-R2330027-042622-ADP-014	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330028-102722-ADH-004	10/27/2022										
MW-18	W-R2330028-102722-ADH-004	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R23300310-41723-ERR-001	4/17/2023										
MW-18	W-R23300310-41723-ERR-001	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330031-110623-ERR-001	11/6/2023										
MW-18	W-R2330031-110623-ERR-001	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	DUP-02	11/6/2023										
MW-18	DUP-02	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18[A]	W-R2330012-051424-KNK-MW18	5/14/2024										
MW-18	W-R2330012-051424-KNK-MW18	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-17[A]	W-R2330026-110920-KRM-028	11/9/2020	42	3,100	320
MW-17	W-R2330026-110920-KRM-028	11/9/2020	<8.0	2,600	310
MW-17[A]	W-R2330027-041421-SSR-023	4/14/2021	85	2,500	370
MW-17	W-R2330027-041421-SSR-023	4/14/2021	<8.0	2,100	340
MW-17[A]	W-R2330027-0426221-SSR-015	4/26/2022	1,900	8,600	470
MW-17	W-R2330027-0426221-SSR-015	4/26/2022	<10.0	2,800	370
MW-17[A]	W-R2330031-042023-ERR-015	4/20/2023	130	11,000	110
MW-17	W-R2330031-042023-ERR-015	4/20/2023	<10	2,100	77
MW-17[A]	W-R2330031-070124-ADH-MW17	7/1/2024	29.5	3,060	384
MW-17	W-R2330031-070124-ADH-MW17	7/1/2024	5.97 J	2,940	428
MW-18[A]	W-R2330027-042622-ADP-014	4/26/2022	1,500	9,200	550
MW-18	W-R2330027-042622-ADP-014	4/26/2022	22	370	220
MW-18[A]	W-R2330028-102722-ADH-004	10/27/2022	410	6,300	290
MW-18	W-R2330028-102722-ADH-004	10/27/2022	13	4,100	290
MW-18[A]	W-R23300310-41723-ERR-001	4/17/2023	220	1,200	290
MW-18	W-R23300310-41723-ERR-001	4/17/2023	11	580	310
MW-18[A]	W-R2330031-110623-ERR-001	11/6/2023	69	1,100	240
MW-18	W-R2330031-110623-ERR-001	11/6/2023	<10	130	240
MW-18[A]	DUP-02	11/6/2023	2,800	7,500	400
MW-18	DUP-02	11/6/2023	36	2,600	250
MW-18[A]	W-R2330012-051424-KNK-MW18	5/14/2024	64.8	1,630	424
MW-18	W-R2330012-051424-KNK-MW18	5/14/2024	<5.73	1,470	397

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-19[A]	W-R2330027-042622-SSR-030	4/26/2022										
MW-19	W-R2330027-042622-SSR-030	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R233028-102722-ADH-005	10/27/2022										
MW-19	W-R233028-102722-ADH-005	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R233031-041723-ERR-002	4/17/2023										
MW-19	W-R233031-041723-ERR-002	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R2330031-110623-ERR-002	11/6/2023										
MW-19	W-R2330031-110623-ERR-002	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R2330031-051424-KNK-MW19	5/14/2024										
MW-19	W-R2330031-051424-KNK-MW19	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330027-042622-SSR-029	4/26/2022										
MW-20	W-R2330027-042622-SSR-029	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330028-10/26/22-ADH-001	10/26/2022										
MW-20	W-R2330028-10/26/22-ADH-001	10/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-041723-ERR-003	4/17/2023										
MW-20	W-R2330031-041723-ERR-003	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-110623-ERR-003	11/6/2023										
MW-20	W-R2330031-110623-ERR-003	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-051624-KNK-MW20	5/16/2024										
MW-20	W-R2330031-051624-KNK-MW20	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-19[A]	W-R2330027-042622-SSR-030	4/26/2022										
MW-19	W-R2330027-042622-SSR-030	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R233028-102722-ADH-005	10/27/2022										
MW-19	W-R233028-102722-ADH-005	10/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R233031-041723-ERR-002	4/17/2023										
MW-19	W-R233031-041723-ERR-002	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R2330031-110623-ERR-002	11/6/2023										
MW-19	W-R2330031-110623-ERR-002	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19[A]	W-R2330031-051424-KNK-MW19	5/14/2024										
MW-19	W-R2330031-051424-KNK-MW19	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330027-042622-SSR-029	4/26/2022										
MW-20	W-R2330027-042622-SSR-029	4/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330028-10/26/22-ADH-001	10/26/2022										
MW-20	W-R2330028-10/26/22-ADH-001	10/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-041723-ERR-003	4/17/2023										
MW-20	W-R2330031-041723-ERR-003	4/17/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-110623-ERR-003	11/6/2023										
MW-20	W-R2330031-110623-ERR-003	11/6/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20[A]	W-R2330031-051624-KNK-MW20	5/16/2024										
MW-20	W-R2330031-051624-KNK-MW20	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-19[A]	W-R2330027-042622-SSR-030	4/26/2022	1,900	8,900	620
MW-19	W-R2330027-042622-SSR-030	4/26/2022	14	4,700	580
MW-19[A]	W-R233028-102722-ADH-005	10/27/2022	270	3,800	450
MW-19	W-R233028-102722-ADH-005	10/27/2022	45	3,200	460
MW-19[A]	W-R233031-041723-ERR-002	4/17/2023	490	2,200	460
MW-19	W-R233031-041723-ERR-002	4/17/2023	46	1,500	470
MW-19[A]	W-R2330031-110623-ERR-002	11/6/2023	180	2,900	440
MW-19	W-R2330031-110623-ERR-002	11/6/2023	<10	2,600	400
MW-19[A]	W-R2330031-051424-KNK-MW19	5/14/2024	161	3,400	489
MW-19	W-R2330031-051424-KNK-MW19	5/14/2024	8.99 J	2,680	485
MW-20[A]	W-R2330027-042622-SSR-029	4/26/2022	2,600	12,000	410
MW-20	W-R2330027-042622-SSR-029	4/26/2022	150	4,200	180
MW-20[A]	W-R2330028-10/26/22-ADH-001	10/26/2022	8,700	35,000	1100
MW-20	W-R2330028-10/26/22-ADH-001	10/26/2022	43	91	150
MW-20[A]	W-R2330031-041723-ERR-003	4/17/2023	270	5,600	200
MW-20	W-R2330031-041723-ERR-003	4/17/2023	11	5,000	180
MW-20[A]	W-R2330031-110623-ERR-003	11/6/2023	220	4,300	180
MW-20	W-R2330031-110623-ERR-003	11/6/2023	11	3,600	160
MW-20[A]	W-R2330031-051624-KNK-MW20	5/16/2024	111	4,850	162
MW-20	W-R2330031-051624-KNK-MW20	5/16/2024	10.2	4,010	156

Table 4
Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-21[A] (DUP)	DUP 1	4/27/2022										
MW-21 (DUP)	DUP 1	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330027-042722-SSR-024	4/27/2022										
MW-21	W-R2330027-042722-SSR-024	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330028-102622-ADH-002	10/26/2022										
MW-21	W-R2330028-102622-ADH-002	10/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-041923-ERR-011	4/19/2023										
MW-21	W-R2330031-041923-ERR-011	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-110823-ERR-010	11/8/2023										
MW-21	W-R2330031-110823-ERR-010	11/8/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-051624-KNK-MW21	5/16/2024										
MW-21	W-R2330031-051624-KNK-MW21	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330026-110420-SSR-008	11/4/2020										
MW-22	W-R2330026-110420-SSR-008	11/4/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330027-041421-KRM-026	4/14/2021										
MW-22	W-R2330027-041421-KRM-026	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330027-042722-SSR-023	4/27/2022										
MW-22	W-R2330027-042722-SSR-023	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330031-041923-ERR-012	4/19/2023										
MW-22	W-R2330031-041923-ERR-012	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330031-051624-KNK-MW22	5/16/2024										
MW-22	W-R2330031-051624-KNK-MW22	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-21[A] (DUP)	DUP 1	4/27/2022										
MW-21 (DUP)	DUP 1	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330027-042722-SSR-024	4/27/2022										
MW-21	W-R2330027-042722-SSR-024	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330028-102622-ADH-002	10/26/2022										
MW-21	W-R2330028-102622-ADH-002	10/26/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-041923-ERR-011	4/19/2023										
MW-21	W-R2330031-041923-ERR-011	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-110823-ERR-010	11/8/2023										
MW-21	W-R2330031-110823-ERR-010	11/8/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21[A]	W-R2330031-051624-KNK-MW21	5/16/2024										
MW-21	W-R2330031-051624-KNK-MW21	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330026-110420-SSR-008	11/4/2020										
MW-22	W-R2330026-110420-SSR-008	11/4/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330027-041421-KRM-026	4/14/2021										
MW-22	W-R2330027-041421-KRM-026	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330027-042722-SSR-023	4/27/2022										
MW-22	W-R2330027-042722-SSR-023	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330031-041923-ERR-012	4/19/2023										
MW-22	W-R2330031-041923-ERR-012	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22[A]	W-R2330031-051624-KNK-MW22	5/16/2024										
MW-22	W-R2330031-051624-KNK-MW22	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-21[A] (DUP)	DUP 1	4/27/2022	16,000	19,000	1,200
MW-21 (DUP)	DUP 1	4/27/2022	130	83	60
MW-21[A]	W-R2330027-042722-SSR-024	4/27/2022	18,000	21,000	1,000
MW-21	W-R2330027-042722-SSR-024	4/27/2022	46	82	53
MW-21[A]	W-R2330028-102622-ADH-002	10/26/2022	850	4,900	610
MW-21	W-R2330028-102622-ADH-002	10/26/2022	32	250	60
MW-21[A]	W-R2330031-041923-ERR-011	4/19/2023	470	3,200	520
MW-21	W-R2330031-041923-ERR-011	4/19/2023	30	240	110
MW-21[A]	W-R2330031-110823-ERR-010	11/8/2023	55	440	190
MW-21	W-R2330031-110823-ERR-010	11/8/2023	<10	200	150
MW-21[A]	W-R2330031-051624-KNK-MW21	5/16/2024	50.8	436	256
MW-21	W-R2330031-051624-KNK-MW21	5/16/2024	<5.73	274	215
MW-22[A]	W-R2330026-110420-SSR-008	11/4/2020	330	11,000	98
MW-22	W-R2330026-110420-SSR-008	11/4/2020	170	10,000	87
MW-22[A]	W-R2330027-041421-KRM-026	4/14/2021	54	8,500	110
MW-22	W-R2330027-041421-KRM-026	4/14/2021	<8.0	7,200	120
MW-22[A]	W-R2330027-042722-SSR-023	4/27/2022	730	11,000	180
MW-22	W-R2330027-042722-SSR-023	4/27/2022	<10	6,800	150
MW-22[A]	W-R2330031-041923-ERR-012	4/19/2023	29	3,500	55
MW-22	W-R2330031-041923-ERR-012	4/19/2023	<10	2,900	52
MW-22[A]	W-R2330031-051624-KNK-MW22	5/16/2024	33	6,850	212
MW-22	W-R2330031-051624-KNK-MW22	5/16/2024	<5.73	6,350	211

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Summary of Groundwater
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GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-23[A]	W-R2330027-042722-SSR-021	4/27/2022										
MW-23	W-R2330027-042722-SSR-021	4/27/2022	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	31	<1.0
MW-23[A]	W-R2330028-1028/22-ADH-010	10/28/2022										
MW-23	W-R2330028-1028/22-ADH-010	10/28/2022	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	61	<1.0
MW-23[A]	W-R2330031-042023-ERR-018	4/20/2023										
MW-23	W-R2330031-042023-ERR-018	4/20/2023	NS	NS	NS	NS	NS	1.20	NS	NS	39	NS
MW-23[A]	W-R230031-110923-ERR-012	11/9/2023										
MW-23	W-R230031-110923-ERR-012	11/9/2023	<25	<1.0	<1.0	<50	17 J	0.93 J	<1.0	<5.0	2.10	<5.0
MW-23[A]	W-R230031-051624-KNK-MW23	5/16/2024										
MW-23	W-R230031-051624-KNK-MW23	5/16/2024	<2.43	<0.320	<0.350	<0.52	<4.53	1.28	<0.49	<0.56	41.50	<0.68
MW-25[A]	W-R2330027-041421-KRM-020	4/14/2021										
MW-25	W-R2330027-041421-KRM-020	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330027-042722-SRS-020	4/27/2022										
MW-25	W-R2330027-042722-SRS-020	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-042023-ERR-017	4/20/2023										
MW-25	W-R2330031-042023-ERR-017	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-121823-ERR-014	12/18/2023										
MW-25	W-R2330031-121823-ERR-014	12/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-051624-KNK-MW25	5/16/2024										
MW-25	W-R2330031-051624-KNK-MW25	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-23[A]	W-R2330027-042722-SSR-021	4/27/2022										
MW-23	W-R2330027-042722-SSR-021	4/27/2022	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-23[A]	W-R2330028-1028/22-ADH-010	10/28/2022										
MW-23	W-R2330028-1028/22-ADH-010	10/28/2022	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-23[A]	W-R2330031-042023-ERR-018	4/20/2023										
MW-23	W-R2330031-042023-ERR-018	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23[A]	W-R230031-110923-ERR-012	11/9/2023										
MW-23	W-R230031-110923-ERR-012	11/9/2023	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23[A]	W-R230031-051624-KNK-MW23	5/16/2024										
MW-23	W-R230031-051624-KNK-MW23	5/16/2024	NS	<0.46	<0.63	NS	<0.68	<0.34	<0.35	<0.35	<0.45	<0.81
MW-25[A]	W-R2330027-041421-KRM-020	4/14/2021										
MW-25	W-R2330027-041421-KRM-020	4/14/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330027-042722-SRS-020	4/27/2022										
MW-25	W-R2330027-042722-SRS-020	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-042023-ERR-017	4/20/2023										
MW-25	W-R2330031-042023-ERR-017	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-121823-ERR-014	12/18/2023										
MW-25	W-R2330031-121823-ERR-014	12/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25[A]	W-R2330031-051624-KNK-MW25	5/16/2024										
MW-25	W-R2330031-051624-KNK-MW25	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-23[A]	W-R2330027-042722-SSR-021	4/27/2022	78	9,700	74
MW-23	W-R2330027-042722-SSR-021	4/27/2022	<10	8,000	74
MW-23[A]	W-R2330028-1028/22-ADH-010	10/28/2022	NS	NS	NS
MW-23	W-R2330028-1028/22-ADH-010	10/28/2022	NS	NS	NS
MW-23[A]	W-R2330031-042023-ERR-018	4/20/2023	130	13,000	95
MW-23	W-R2330031-042023-ERR-018	4/20/2023	13	13,000	88
MW-23[A]	W-R230031-110923-ERR-012	11/9/2023	NS	NS	NS
MW-23	W-R230031-110923-ERR-012	11/9/2023	NS	NS	NS
MW-23[A]	W-R230031-051624-KNK-MW23	5/16/2024	112	11,800	107
MW-23	W-R230031-051624-KNK-MW23	5/16/2024	10.5	10,900	85.2
MW-25[A]	W-R2330027-041421-KRM-020	4/14/2021	120	410	580
MW-25	W-R2330027-041421-KRM-020	4/14/2021	<8.0	<50	380
MW-25[A]	W-R2330027-042722-SRS-020	4/27/2022	61	1,200	570
MW-25	W-R2330027-042722-SRS-020	4/27/2022	<10	130	280
MW-25[A]	W-R2330031-042023-ERR-017	4/20/2023	3,200	6,900	4,200
MW-25	W-R2330031-042023-ERR-017	4/20/2023	11	<80	200
MW-25[A]	W-R2330031-121823-ERR-014	12/18/2023	420	890	440
MW-25	W-R2330031-121823-ERR-014	12/18/2023	<10	470	390
MW-25[A]	W-R2330031-051624-KNK-MW25	5/16/2024	720	1,780	617
MW-25	W-R2330031-051624-KNK-MW25	5/16/2024	8.14 J	387	597

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-26[A]	W-R2330027-042722-SSR-022	4/27/2022										
MW-26	W-R2330027-042722-SSR-022	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R2330028-102822-ADH-009	10/28/2022										
MW-26	W-R2330028-102822-ADH-009	10/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R2330031-042023-ERR-019	4/20/2023										
MW-26	W-R2330031-042023-ERR-019	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R230031-110823-ERR-011	11/8/2023										
MW-26	W-R230031-110823-ERR-011	11/8/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R230031-051624-KNK-MW26	5/16/2024										
MW-26	W-R230031-051624-KNK-MW26	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330026-110520-KRM-016	11/5/2020										
MW-27	W-R2330026-110520-KRM-016	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330027-041321-KRM-0012	4/13/2021										
MW-27	W-R2330027-041321-KRM-0012	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330027-042522-ADP-005	4/25/2022										
MW-27	W-R2330027-042522-ADP-005	4/25/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330031-042023-ERR-023	5/5/2023										
MW-27	W-R2330031-042023-ERR-023	5/5/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330031-062824-ADH-MW27	6/28/2024										
MW-27	W-R2330031-062824-ADH-MW27	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-28[A]	W-R2330031-062724-ADH-MW28	6/27/2024										
MW-28	W-R2330031-062724-ADH- MW28	6/27/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-26[A]	W-R2330027-042722-SSR-022	4/27/2022										
MW-26	W-R2330027-042722-SSR-022	4/27/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R2330028-102822-ADH-009	10/28/2022										
MW-26	W-R2330028-102822-ADH-009	10/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R2330031-042023-ERR-019	4/20/2023										
MW-26	W-R2330031-042023-ERR-019	4/20/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R230031-110823-ERR-011	11/8/2023										
MW-26	W-R230031-110823-ERR-011	11/8/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26[A]	W-R230031-051624-KNK-MW26	5/16/2024										
MW-26	W-R230031-051624-KNK-MW26	5/16/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330026-110520-KRM-016	11/5/2020										
MW-27	W-R2330026-110520-KRM-016	11/5/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330027-041321-KRM-0012	4/13/2021										
MW-27	W-R2330027-041321-KRM-0012	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330027-042522-ADP-005	4/25/2022										
MW-27	W-R2330027-042522-ADP-005	4/25/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330031-042023-ERR-023	5/5/2023										
MW-27	W-R2330031-042023-ERR-023	5/5/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27[A]	W-R2330031-062824-ADH-MW27	6/28/2024										
MW-27	W-R2330031-062824-ADH-MW27	6/28/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-28[A]	W-R2330031-062724-ADH-MW28	6/27/2024										
MW-28	W-R2330031-062724-ADH- MW28	6/27/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-26[A]	W-R2330027-042722-SSR-022	4/27/2022	300	370	9
MW-26	W-R2330027-042722-SSR-022	4/27/2022	9	<80	<5
MW-26[A]	W-R2330028-102822-ADH-009	10/28/2022	120	340	NS
MW-26	W-R2330028-102822-ADH-009	10/28/2022	16	<1.0	NS
MW-26[A]	W-R2330031-042023-ERR-019	4/20/2023	15	61 J	<5.0
MW-26	W-R2330031-042023-ERR-019	4/20/2023	<10	<80	<5.0
MW-26[A]	W-R230031-110823-ERR-011	11/8/2023	65	410	140
MW-26	W-R230031-110823-ERR-011	11/8/2023	<10	<80	45
MW-26[A]	W-R230031-051624-KNK-MW26	5/16/2024	46.90	172	6.82
MW-26	W-R230031-051624-KNK-MW26	5/16/2024	<5.73	<47	<1.67
MW-27[A]	W-R2330026-110520-KRM-016	11/5/2020	630	6,300	100
MW-27	W-R2330026-110520-KRM-016	11/5/2020	<8.0	4,100	96
MW-27[A]	W-R2330027-041321-KRM-0012	4/13/2021	28	2,600	110
MW-27	W-R2330027-041321-KRM-0012	4/13/2021	<8	2,400	110
MW-27[A]	W-R2330027-042522-ADP-005	4/25/2022	730	11,000	180
MW-27	W-R2330027-042522-ADP-005	4/25/2022	<10	6,800	150
MW-27[A]	W-R2330031-042023-ERR-023	5/5/2023	160	7,100	93
MW-27	W-R2330031-042023-ERR-023	5/5/2023	<10	1,900	83
MW-27[A]	W-R2330031-062824-ADH-MW27	6/28/2024	5.97 J	3,100	79.1
MW-27	W-R2330031-062824-ADH-MW27	6/28/2024	<5.73	2,840	90.2
MW-28[A]	W-R2330031-062724-ADH-MW28	6/27/2024	8.89 J	11,000	469
MW-28	W-R2330031-062724-ADH- MW28	6/27/2024	5.77 J	19,900	450

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-29[A]	W-R2330027-042822-SSR-027	4/28/2022										
MW-29	W-R2330027-042822-SSR-027	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330028-11/1/22-ADH-011	11/1/2022										
MW-29	W-R2330028-11/1/22-ADH-011	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-041823-ERR-008	4/18/2023										
MW-29	W-R2330031-041823-ERR-008	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-110723-ERR-004	11/7/2023										
MW-29	W-R2330031-110723-ERR-004	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-051424-KNK-MW29	5/14/2024										
MW-29	W-R2330031-051424-KNK-MW29	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330027-042822-SSR-028	4/28/2022										
MW-30	W-R2330027-042822-SSR-028	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330028-11122-ADH-012	11/1/2022										
MW-30	W-R2330028-11122-ADH-012	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-041823-ERR-009	4/18/2023										
MW-30	W-R2330031-041823-ERR-009	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-110723-ERR-005	11/7/2023										
MW-30	W-R2330031-110723-ERR-005	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-0514243-KNK-MW30	5/14/2024										
MW-30	W-R2330031-0514243-KNK-MW30	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-29[A]	W-R2330027-042822-SSR-027	4/28/2022										
MW-29	W-R2330027-042822-SSR-027	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330028-11/1/22-ADH-011	11/1/2022										
MW-29	W-R2330028-11/1/22-ADH-011	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-041823-ERR-008	4/18/2023										
MW-29	W-R2330031-041823-ERR-008	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-110723-ERR-004	11/7/2023										
MW-29	W-R2330031-110723-ERR-004	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29[A]	W-R2330031-051424-KNK-MW29	5/14/2024										
MW-29	W-R2330031-051424-KNK-MW29	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330027-042822-SSR-028	4/28/2022										
MW-30	W-R2330027-042822-SSR-028	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330028-11122-ADH-012	11/1/2022										
MW-30	W-R2330028-11122-ADH-012	11/1/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-041823-ERR-009	4/18/2023										
MW-30	W-R2330031-041823-ERR-009	4/18/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-110723-ERR-005	11/7/2023										
MW-30	W-R2330031-110723-ERR-005	11/7/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30[A]	W-R2330031-0514243-KNK-MW30	5/14/2024										
MW-30	W-R2330031-0514243-KNK-MW30	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-29[A]	W-R2330027-042822-SSR-027	4/28/2022	1,700	34,000	180
MW-29	W-R2330027-042822-SSR-027	4/28/2022	10	1,200	57
MW-29[A]	W-R2330028-11/1/22-ADH-011	11/1/2022	18	3,000	170
MW-29	W-R2330028-11/1/22-ADH-011	11/1/2022	5.8	2,600	190
MW-29[A]	W-R2330031-041823-ERR-008	4/18/2023	11	4,500	140
MW-29	W-R2330031-041823-ERR-008	4/18/2023	<10	4,300	140
MW-29[A]	W-R2330031-110723-ERR-004	11/7/2023	<10	3,100	85
MW-29	W-R2330031-110723-ERR-004	11/7/2023	<10	2,600	89
MW-29[A]	W-R2330031-051424-KNK-MW29	5/14/2024	5.93 J	1,660	118
MW-29	W-R2330031-051424-KNK-MW29	5/14/2024	<5.73	1,400	117
MW-30[A]	W-R2330027-042822-SSR-028	4/28/2022	1,400	3,600	250
MW-30	W-R2330027-042822-SSR-028	4/28/2022	8.8	67	29
MW-30[A]	W-R2330028-11122-ADH-012	11/1/2022	13	210	41
MW-30	W-R2330028-11122-ADH-012	11/1/2022	20	230	50
MW-30[A]	W-R2330031-041823-ERR-009	4/18/2023	360	670	100
MW-30	W-R2330031-041823-ERR-009	4/18/2023	17	300	65
MW-30[A]	W-R2330031-110723-ERR-005	11/7/2023	55	630	26
MW-30	W-R2330031-110723-ERR-005	11/7/2023	<10	70 J	17
MW-30[A]	W-R2330031-0514243-KNK-MW30	5/14/2024	63.9	474	152
MW-30	W-R2330031-0514243-KNK-MW30	5/14/2024	<5.73	<47	42.1

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)									
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			9.6E+06	NA	NA	1.1E+06	1.1E+07	100	NA	NA	1.3E+03	7.9E+04
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-34[A]	W-R2330026-111020-SSR-036	11/10/2020										
MW-34	W-R2330026-111020-SSR-036	11/10/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330027-041221-SSR-015	4/13/2021										
MW-34	W-R2330027-041221-SSR-015	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A] (DUP)	W-R2330027-041221-SSR-017	4/13/2021										
MW-34 (DUP)	W-R2330027-041221-SSR-017	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330027-042822-SSR-031	4/28/2022										
MW-34	W-R2330027-042822-SSR-031	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330031-041923-ERR-014	4/19/2023										
MW-34	W-R2330031-041923-ERR-014	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R230031-051424-KNK-MW34	5/14/2024										
MW-34	W-R230031-051424-KNK-MW34	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of NREPA.

G = Calculated value based on a hardness of 150 mg/L.

H = Analyzed outside of holding time.

J = Analyte detected below quantitation limit.

NS = Not Sampled or Not Analyzed.

Exceeds Generic Drinking Water Cleanup Criteria (II)

Exceeds Generic Drinking Water Cleanup Criteria (II) and the Generic Health-Based Drinking Water Value (E)

Exceeds Generic Ground Water Surface Water Interface Criteria (III)

Exceeds Two or More DW (II), GSI (III) and/or Generic Health-Based Drinking Water Value (E)

Exceeds GSI Final Acute Value (FAV), also exceeds others

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			VOCs									
			Chloromethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			260	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			NA	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			8.6E+03	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)				520	NA	NA	NA	NA	NA		NA	NA
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NA	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			6.34E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			3.6E+04	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE										
MW-34[A]	W-R2330026-111020-SSR-036	11/10/2020										
MW-34	W-R2330026-111020-SSR-036	11/10/2020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330027-041221-SSR-015	4/13/2021										
MW-34	W-R2330027-041221-SSR-015	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A] (DUP)	W-R2330027-041221-SSR-017	4/13/2021										
MW-34 (DUP)	W-R2330027-041221-SSR-017	4/13/2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330027-042822-SSR-031	4/28/2022										
MW-34	W-R2330027-042822-SSR-031	4/28/2022	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R2330031-041923-ERR-014	4/19/2023										
MW-34	W-R2330031-041923-ERR-014	4/19/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34[A]	W-R230031-051424-KNK-MW34	5/14/2024										
MW-34	W-R230031-051424-KNK-MW34	5/14/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of NREPA.

G = Calculated value based on a hardness of 150 mg/L.

H = Analyzed outside of holding time.

J = Analyte detected below quantitation limit.

NS = Not Sampled or Not Analyzed.

Exceeds Generic Drinking Water Cleanup Criteria (II)

Exceeds Generic Drinking Water Cleanup Criteria (II) and the Generic Health-Based Drinking Water Value (E)

Exceeds Generic Ground Water Surface Water Interface Criteria (III)

Exceeds Two or More DW (II), GSI (III) and/or Generic Health-Based Drinking Water Value (E)

Exceeds GSI Final Acute Value (FAV), also exceeds others

Table 4
Summary of Groundwater
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals		
			Aluminum	Iron (B)	Manganese (B)
Residential Drinking Water Criteria (II)			50 (E)(V)	300 (E)	50 (E)
Residential Health-Based Drinking Water Value (E)			300	2,000	860
Ground Water Surface Water Interface Criteria (GSI) (III)			NA	NA	2,800 (G)
GSI Final Acute Value (FAV)			NA	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV
Draft Non-Residential Groundwater Screening Levels ($GW_{IV}SL_{(c,d)}$)			NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion ($GW_{VI\text{-}res}$) (a)			NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID
MONITORING WELL ID	SAMPLE ID	SAMPLE DATE			
MW-34[A]	W-R2330026-111020-SSR-036	11/10/2020	100	2,700	420
MW-34	W-R2330026-111020-SSR-036	11/10/2020	<8.0	2,500	420
MW-34[A]	W-R2330027-041221-SSR-015	4/13/2021	110	2,000	190
MW-34	W-R2330027-041221-SSR-015	4/13/2021	<8.0	1,400	200
MW-34[A] (DUP)	W-R2330027-041221-SSR-017	4/13/2021	140	2,000	200
MW-34 (DUP)	W-R2330027-041221-SSR-017	4/13/2021	10	1,400	180
MW-34[A]	W-R2330027-042822-SSR-031	4/28/2022	2,400	7,300	260
MW-34	W-R2330027-042822-SSR-031	4/28/2022	14	2,700	170
MW-34[A]	W-R2330031-041923-ERR-014	4/19/2023	18	2,600	290
MW-34	W-R2330031-041923-ERR-014	4/19/2023	<10	2,200	300
MW-34[A]	W-R230031-051424-KNK-MW34	5/14/2024	57.5	2,700	246
MW-34	W-R230031-051424-KNK-MW34	5/14/2024	<5.73	1,790	228

Notes:

E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of NREPA.

G = Calculated value based on a hardness of 150 mg/L.

H = Analyzed outside of holding time.

J = Analyte detected below quantitation limit.

NS = Not Sampled or Not Analyzed.

Exceeds Generic Drinking Water Cleanup Criteria (II)

Exceeds Generic Drinking Water Cleanup Criteria (II) and the Generic Health-Based Drinking Water Value (E)

Exceeds Generic Ground Water Surface Water Interface Criteria (III)

Exceeds Two or More DW (II), GSI (III) and/or Generic Health-Based Drinking Water Value (E)

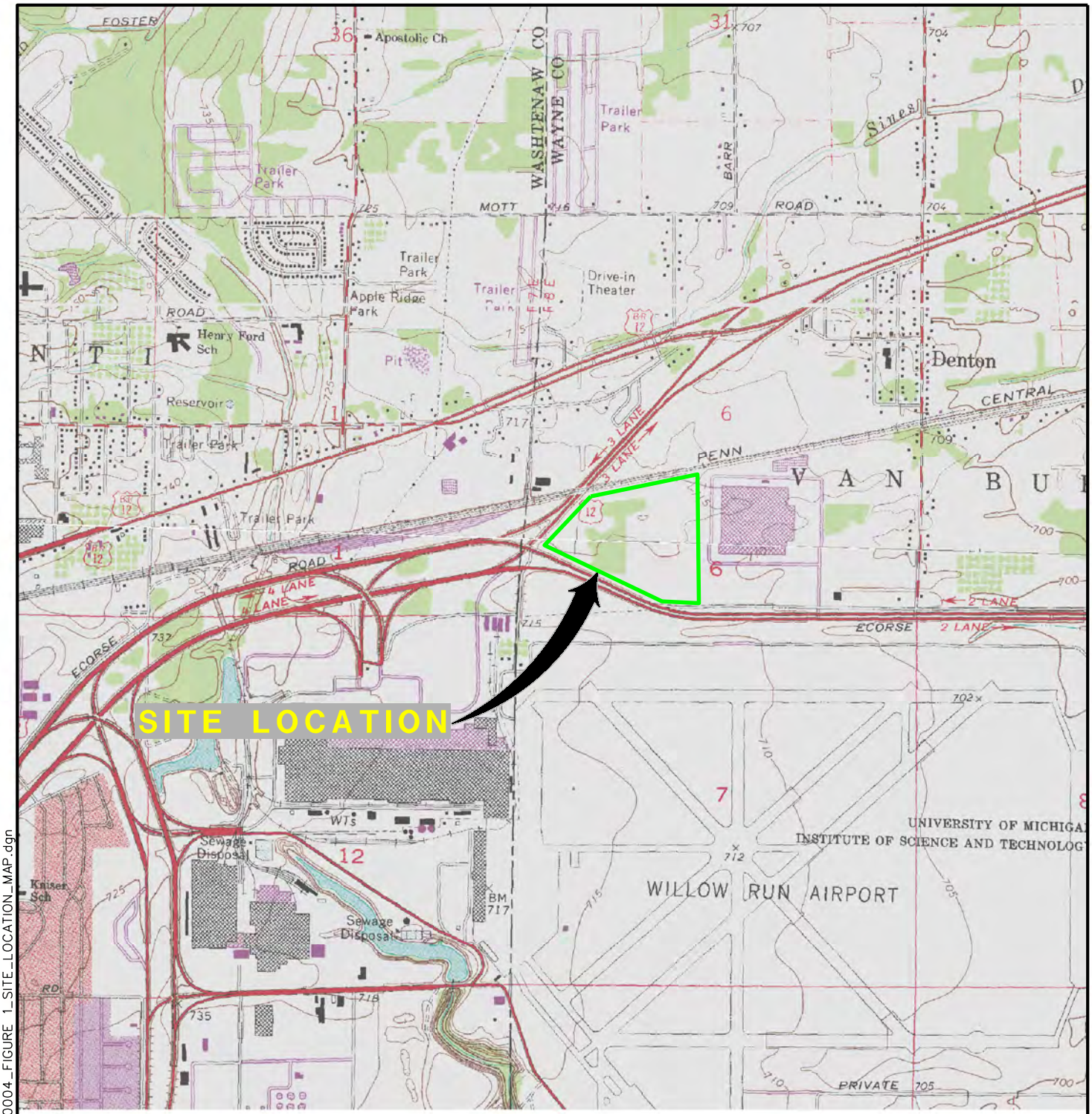
Exceeds GSI Final Acute Value (FAV), also exceeds others

Table 5
Total Depth to Bottom of Wells and
Estimated Sediment Accumulation

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Well ID	Total Depth of Well from TOC[3] (feet)	Total Depth of Well from TOC[3] (feet) 05/13/2024-7/1/2024	Estimated Sediment Accumulation
MW-1R	21.67	19.4	2.27
MW-3	14.80	13.68	1.12
MW-4	21.60	21.78	-0.18
MW-5	30.02	29.6	0.42
MW-6	16.38	16.17	0.21
MW-7	8.81	8.7	0.11
MW-8	7.78	7.5	0.28
MW-9	14.81	14.6	0.21
MW-10	23.45	23.60	-0.15
MW-11	18.12	18.21	-0.09
MW-12	18.66	17.69	0.97
MW-13	25.94	24.90	1.04
MW-14	17.70	15.61	2.09
MW-15	15.72	16.36	-0.64
MW-16	16.28	16.61	-0.33
MW-17	17.84	18.00	-0.16
MW-18	16.66	15.80	0.86
MW-19	14.63	14.20	0.43
MW-20	15.47	14.70	0.77
MW-21	15.36	14.50	0.86
MW-22	15.42	14.70	0.72
MW-23	15.74	14.95	0.79
MW-25	16.52	11.85	4.67
MW-26	17.19	16.20	0.99
MW-27	13.97	13.79	0.18
MW- 28	21.70	23.25	-1.55
MW-29	12.22	11.60	0.62
MW-30	12.36	12.40	-0.04
MW-34	18.89	13.10	5.79

FIGURES



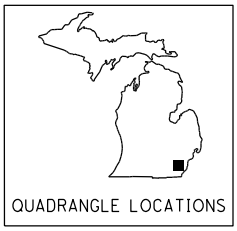
SCALE 1:24000

1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



MSG

NOTE: MAP ADAPTED FROM USGS TOPOGRAPHIC QUADRANGLES, (MICHIGAN 7.5 MINUTE SERIES) DENTON, MICHIGAN (PHOTOGRAPHS TAKEN 1952 AND REVISE FROM PHOTOGRAPHS TAKEN 1966 AND FIELD CHECKED 1969, REVISED AGAIN IN 1982) AND YPSILANTI EAST, MICHIGAN,(PHOTOGRAPHS TAKEN 1952, AND REVISIONS TAKEN FROM PHOTOGRAPHS TAKEN 1966, AND FIELD CHECKED 1967, REVISED AGAIN IN 1982)

Mannik & Smith Group, Inc.
2365 Haggerty Road South Canton, Michigan 48188
Telephone: (734) 397-3100

FIGURE 1
SITE LOCATION MAP

VAN BUREN LANDFILL SITE
MICHIGAN AVE. & ECORSE RD.
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

DATE	DRAWN BY	DESIGNED BY	PROJECT NO.
11/12	HMW	MJF	R2330004

W:\Projects\Projects P-T\R2330004\CAD\BASE\R2330004_FIGURE 1_SITE_LOCATION_MAP.dgn

Notes

Imagery Credits: Maxar

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FIGURE 2

Groundwater Elevation Contour Map (Spring 2024)

Van Buren Landfill Site
Michigan Ave & Ecorse Rd
Van Buren Twp, Wayne County, Michigan

DATE	DRAWN BY	DESIGNED BY	PROJECT NO.
9/18/2024	JWW	KRB	R2330031

Date Saved: 9/18/2024 3:50 PM
Path: W:\Projects\Projects P-T\R2330031\ENGAPPS\GIS\R2330031GIS_SamplingMap\R2330031GIS_SamplingMap.aprx

MW-34	
11/10/2020	4/13/2021
BC	BC
4/28/2022	4/19/2023
BC	BC
5/14/2024	
BC	

MW-30	
4/28/2022	11/1/2022
BC	BC
4/18/2023	11/7/2023
BC	BC
5/14/2024	
BC	

MW-29	
4/28/2022	11/1/2022
BC	Fe 2,600
4/18/2023	11/7/2023
Fe 4,300	Fe 2,600
5/14/2024	
BC	

MW-22	
11/4/2020	4/14/2021
Fe 10,000	Fe 7,200
4/27/2022	4/19/2023
Fe 6,800	Fe 2,900
5/16/2024	
Fe 6,350	

MW-25	
4/14/2021	4/27/2022
BC	BC
4/20/2023	12/18/2023
BC	BC
5/16/2024	
BC	

MW-26	
4/27/2022	10/28/2022
BC	BC
4/20/2023	Fe ND
BC	BC
5/16/2024	
BC	

MW-23	
11/4/2020	4/14/2021
Fe 10,000	Fe 10,000
4/27/2022	4/20/2023
Fe 8,000	Fe 13,000
5/16/2024	
Fe 10,900	

MW-1	
11/6/2020	4/15/2021
Fe 15,000	Fe 18,000
4/25/2022	4/21/2023
Not Sampled	Fe 15,000
5/16/2024	5/16/2024 (DUP)
Fe 18,600	Fe 18,400

MW-10	
11/6/2020	4/15/2021
Fe 19,000	Fe 21,000
4/26/2022	4/19/2023
Fe 18,000	Fe 20,000
5/16/2024	
Fe 18,200	

MW-21	
4/27/2022	10/26/2022
BC	BC
4/19/2023	11/18/2023
BC	BC
5/16/2024	
BC	

MW-5	
4/26/2022	10/27/2022
Fe 5,700	Fe 5,800
4/18/2023	11/7/2023
Fe 6,700	Fe 6,700
5/24/2024	
Fe 6,160	

MW-11	
11/6/2020	4/15/2021
BC	BC
4/26/2022	4/20/2023
BC	BC
7/1/2024	
BC	

MW-9	
4/26/2022	11/1/2022
Fe 26,000	Fe 24,000
4/18/2023	11/7/2023
Fe 18,000	Fe 25,000
5/24/2024	
Fe 24,300	

MW-3	
11/5/2020	4/13/2021
Fe 8,600	BC
4/25/2022	4/20/2023
BC	BC
6/28/2024	
BC	

MW-7	
4/26/2022	10/27/2022
BC	BC
4/18/2023	11/7/2023
BC	BC
5/23/2024	
BC	

MW-27	
11/5/2020	4/13/2021
Fe 4,100	Fe 2,400
4/25/2022	5/5/2023
Fe 6,800	Fe 1,900
6/28/2024	
Fe 2,840	

MW-8	
11/19/2020	4/14/2021
Fe 8,000	Fe 6,600
4/25/2022	4/18/2023
Not Sampled	BC
5/23/2024	
BC	

MW-4	
11/5/2020	4/13/2021
Fe 14,000	Fe 14,000
4/26/2022	5/4/2023
BC	BC
6/28/2024	
Fe 10,600	

MW-18	
4/26/2022	10/27/2022
BC	Fe 4,100
4/17/2023	11/6/2023
BC	BC
5/14/2024	
BC	

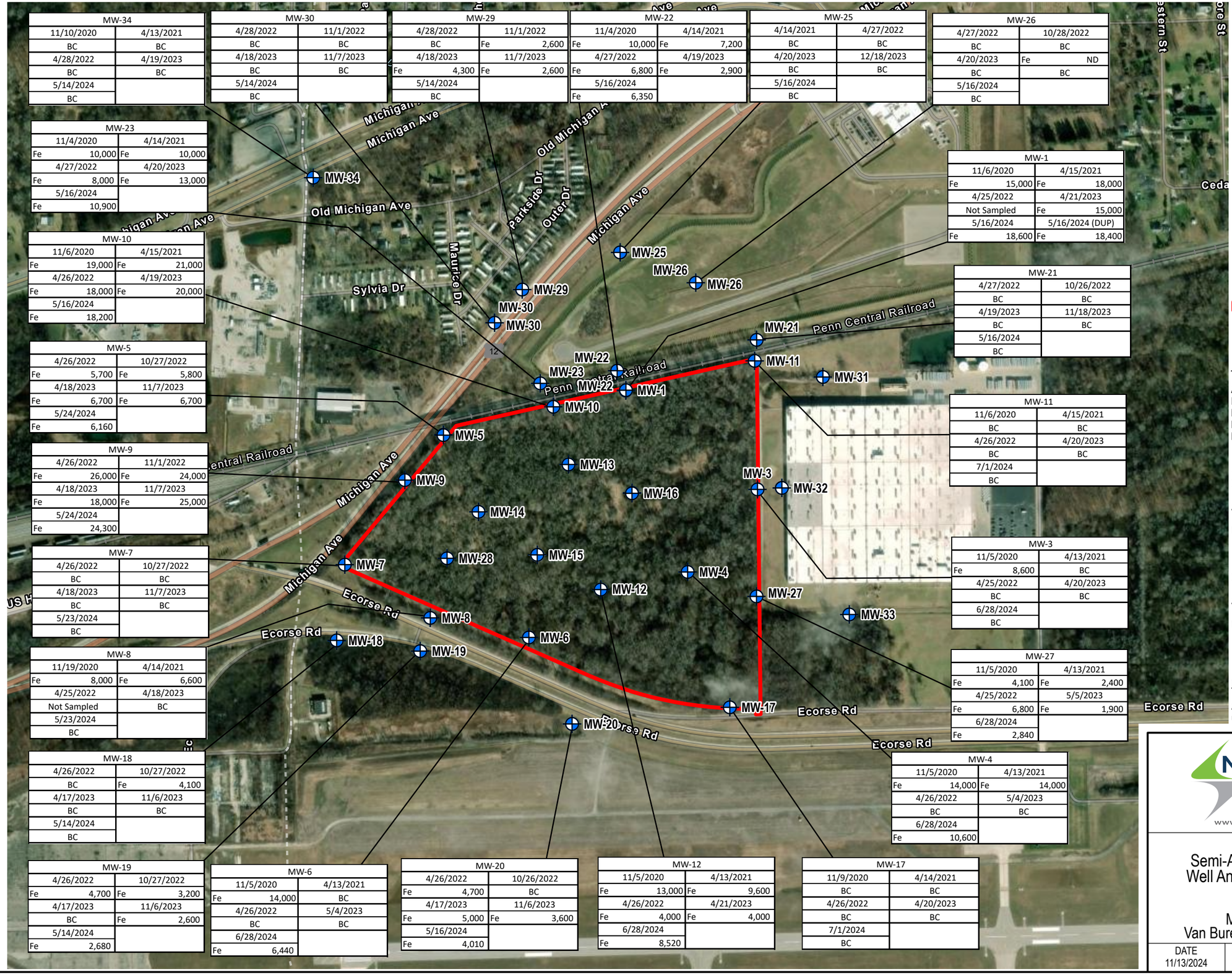
MW-19	
4/26/2022	10/27/2022
Fe 4,700	Fe 3,200
4/17/2023	11/6/2023
BC	Fe 2,600
5/14/2024	
Fe 2,680	

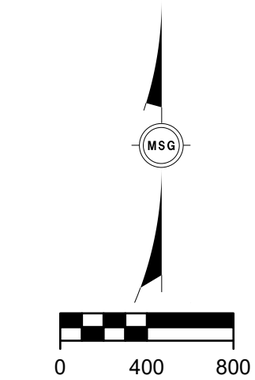
MW-6	
11/5/2020	4/13/2021
Fe 14,000	BC
4/26/2022	5/4/2023
BC	BC
6/28/2024	
Fe 6,440	

MW-20	
4/26/2022	10/26/2022
Fe 4,700	BC
4/17/2023	11/6/2023
Fe 5,000	Fe 3,600
5/16/2024	
Fe 4,010	

MW-12	
11/5/2020	4/13/2021
Fe 13,000	Fe 9,600
4/26/2022	4/21/2023
Fe 4,000	Fe 4,000
6/28/2024	
Fe 8,520	

MW-17	
11/9/2020	4/14/2021
BC	BC
4/26/2022	4/20/2023
BC	BC
7/1/2024	
BC	





Monitoring Well

Fence

Monitoring Well

Chemical Abbreviations

Al = Aluminum
Fe = Iron
Mn = Manganese
BC = Below Applicable Criteria
NS = Not Sampled

Part 201 Non-Residential Health-Based Drinking Water Value

Al = 4,100 µg/l
Fe = 5,600 µg/l
Mn = 2,500 µg/l

Part 201 Residential Health-Based Drinking Water Value

Al = 300 µg/l
Fe = 2,000 µg/l
Mn = 860 µg/l

Notes

All result units are in micrograms per liter (µg/L) unless otherwise labelled.

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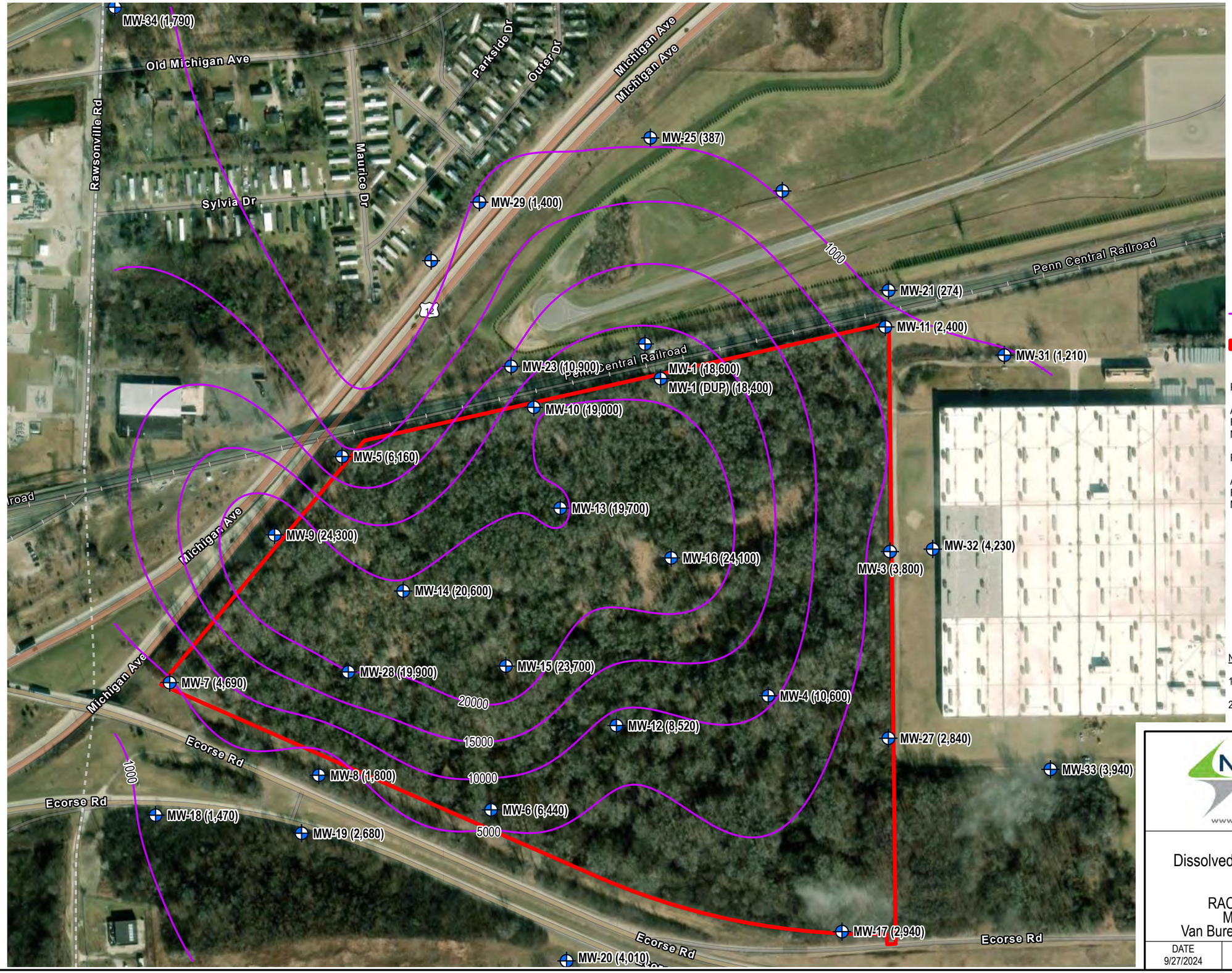
FIGURE 3
Semi-Annual Groundwater Monitoring Well Analytical Summary (Spring 2024)

Van Buren Landfill Site
Michigan Ave & Ecorse Rd
Van Buren Twp, Wayne County, Michigan

DATE	DRAWN BY	DESIGNED BY	PROJECT NO.
11/13/2024	JWW	KRB	R2330031

Date Saved: 11/13/2024 12:26 PM
Path: W:\Projects\Projects P-T\R2330031\ENGAPPS\GIS\R2330031GIS_SamplingMap\R2330031GIS_SamplingMap.aprx



Part 201 Non-Residential Health Based Clean Up Criteria

Al = 4,100 µg/l
Fe = 5,600 µg/l
Mn = 2,500 µg/l

Part 201 Residential Health Based Clean Up Criteria

Al = 300 µg/l
Fe = 2,000 µg/l
Mn = 860 µg/l

Notes

1. Imagery Credits: Maxar
2. Only exceedances of residential health-based drinking water criteria are shown.

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FIGURE 4
Dissolved Iron Isoconcentration Diagram
(Spring 2024)

RACER: Van Buren Landfill Site
Michigan Ave & Ecorse Rd
Van Buren Twp, Wayne County, Michigan

DATE	DRAWN BY	DESIGNED BY	PROJECT NO.
9/27/2024	JWW	KRB	R2330031

Date Saved: 9/27/2024 9:41 AM
Path: W:\Projects\Projects P-T\R2330031\ENGAPPS\GIS\R2330031GIS_SamplingMap\R2330031GIS_SamplingMap.aprx

ATTACHMENT 1

LOW FLOW GROUNDWATER FIELD SAMPLING FORMS

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-34

DATE: 5/14/24
PERSONNEL: KNK, ABH
OBSERVERS: –

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 60s, Sunny

DEPTH OF WELL: 13.1'
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 4.05'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: ~~peristaltic~~ and bladder pumps, Horiba U-5000, water level meter

(5 minutes)

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (~~µS/cm~~ mS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1116	4.05	57.1	2.02	13.69	6.92	31	393			
1121	4.05	54.4	2.04	2.60	6.85	2	120			
1126	4.05	53.8	1.97	1.91	6.81	6	0.0			
1131	4.05	53.6	1.87	1.65	6.76	8	5.2			
1136	4.05	53.7	1.80	1.53	6.80	10	0.0			
1141	4.05	53.5	1.74	1.43	6.77	11	0.0			
1146	4.05	53.4	1.69	1.38	6.77	9	0.0			

SAMPLE ID: MW-34
SAMPLE DATE: 5/14/24
SAMPLE TIME: 1150

purge @ 1113
Sample @ 1150

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-29

DATE: 5/14/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 60s Sunny 5% precip 10 mph winds

DEPTH OF WELL: 11.60
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 4.65'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: [redacted] bladder pumps, Horiba U-5000, water level meter

(5 mins) mS/cm

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (µS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1218	5.45	56.8	0.698	2.78	6.77	29	5.6			
1223	5.35	57.2	0.751	1.75	6.80	27	0.0			
1228	5.35	57.3	0.812	1.37	6.78	21	13.7			
1233	5.35	57.3	0.871	1.25	6.78	21	0.0			
1238	5.45	57.2	0.942	1.15	6.77	16	0.0			
1243	5.40	57.3	1.00	1.11	6.79	14	0.0			
1248	5.40	57.5	1.02	1.06	6.78	12	10.8			
1253	5.45	57.6	1.05	1.05	6.78	11	0.0			
1258	5.35	57.7	1.08	1.02	6.78	12	0.0			
1303	5.35	57.8	1.09	1.00	6.79	9	0.0			

purged 1208

SAMPLE ID: MW-29
SAMPLE DATE: 5/14/24
SAMPLE TIME: 1305

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-30

DATE: 5/14/24
PERSONNEL: KNK, ADH
OBSERVERS: —

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 60s, sunny

DEPTH OF WELL: 12.4
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 3.5
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: ~~peristaltic and~~ bladder pumps, Horiba U-5000, water level meter

(5 minutes)

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (~~µS/cm~~ mS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1326	3.65	60.8	0.660	1.46	6.93	41	0.0			
1331	3.95	61.0	0.610	1.30	6.94	51	0.0			
1336	4.25	61.3	0.569	1.25	6.96	63	0.0			
1341	4.50	61.3	0.550	1.18	6.98	68	0.0			
1346	4.90	61.4	0.528	1.12	6.98	77	0.0			
1351	5.00	61.3	0.515	1.09	7.00	87	0.0			
1356	5.25	61.2	0.506	1.07	7.00	100	0.0			
1401	5.45	61.2	0.560	1.06	7.01	110	0.0			
1406	5.65	61.2	0.495	1.05	7.00	120	0.0			

purge @ 1318
sample @

SAMPLE ID: MW-30
SAMPLE DATE: 5/14/24
SAMPLE TIME: 1410

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-18

DATE: 5/14/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, sunny

DEPTH OF WELL: 15.8'
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 1.60'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: [redacted] bladder pumps, Horiba U-5000, water level meter

(5 minutes) mS/cm

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (~~µS/cm~~)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1529	2.85	50.9	2.35	1.79	6.83	42	126			
1534	2.80	51.0	2.16	1.54	6.79	58	105			
1539	2.90	50.9	2.28	1.28	6.79	51	0.0			
1544	2.95	50.8	2.31	1.14	6.76	48	0.0			
1549	2.85	50.5	2.30	1.08	6.73	46	0.0			
1554	2.95	50.5	2.30	1.02	6.71	44	0.0			

SAMPLE ID: MW-18
SAMPLE DATE: 5/14/24
SAMPLE TIME: 1600

Purge @ 1522
Sample @ [redacted] 1600

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-19

DATE: 5/14/24
PERSONNEL: KWK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, sunny

DEPTH OF WELL: 14.2
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 2.4'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: peristaltic and bladder pumps, Horiba U-5000, water level meter

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C) +/- 3%	COND. (µS/cm) +/- 3%	DO (mg/L)[1] +/- 10%	Ph +/- 0.1	ORP (mV) +/- 10 mV	TURB. (NTU)[2] +/- 10%	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
1622	2.40	50.2	5.92	2.13	6.72	14	81.0			
1627	2.40	50.1	5.87	1.19	6.70	12	36.0			
1632	2.40	49.8	5.85	1.07	6.68	10	1.1			
1637	2.40	49.9	5.81	0.99	6.68	9	0.0			
1642	2.40	49.8	5.77	0.94	6.67	7	0.0			

SAMPLE ID: MW-19
SAMPLE DATE: 5/14/24
SAMPLE TIME: 1645

purge @ 1618
sample @ 1645

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-26

DATE: 5/16/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 60s Sunny

DEPTH OF WELL: 16.2'
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 8.15'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: [redacted] bladder pumps, Horiba U-5000, water level meter

(5 mins)

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C) +/- 3%	COND. (µS/cm) +/- 3%	DO (mg/L)[1] +/- 10%	Ph +/- 0.1	ORP (mV) +/- 10 mV	TURB. (NTU)[2] +/- 10%	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
0942	8.45	13.49	0.423	5.01	7.02	251	477			
0947	8.45	13.69	0.420	4.31	6.99	248	468			
0952	8.35	13.59	0.416	4.03	6.96	236	462			
0957	8.35	13.93	0.413	3.95	6.94	229	459			

SAMPLE ID: MW-26
SAMPLE DATE: 5/16/24
SAMPLE TIME: 1000

purge @ 0932
Sample @ 1000

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

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SAMPLE LOCATION: MW-23

DATE: 5/16/24
PERSONNEL: KWK, ADH
OBSERVERS: —

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 60s sunny

DEPTH OF WELL: 14.95
SCREEN LENGTH: —
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 7.60'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: ~~peristaltic and~~ bladder pumps, Horiba U-5000, water level meter

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (µS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1028	7.64	14.47	2.24	5.09	6.54	-2	483			
1033	7.64	14.62	2.17	2.86	6.56	-42	481			
1038	7.64	14.44	2.11	2.36	6.55	-58	480			
1043	7.64	14.44	2.09	2.10	6.54	-69	479			
1048	7.64	14.56	2.08	1.85	6.54	-76	478			
1053	7.64	14.74	2.08	1.71	6.54	-81	476			
1058	7.64	14.86	2.08	1.57	6.54	-86	475			

SAMPLE ID: MW-23
SAMPLE DATE: 5/16/24
SAMPLE TIME: 1105

purge @ 1018
sample @ 1105

Notes: metals + VOCs

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

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SAMPLE LOCATION: MW-25

DATE: 5/16/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 60s, sunny

DEPTH OF WELL: 11.85
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 3.60
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: peristaltic and bladder pumps, Horiba U-5000, water level meter

(5 mins)

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (µS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1123	3.65	17.31	0.999	8.75	6.62	-11	0.0			
1128	3.69	17.23	0.976	1.48	6.60	-17	911			
1133	3.65	17.20	0.967	1.27	6.58	-18	740			
1138	3.68	16.96	0.969	1.18	6.59	-19	732			
1143	3.68	17.02	0.965	1.13	6.59	-20	644			
1148	3.68	16.83	0.969	1.07	6.59	-21	584			
1153	3.68	16.63	0.968	1.04	6.59	-23	553			

SAMPLE ID: MW-25
SAMPLE DATE: 5/16/24
SAMPLE TIME: 1200

purge @ 1113
sample @ 1200

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

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SAMPLE LOCATION: MW-21

DATE: 5/16/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, Sunny

DEPTH OF WELL: 14.51'
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 7.1'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: [redacted] bladder pumps, Horiba U-5000, water level meter

(5 mins) mS/cm

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/~~(C)~~)	COND. (~~µS/cm~~)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1250	7.40	13.24	0.455	2.47	7.12	169	601			
1255	7.40	12.60	0.455	2.04	7.08	159	555			
1300	7.40	12.59	0.454	2.54	7.01	145	583			
1305	7.40	12.41	0.456	2.95	6.96	139	528			
1310	7.40	12.13	0.459	3.45	6.93	136	521			
1315	7.40	12.01	0.463	3.63	6.90	134	516			
1320	7.35	11.94	0.465	3.75	6.87	134	512			

purge @ 1242
sample @ 1325

SAMPLE ID: MW-21
SAMPLE DATE: 5/16/24
SAMPLE TIME: 1325

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

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SAMPLE LOCATION: MW-22

DATE: 5/16/24
PERSONNEL: KNK ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, Sunny

DEPTH OF WELL: 14.7'
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 5.6'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: ~~peristaltic~~ and bladder pumps, Horiba U-5000, water level meter

5mins

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (µS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1350	5.60	12.61	1.33	1.42	6.65	-24	510			
1355	5.60	12.39	1.34	1.24	6.64	-54	497			
1400	5.60	12.39	1.35	1.14	6.62	-70	490			
1405	5.60	12.59	1.36	1.07	6.61	-79	490			
1410	5.60	12.49	1.35	1.01	6.60	-85	488			

SAMPLE ID: MW-22
SAMPLE DATE: 5/16/24
SAMPLE TIME: 1415

Purge @ ~~1400~~ 1342
Sample @ 1415

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-10

DATE: 5/16/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, sunny

DEPTH OF WELL: 23.6'
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 13.85'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: ~~peristaltic and~~ bladder pumps, Horiba U-5000, water level meter

(5mins) mS/cm

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (~~µS/cm~~)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1440	13.85	19.05	2.73	1.17	6.58	-81	534			
1445	13.85	18.86	2.66	0.87	6.53	-92	498			
1450	13.85	18.86	2.65	0.77	6.52	-98	486			
1455	13.85	19.04	2.65	0.72	6.53	-102	483			
1500	13.85	19.02	2.66	0.69	6.53	-105	483			

purge@ 1430

SAMPLE ID: MW-10
SAMPLE DATE: 5/16/24
SAMPLE TIME: 1505

Notes: Metals + VOCs

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-1

DATE: 5/16/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, sunny

DEPTH OF WELL: 19.4
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 13.7
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: peristaltic and bladder pumps, Horiba U-5000, water level meter

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (µS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1535	13.70	14.53	2.79	1.76	6.59	-78	0.0			
1540	13.70	14.10	2.79	1.48	6.56	-89	0.0			
1545	13.70	14.01	2.82	1.32	6.55	-95	0.0			
1550	13.70	13.81	2.84	1.18	6.54	-99	0.0			
1555										
1600										

SAMPLE ID: MW-1
SAMPLE DATE: 5/16/24
SAMPLE TIME: 1555

purge @ 1525
sample @ 1555

Notes: Duplicate taken (DUP-1)

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-20

DATE: 5/16/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, sunny

DEPTH OF WELL: 14.70'
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 5.11'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT:
peristaltic and bladder pumps, Horiba U-5000, water level meter

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/C)	COND. (µS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1619	5.11	18.10	2.11	1.14	6.93	-53	0.0			
1624	5.11	17.30	2.13	0.83	6.78	-78	0.0			
1629	5.11	11.74	2.48	1.05	6.75	-81	821			
1634	5.11	11.71	2.50	1.00	6.74	-83	743			
1639	5.11	11.65	2.50	0.95	6.72	-84	640			
1644	5.11	11.49	2.49	0.90	6.70	-86	613			
1649	5.11	11.48	2.50	0.88	6.68	-87	600			

SAMPLE ID: MW-20
SAMPLE DATE: 5/16/24
SAMPLE TIME: 1655

Purge @ 1610
Sample @ 1655

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-8

DATE: 5/23/24
PERSONNEL: ADH, KNK
OBSERVERS: —

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, sunny

DEPTH OF WELL: 7.50'
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 0.0'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: [redacted] bladder pumps, Horiba U-5000, water level meter

(5 mins)

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (~~µS/cm~~ mS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1120	0.0'	56.4	1.53	1.93	6.90	-34	0.0			
1125	0.0	56.9	1.46	1.56	6.82	-40	0.0			
1130	0.0	56.0	1.49	1.39	6.76	-43	0.0			
1135	0.0	55.8	1.52	1.30	6.76	-46	0.0			
1140	0.0	55.4	1.56	1.19	6.74	-46	0.0			

SAMPLE ID: MW-8
SAMPLE DATE: 5/23/24
SAMPLE TIME: 1145

purge @ 1110
sample @ 1145

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-7

DATE: 5/23/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, Sunny

DEPTH OF WELL: 8.7'
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 3.5'
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT:
~~Peristaltic~~ and bladder pumps, Horiba U-5000, water level meter

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (µS/cm ≡ mS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1205	3.50	60.7	2.74	1.59	6.65	-93	0.0			
1210	3.50	61.0	2.72	1.26	6.67	-111	0.0			
1215	3.50	61.1	2.74	1.09	6.68	-129	0.0			
1220	3.50	60.9	2.77	1.02	6.70	-144	0.0			
1225	3.50	61.0	2.82	0.97	6.73	-149	0.0			
1230	3.50	61.2	2.87	0.96	6.77	-143	0.0			

Purge @ 1155
Sample @ 1235

SAMPLE ID: MW-7
SAMPLE DATE: 5/23/24
SAMPLE TIME: 1235

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-9

DATE: 5/24/24
PERSONNEL: KNK, ADH
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, sunny

DEPTH OF WELL: 14.6
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 7.5
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: peristaltic and bladder pumps, Horiba U-5000, water level meter

mS/cM

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F)/C)	COND. ~~(uS/cm)~~	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1132	7.50	55.9	2.73	1.11	6.63	-30	0.0			
1137	7.50	55.2	2.74	0.98	6.64	-32	0.0			
1142	7.50	55.0	2.75	0.95	6.64	-34	0.0			
1147	7.50	54.8	2.75	0.92	6.63	-35	0.0			

purge @ 1122
Sample @ 1150

SAMPLE ID: MW-9
SAMPLE DATE: 5/24/24
SAMPLE TIME: 1150

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-5

DATE: 5/24/24
PERSONNEL: ADH, KNK
OBSERVERS:

PROJECT #: R233031
SITE NAME: Racer Van Buren Landfill Site
SITE ADDRESS: Michigan Ave and Ecorse Rd
SITE CONDITIONS: 70s, sunny

DEPTH OF WELL: 29.6
SCREEN LENGTH:
TUBING TYPE: polyethylene / silicone

DEPTH TO WATER LEVEL FROM TOP OF CASING: 9.15
WELL DIAMETER: 2"
CASING TYPE: PVC

MONITORING EQUIPMENT: peristaltic and bladder pumps, Horiba U-5000, water level meter

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (µS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1046	9.15	60.4	3.01	1.61	6.83	-56	0.0			
1051	9.15	60.2	3.02	1.37	6.77	-59	0.0			
1056	9.15	60.2	3.02	1.21	6.73	-61	0.0			
1101	9.15	60.1	3.02	1.14	6.72	-62	0.0			
1106	9.15	60.2	3.02	1.07	6.70	-63	0.0			

purged @ 1038
sample @ 1110

SAMPLE ID: MW-5
SAMPLE DATE: 5/24/24
SAMPLE TIME: 1110

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

DATE: 7-1-2024

PERSONNEL: ADH, DCJ

OBSERVERS:

SAMPLE LOCATION: MW-11

PROJECT #: R233031

SITE NAME: Racer van buron landfill site

SITE ADDRESS: Michigan Ave and Ecorse Rd

SITE CONDITIONS: High 60s, sunny

DEPTH OF WELL: 18.21

SCREEN LENGTH:

TUBING TYPE:

DEPTH TO WATER LEVEL: 9.21

WELL DIAMETER:

CASING TYPE:

MONITORING EQUIPMENT:

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	Ph	ORP (mV)	COND. (mS/cm)	TURB. (NTU)[2]	DO (mg/L)[1]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 0.1	+/- 10 mV	+/- 3%	+/- 10%	+/- 10%			
11:45	9.35	54.3	6.84	115	1.14	148	7.93			
11:50	9.25	54.0	6.85	105	1.24	75	7.90			
11:55	9.28	53.9	6.87	101	1.23	97	7.09			
12:00	9.40	54.1	6.88	97	1.25	86	7.08			
12:05	9.20	53.9	6.88	99	1.23	87	7.01			
12:10	9.23	53.7	6.88	96	1.24	84	6.59			

SAMPLE ID: MW-11

SAMPLE DATE: 7-1-24

SAMPLE TIME: 12:13

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

DATE: 7-1-24

PERSONNEL: ADH, DCJ

OBSERVERS:

SAMPLE LOCATION: MW-17

PROJECT #: R233031

SITE NAME: Racer van buron landfill site

SITE ADDRESS: Michigan Ave and Ecorse Rd

SITE CONDITIONS:

DEPTH OF WELL: 18'

SCREEN LENGTH:

TUBING TYPE:

DEPTH TO WATER LEVEL: 7.75

WELL DIAMETER:

CASING TYPE:

MONITORING EQUIPMENT:

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	Ph	ORP (mV)	COND. (mS/cm)	TURB. (NTU)[2]	DO (mg/L)[1]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 0.1	+/- 10 mV	+/- 3%	+/- 10%	+/- 10%			
1:10	7.5	55.1	7.09	52	2.48	0	8.15			
1:15	7.2	55.0	7.07	43	1.80	0	7.91			
1:20	7.5	54.8	7.10	36	2.00	0	7.94			
1:25	7.2	54.9	7.14	31	2.05	0	8.12			
1:30	7.0	54.8	7.14	30	2.12	0	8.07			

SAMPLE ID: MW-17

SAMPLE DATE: 7-1-24

SAMPLE TIME: 13:33

Notes:

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

DATE: 6-28-24

PERSONNEL: SDH, DJ

OBSERVERS:

SAMPLE LOCATION: MW-3

PROJECT #: R233031

SITE NAME: Racer Van Buron Landfill Site

SITE ADDRESS: Michigan Ave and Ecorse Rd

SITE CONDITIONS:

DEPTH OF WELL: 13,68'

SCREEN LENGTH:

TUBING TYPE:

DEPTH TO WATER LEVEL: 6.01'

WELL DIAMETER:

CASING TYPE:

MONITORING EQUIPMENT:

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	Ph	ORP (mV)	COND. (mS/cm)	TURB. (NTU)[2]	DO (mg/L)[1]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 0.1	+/- 10 mV	+/- 3%	+/- 10%	+/- 10%			
11:06	6.03	18.8	7.77	196.5	0.952	54.78	8.50			
11:09	6.03	19.0	7.90	100.0	0.982	54.31	8.58			
11:12	6.03	19.0	7.86	39.4	0.843	66.57	8.45			
11:15	6.03	19.2	7.91	-40.9	0.937	50.11	8.52			
11:18	6.03	19.2	7.87	-40.2	1.062	54.04	8.86			
11:21	6.03	19.2	7.90	-45.5	1.010	47.53	8.91			
11:24	6.03	19.2	7.87	-54.7	1.073	40.06	8.69			

SAMPLE ID: MW-3

SAMPLE DATE: 6-28-24

SAMPLE TIME: 11:27

Notes: purge: 11:03

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith Group — TECHNICAL SKILL. CREATIVE SPIRIT.
www.MannikSmithGroup.com

SAMPLE LOCATION: MW-4

DATE: 6/20/2024
PERSONNEL: RCA, SRK, DS
OBSERVERS:

PROJECT #:
SITE NAME:
SITE ADDRESS:
SITE CONDITIONS:
DEPTH TO WATER LEVEL FROM TOP OF CASING: 14.04

DEPTH OF WELL: 21.78
SCREEN LENGTH:
TUBING TYPE:
WELL DIAMETER:
CASING TYPE:
MONITORING EQUIPMENT:

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C) +/- 3%	COND. (µS/cm) +/- 3%	DO (mg/L)[1] +/- 10%	Ph +/- 0.1	ORP (mV) +/- 10 mV	TURB. (NTU)[2] +/- 10%	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
9:43	14.19	14.92	2.65	7.55	6.82	-48	179			
9:46	14.21	13.23	2.78	9.24	6.84	-80	104			
9:49	14.22	12.70	333 0.17	8.44	6.81	-119	354			
9:52	14.22	12.34	2.19	8.49	6.74	-97	298			
9:55	14.22	12.12	187	8.54	6.52	-84	127			
9:58	14.23	11.98	2.70	8.72	6.44	-73	162			
10:01	14.25	11.52	2.67	7.82	6.48	-77	108			
10:04	14.25	11.50	2.62	7.80	6.51	-78	37			
10:07	14.26	11:56	2.60	7.80	6.52	-79	30	~2		

SAMPLE ID: MW-4
SAMPLE DATE: 10:10
SAMPLE TIME:

Notes: Purge @ 9:40

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

DATE: 6/28/2024

SAMPLE LOCATION: MW-6

PROJECT #: ~~MDMB0001~~

SITE NAME: ~~Sunshine Foods~~ RACER

PERSONNEL: _____

SITE ADDRESS: ~~5516 Davison Road, Burton, Michigan~~

OBSERVERS: _____

SITE CONDITIONS: _____

DEPTH OF WELL: 16.17

DEPTH TO WATER LEVEL: 7.03

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: _____

CASING TYPE: _____

MONITORING EQUIPMENT: Geotech peristaltic pump/bladder pump (circle one), water level meter, Horiba U-52 w/ flowcell

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/(°C)) +/- 3%	Ph +/- 0.1	ORP (mV) +/- 10 mV	COND. (mS/cm) +/- 3%	TURB. (NTU)[2] +/- 10%	DO (mg/L)[1] +/- 10%	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
14:13	7.02	16.69	6.60	-60	2.43	0.0	2.35			
14:16	7.10	14.22	6.61	-41	2.38	0.0	3.51			
14:19	7.10	13.76	6.61	-39	2.41	13.5	3.91			
14:22	7.12	1364	6.60	-38	2.44	12.2	4.03			
14:25	7.12	13.60	6.59	-39	2.46	13.6	3.84			
14:28	7.12	13.45	6.58	-39	2.47	13.9	4.92			
14:31	7.13	13.47	6.59	-39	2.47	16.2	4.71			
14:34	7.13	13.41	6.59	-40	2.48	14.3	5.37			
14:37	7.13	1336	6.59	-41	2.49	14.1	4.63			
14:40	7.14	13.37	6.59	-40	2.49	13.1	4.81			
14:43										

SAMPLE ID: MW-6

SAMPLE DATE: 6-28-2024

SAMPLE TIME: 14:43

Notes: Purge @ 14:10

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM

Mannik Smith Group — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

DATE: 6 / 28 / 2024

PERSONNEL: RCA, SRK, DJ, AH

OBSERVERS: _____

SAMPLE LOCATION: MW-12

PROJECT #: ~~MDMB0001~~

SITE NAME: ~~Sunshine Foods~~ RACER

SITE ADDRESS: ~~5516 Davison Road, Burton, Michigan~~

SITE CONDITIONS: _____

DEPTH OF WELL: 17.69

DEPTH TO WATER LEVEL: 10.28

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: _____

CASING TYPE: _____

MONITORING EQUIPMENT: Geotech peristaltic pump/bladder pump (circle one), water level meter, Horiba U-52 w/ flowcell

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	Ph	ORP (mV)	COND. (mS/cm)	TURB. (NTU)[2]	DO (mg/L)[1]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 0.1	+/- 10 mV	+/- 3%	+/- 10%	+/- 10%			
10:51	10.31	12.17	6.39	-77	2.42	731	10.57			
10:54	10.33	11.73	6.37	-79	2.45	652	10.40			
10:57	10.33	11.46	6.57	-88	2.46	468	11.51			
11:00	10.34	11.51	6.70	-90	2.46	375	24.74			
11:03	10.34	11.48	6.81	-103	1.77	282	8.01			
11:06	10.34	11.50	6.95	-112	2.10	257	6.68			
11:09	10:35	11.46	6.88	-104	1.62	171	12.45			
11:12	10.35	11.56	6.87	-100	2.33	142	12.65			
11:15	10.35	11.51	6.61	-88	1.70	170	16.31			
11:18	10.35	11.99	6.54	-93	1.34	123	8.09			
11:22	10.35	11.56	6.69	-89	2.40	69.2	7.80			
11:25	10.36	11.35	6.69	-88	2.42	59.1	10.80			
11:28	10.36	11.37	6.65	-86	2.41	45.0	11.63			
11:31	10.36	11.29	6.64	-85	2.41	47.2	11.97	4		
11:34										

SAMPLE ID: MW-12

SAMPLE DATE: 6/28/2024

SAMPLE TIME: 11:34

Notes: Purge @ 10:48

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW-13

DATE: 6-28-24

PROJECT #: R233031

SITE NAME: Racer Van Buron Landfill Site

PERSONNEL: BCA, DJ, SRK

SITE ADDRESS: Michigan Ave and Ecorse Rd

OBSERVERS:

SITE CONDITIONS:

DEPTH OF WELL: 24.90'

DEPTH TO WATER LEVEL: 14.59'

SCREEN LENGTH:

WELL DIAMETER:

TUBING TYPE:

CASING TYPE:

MONITORING EQUIPMENT:

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/C)	Ph	ORP (mV)	COND. (mS/cm)	TURB. (NTU)[2]	DO (mg/L)[1]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 0.1	+/- 10 mV	+/- 3%	+/- 10%	+/- 10%			
18:27	14.64	14.48	6.53	-65	3.40	394	9.56			
18:30	14.67	14.94	6.57	-92	4.03	324	7.91			
18:33	14.67	15.00	6.54	-96	4.08	241	7.88			
18:36	14.68	15.02	6.55	-99	4.08	195	7.54			
18:39	14.64	14.91	6.56	-101	4.05	156	7.59			
18:42	14.67	14.88	6.59	-101	4.03	134	7.62			
18:45	14.67	14.89	6.61	-104	3.99	116	7.50			
18:48	14.67	14.80	6.61	-106	3.95	115	7.97			

SAMPLE ID: MW-13

SAMPLE DATE: 6-28-24

SAMPLE TIME: 18:51

Notes: purge: 18:23

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

SAMPLE LOCATION: MW - 14

DATE: 6/27/2024
PERSONNEL:
OBSERVERS:

PROJECT #:
SITE NAME:
SITE ADDRESS:
SITE CONDITIONS:

DEPTH OF WELL: 15.61
SCREEN LENGTH:
TUBING TYPE:

DEPTH TO WATER LEVEL FROM TOP OF CASING: 14.11
WELL DIAMETER:
CASING TYPE:

MONITORING EQUIPMENT:

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (µS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
15:33		16,91	2,55	15,13	7,81	-106	139			
15:36		15,73	2,52	13,09	7,75	-98	114			
15:39		15,06	2,47	11,87	7,71	-88	46,6			
15:42		14,55	2,44	11,28	7,68	-82	18,2			
15:45		14,99	2,41	20,37	7,78	-78	8,3			
15:48		15,18	2,43	10,87	7,84	-81	16,9			
15:51		14,62	2,40	8,93	7,79	-81	11,7			
15:54		14,43	2,39	9,24	7,80	-79	4,0			
15:57		14,42	2,39	15,82	7,73	-80	4,8			
16:00		14,36	2,37	16,43	7,77	-74	4,5			

SAMPLE ID: MW-14
SAMPLE DATE: 6/27/24
SAMPLE TIME: 16:03

Notes: unable to get water depth due to low water level

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

DATE: 6 / 28 / 2024

SAMPLE LOCATION: MW-15

PROJECT #: ~~MDMB0001~~

SITE NAME: ~~Sunshine Foods~~ RACER

PERSONNEL: RCA, SRK, DJ, AH

SITE ADDRESS: ~~5516 Davison Road, Burton, Michigan~~

OBSERVERS: _____

SITE CONDITIONS: _____

DEPTH OF WELL: 16.36

DEPTH TO WATER LEVEL: 12.62

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: _____

CASING TYPE: _____

MONITORING EQUIPMENT: Geotech peristaltic pump/bladder pump (circle one), water level meter, Horiba U-52 w/ flowcell

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C) +/- 3%	Ph +/- 0.1	ORP (mV) +/- 10 mV	COND. (mS/cm) +/- 3%	TURB. (NTU)[2] +/- 10%	DO (mg/L)[1] +/- 10%	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
12:38	12.92	15.12	6.59	-62	2.54	127	3.91			
12:41	12.94	14.81	6.62	-74	2.67	83.2	3.60			
12:44	12.94	14.76	6.62	-78	2.70	45.0	3.55			
12:47	12.95	14.63	6.63	-80	2.71	22.5	6.53			
12:50	12.95	14.73	6.67	-82	2.70	17.1	8.08			
12:53	12.96	14.82	6.67	-82	2.70	15.6	3.66			
12:56	12.96	14.77	6.67	-82	2.71	12.2	3.54			
12:59	12.96	14.87	6.68	-83	2.70	11.2	3.30			
13:02	12.96	14.82	6.67	-84	2.76	11.4	3.27	2		
13:05										

SAMPLE ID: MW-15

SAMPLE DATE: 6/28/2024

SAMPLE TIME: 13:05

Notes: Purge @ 12:35

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

DATE: 6/28/24

SAMPLE LOCATION: MW-16

PROJECT #: R233031

SITE NAME: Racer Van Buron Landfill Site

SITE ADDRESS: Michigan Ave and Ecorse Rd

SITE CONDITIONS:

PERSONNEL:

OBSERVERS:

DEPTH OF WELL: 16.61

DEPTH TO WATER LEVEL: 12.06

SCREEN LENGTH:

WELL DIAMETER:

TUBING TYPE:

CASING TYPE:

MONITORING EQUIPMENT:

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	Ph	ORP (mV)	COND. (mS/cm)	TURB. (NTU)[2]	DO (mg/L)[1]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 0.1	+/- 10 mV	+/- 3%	+/- 10%	+/- 10%			
17:42	12.07	15.92	6.44	-35	1.82	0.0	7.92			
17:45	12.07	13.91	6.54	-69	1.96	49.5	9.15			
17:48	12.08	13.44	6.55	-73	1.96	36.4	8.83			
17:52	12.08	13.39	6.55	-75	1.95	27.0	8.85			
17:55	12.08	13.31	6.56	-76	1.95	24.3	8.77			
17:58	12.08	13.12	6.56	-77	1.96	23.0	8.42			
18:01	12.08	13.40	6.59	-78	1.95	24.4	8.31			

SAMPLE ID: MW-16

SAMPLE DATE: 6/28/2024

SAMPLE TIME: 18:04

Notes: Purge @ 17:39

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

DATE: 6-28-24

PERSONNEL: SMK, RCA, DJ

OBSERVERS:

SAMPLE LOCATION: MW-27

PROJECT #: R233031

SITE NAME: Racer Van Buron Landfill Site

SITE ADDRESS: Michigan Ave and Ecorse Rd

SITE CONDITIONS:

DEPTH OF WELL: 13.79

SCREEN LENGTH:

TUBING TYPE:

DEPTH TO WATER LEVEL: 5.81

WELL DIAMETER:

CASING TYPE:

MONITORING EQUIPMENT:

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	Ph	ORP (mV)	COND. (mS/cm)	TURB. (NTU)[2]	DO (mg/L)[1]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 0.1	+/- 10 mV	+/- 3%	+/- 10%	+/- 10%			
15:37	5.81'	15.20	6.35	-68	0.003	48.6	9.33			
15:40	5.81'	14.72	6.33	-81	0.917	272	3.07			
15:43	5.81'	14.66	6.35	-81	0.549	264	5.89			
15:46	5.81'	14.68	6.46	-82	0.003	231	2.62			
15:49	5.82'	14.38	6.41	-82	0.007	264	3.90			
15:52	5.82'	14.51	6.39	-89	0.004	243	4.24			
15:55	5.82'	14.59	6.50	-87	0.009	170	3.82			
15:58	5.82'	14.40	6.59	-95	0.004	200	4.17			
16:01	5.82'	14.39	6.50	-94	0.003	223	3.98			
16:04	5.82'	14.33	6.58	-101	0.003	228	4.03			
16:07	5.82'	14.34	6.60	-98	0.004	233	4.07			
~~16:10~~										
~~16:13~~										

SAMPLE ID: MW-27

SAMPLE DATE: 6-28-24

SAMPLE TIME: 16:10

Notes: purge : 15:32

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUNDWATER SAMPLING FORM

Mannik Smith GROUP — TECHNICAL SKILL. CREATIVE SPIRIT. — www.MannikSmithGroup.com

DATE: 6/27/2024
PERSONNEL:
OBSERVERS:
DEPTH OF WELL: ~~X~~ 23.25
SCREEN LENGTH:
TUBING TYPE:
MONITORING EQUIPMENT:

SAMPLE LOCATION: MW-28
PROJECT #: RACER
SITE NAME:
SITE ADDRESS:
SITE CONDITIONS:
DEPTH TO WATER LEVEL FROM TOP OF CASING: 11.90
WELL DIAMETER:
CASING TYPE:

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. (°F/°C)	COND. (µS/cm) (mS/cm)	DO (mg/L)[1]	Ph	ORP (mV)	TURB. (NTU)[2]	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		+/- 3%	+/- 3%	+/- 10%	+/- 0.1	+/- 10 mV	+/- 10%			
1720	11.90	63.8	2.58	8.18	6.87	-31	0.0			
1723	11.90	62.0	2.57	8.63	6.85	-36	0.0			
1726	11.90	61.2	2.63	5.07	6.84	-40	0.0			
1729	11.90	61.0	2.62	4.25	6.82	-42	0.0			
1732	11.90	60.7	2.62	3.51	6.83	-45	0.0			
1735	11.90	60.3	2.61	3.03	6.86	-47	0.0			
1738	11.90	60.6	2.60	2.69	6.87	-49	0.0			
1742	11.90	60.7	2.59	2.51	6.88	-50	0.0			

SAMPLE ID: MW-28
SAMPLE DATE:
SAMPLE TIME: 1748

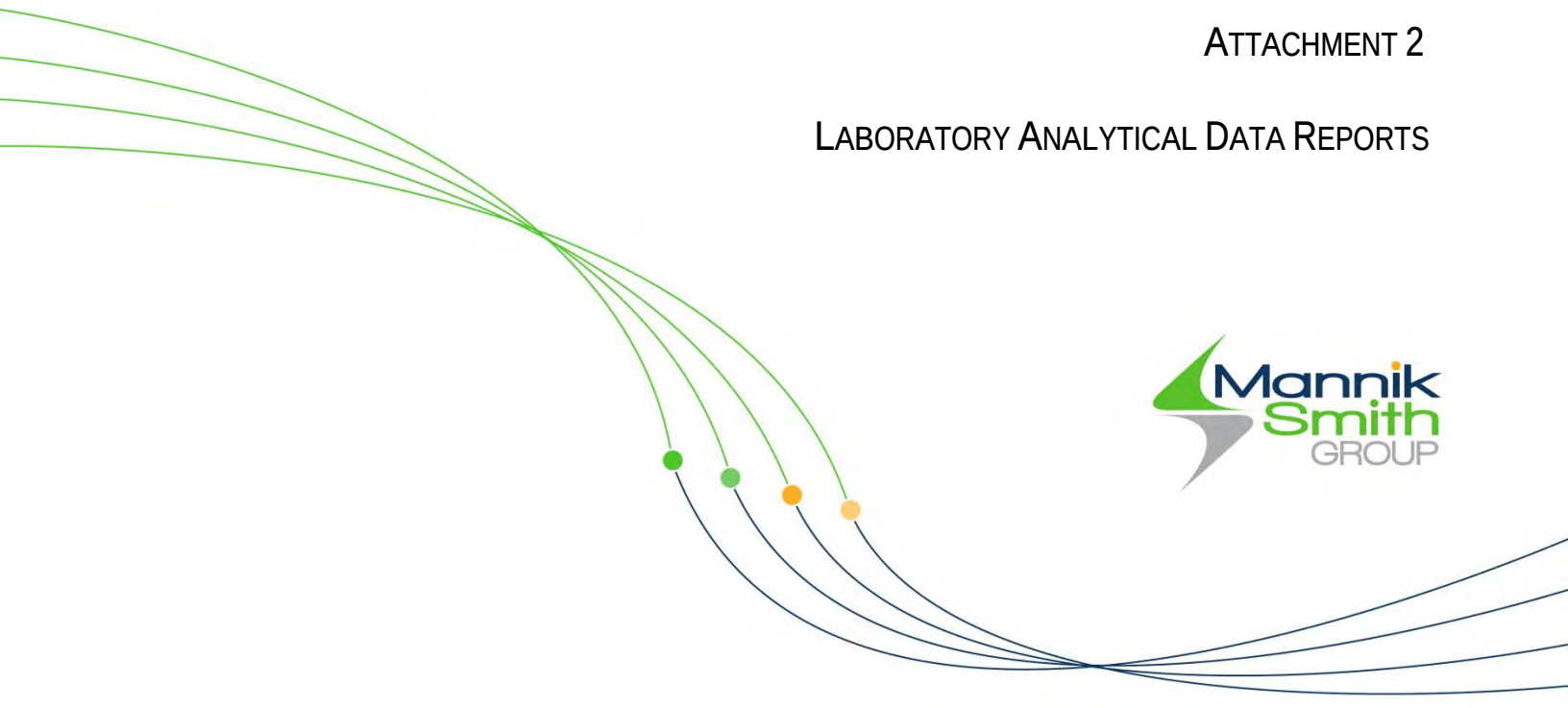
Notes: TURB was at 0.0 the whole time
TM = total metals, DM = dissolved metals

[1] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

[2] - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

ATTACHMENT 2

LABORATORY ANALYTICAL DATA REPORTS



CERTIFICATE OF ANALYSIS

Work Order

HN2402325

Client

The Mannik & Smith Group, Inc.

Project

Racer Van Buren Landfill

Project Date

May 17, 2024

Reporting Contact

Kevin Lund

3352 128th Avenue, Holland, MI 49424 | 616-399-6070 | www.alsglobal.com

June 07, 2024

Kevin Lund
The Mannik & Smith Group, Inc.
2365 Haggerty Road South
Suite 100
Canton, MI 48188

Work Order: **HN2402325**

Re: **Racer Van Buren Landfill**

Dear Kevin ,
Enclosed are the results of the sample(s) submitted to our laboratory.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to contact me:
ADDRESS: 3352 128th Avenue, Holland, MI, USA PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Bill Carey
/S/ BILL CAREY

Project Manager

Narrative Documents

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill **Date Received:** 21-May-2024
Sample Matrix: Groundwater

CASE NARRATIVE

Sample Receipt:

Seventeen groundwater samples were received for analysis at ALS Environmental on 21-May-2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

The MS and MSD recoveries were outside of the control limit for sample "HN2402325-001" in batch "1471645"; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for these analytes: Ca, Na, Sr.

Organics:

VOC 8260: 2279849
The LCS recovery was above the upper control limit. All the sample results in the batch were non-detect. No qualification is necessary for this analyte: (-007, -011)

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting limits.

For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-34	Lab ID: HN2402325-001					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0575		0.00573	0.0100	mg/L	EPA 6020B
Iron	2.70		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	1.79		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.246		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.228		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-29	Lab ID: HN2402325-002					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.00593	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	1.66		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	1.40		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.118		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.117		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-30	Lab ID: HN2402325-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0639		0.00573	0.0100	mg/L	EPA 6020B
Iron	0.474		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.152		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.0421		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-18	Lab ID: HN2402325-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0648		0.00573	0.0100	mg/L	EPA 6020B
Iron	1.63		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	1.47		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.424		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.397		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-19	Lab ID: HN2402325-005					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.161		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00899	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	3.40		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	2.68		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.489		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.485		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-26	Lab ID: HN2402325-006					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0469		0.00573	0.0100	mg/L	EPA 6020B
Iron	0.172		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.00682		0.00167	0.00500	mg/L	EPA 6020B

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting limits.

For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-26	Lab ID: HN2402325-006					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**

CLIENT ID: MW-23	Lab ID: HN2402325-007					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.112		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.0105		0.00573	0.0100	mg/L	EPA 6020B
Benzene	1.28		0.460	1.00	µg/L	EPA 8260D
Chlorobenzene	41.5		0.400	1.00	µg/L	EPA 8260D
Iron	11.8		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	10.9		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.107		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.0852		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-25	Lab ID: HN2402325-008					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.720		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00814	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	1.78		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	0.387		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.617		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.597		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-21	Lab ID: HN2402325-009					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0508		0.00573	0.0100	mg/L	EPA 6020B
Iron	0.436		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	0.274		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.256		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.215		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-22	Lab ID: HN2402325-010					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0330		0.00573	0.0100	mg/L	EPA 6020B
Iron	6.85		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	6.35		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.212		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.211		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-10	Lab ID: HN2402325-011					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0199		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00600	J	0.00573	0.0100	mg/L	EPA 6020B
Benzene	2.62		0.460	1.00	µg/L	EPA 8260D
Chlorobenzene	24.8		0.400	1.00	µg/L	EPA 8260D

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting limits.

For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-10	Lab ID: HN2402325-011					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Iron	18.2		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	19.0		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.598		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.599		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-1	Lab ID: HN2402325-012					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	1.78		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.0378		0.00573	0.0100	mg/L	EPA 6020B
Iron	15.8		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	18.6		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.350		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.260		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-20	Lab ID: HN2402325-013					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.111		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.0102		0.00573	0.0100	mg/L	EPA 6020B
Iron	4.85		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	4.01		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.162		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.156		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: DUP-1	Lab ID: HN2402325-014					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	1.64		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00913	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	15.0		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	18.4		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.357		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.241		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-33	Lab ID: HN2402325-015					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0652		0.00573	0.0100	mg/L	EPA 6020B
Iron	4.10		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	3.94		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.0777		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.0762		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-32	Lab ID: HN2402325-016					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0260		0.00573	0.0100	mg/L	EPA 6020B

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting limits.

For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-32			Lab ID: HN2402325-016			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Iron	3.70		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	4.23		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.0402		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.0433		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-31			Lab ID: HN2402325-017			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.00918	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	1.35		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	1.21		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.368		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.373		0.00167	0.00500	mg/L	EPA 6020B

Sample Receipt Information

SAMPLE SUMMARY

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Workorder: HN2402325

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2402325-001	MW-34	GROUNDWATER	05/14/24 11:50	05/21/24 08:00
HN2402325-002	MW-29	GROUNDWATER	05/14/24 13:05	05/21/24 08:00
HN2402325-003	MW-30	GROUNDWATER	05/14/24 14:10	05/21/24 08:00
HN2402325-004	MW-18	GROUNDWATER	05/14/24 16:00	05/21/24 08:00
HN2402325-005	MW-19	GROUNDWATER	05/14/24 16:45	05/21/24 08:00
HN2402325-006	MW-26	GROUNDWATER	05/16/24 10:00	05/21/24 08:00
HN2402325-007	MW-23	GROUNDWATER	05/16/24 11:05	05/21/24 08:00
HN2402325-008	MW-25	GROUNDWATER	05/16/24 12:00	05/21/24 08:00
HN2402325-009	MW-21	GROUNDWATER	05/16/24 13:25	05/21/24 08:00
HN2402325-010	MW-22	GROUNDWATER	05/16/24 14:15	05/21/24 08:00
HN2402325-011	MW-10	GROUNDWATER	05/16/24 15:05	05/21/24 08:00
HN2402325-012	MW-1	GROUNDWATER	05/16/24 15:55	05/21/24 08:00
HN2402325-013	MW-20	GROUNDWATER	05/16/24 16:55	05/21/24 08:00
HN2402325-014	DUP-1	GROUNDWATER	05/16/24	05/21/24 08:00
HN2402325-015	MW-33	GROUNDWATER	05/17/24 10:40	05/21/24 08:00
HN2402325-016	MW-32	GROUNDWATER	05/17/24 11:50	05/21/24 08:00
HN2402325-017	MW-31	GROUNDWATER	05/17/24 12:35	05/21/24 08:00

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Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
Middletown, PA +1 717 944 5541
Valparaiso, IN +1 219 299 8127
Salt Lake City, UT +1 801 266 7700
South Charleston, WV +1 304 356 3168
Rochester, NY +1 585 288 5380

Chain of Custody Form

COC ID: 063859

ALS Project Manager: | ALS Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Quote #		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	VOCs
Send Report To	Kevin Lund	Invoice Attn	Accounts Payable	D	
Address	2365 Haggerty Rd South	Address	2365 Haggerty Rd South	E	
				F	
City/State/Zip	Canton, MI, 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@mannikSmithgroup.com	e-Mail Address		J	

Environmental Division Holland
Work Order Reference
HN2402325

Telephone : +1 616 399 6070

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	Hold
1	MW-34	5/14/24	1150	GW	HNO_3	2	X	X			
2	MW-29		1305								
3	MW-30		1410								
4	MW-18		1600								
5	MW-19		1645								
6	MW-26	5/16/24	1000								
7	MW-23		1105		HNO_3/HCl	5	X	X	X		
8	MW-25		1200		HNO_3	2	X	X			
9	MW-24		1325		HNO_3	2	X	X			
10	MW-22		1415		HNO_3	2	X	X			

Sampler(s) Please Print & Sign: Kaitlin Koshurba / [redacted] KKoshurba

Shipment Method:

Turnaround Time in Business Days (BD): ☐ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD Other:

Results Due Date:

Relinquished by: Kaitlin Koshurba	Date: 5/20/24	Time:	Received by:	Notes: Rec'd 5/21/24 0800
Relinquished by:	Date: 5/20/24	Time:	Received by (Laboratory):	
Logged by (Laboratory): DFS	Date: 5/21/24	Time: 1100	Checked by (Laboratory):	

Cooler ID	Cooler Temp.
IR3	2.8°C
	pH 3.7

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS-COC-2022-R00

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Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
Middletown, PA +1 717 944 5541
Valparaiso, IN +1 219 299 8127
Salt Lake City, UT +1 801 266 7700
South Charleston, WV +1 304 356 3168
Rochester, NY +1 585 288 5380

Chain of Custody Form

COC ID: 063863

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Quote #		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	VOCs
Send Report To	Kevin Lund	Invoice Attn	Accounts Payable	D	
Address	2365 S Haggerty Rd	Address	2365 S Haggerty Rd	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@mannikSmithgroup.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
11	MW-10	5/16/24	1505	GW	HCl/HNO3	5	X	X	X								
12	MW-1	↓	1555	↓	HNO3	2	X	X									
13	MW-20	↓	1655	↓	↓	↓	↓	↓									
14	DUP-1	↓	0000	↓	↓	↓	↓	↓									
15	MW-33	5/17/24	1040	↓	↓	↓	↓	↓									
16	MW-32	↓	1150	↓	↓	↓	↓	↓									
17	MW-31	↓	1235	↓	↓	↓	↓	↓									
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Kaitlin Koshurba / [signature]

Shipment Method:

Turnaround Time in Business Days (BD): ☐ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD Other:

Results Due Date:

Relinquished by: Kaitlin Koshurba	Date: 5/20/24	Time:	Received by: [signature]	Notes: Rec'd 5/21/24 0800	
Relinquished by: [signature]	Date: 5/20/24	Time:	Received by (Laboratory): [signature]	Cooler ID	Cooler Temp.
Logged by (Laboratory): DES	Date: 5/21/24	Time: 1100	Checked by (Laboratory):	IR3	2.8°C
					pH 3?

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Holland Sample Receiving Checklist

Received by:	Diane F. Shaw
Date/Time:	5/21/24 0800
Carrier Name:	Courier
Shipping container/cooler in good condition?	(Yes) / No / Not Present
Custody seals intact on shipping container/cooler?	Yes / No / (Not Present)
Custody seals intact on sample bottles?	Yes / No / (Not Present)
Chain of Custody present?	(Yes) / No
COC signed when relinquished and received?	(Yes) / No
COC agrees with sample labels?	(Yes) / No
Samples in proper container/bottle?	(Yes) / No
Sample containers intact?	(Yes) / No
Sufficient sample volume for indicated test?	(Yes) / No
All samples received within holding time?	(Yes) / No
Container/Temp Blank temperature in compliance?	(Yes) / No
Temperature(s) (°C):	2.8 | 3.8 c
Thermometer(s):	1R3
Sample(s) received on ice?	(Yes) / No
Matrix/Matrices:	GW
Cooler(s)/Kit(s):	1
Date/Time sample(s) sent to storage:	5/21/24 1130
Water – VOA vials have zero headspace?	(Yes) / No / No Vials
Water – pH acceptable upon receipt?	(Yes) / No / N/A
pH strip lot #: 37	< 2 X > 12 _____ Other _____
pH adjusted (note adjustments below)?	Yes / (No) / N/A
pH adjusted by:	_____
Login Notes:	

Miscellaneous Forms

REPORT QUALIFIERS AND DEFINITIONS

*	Value exceeds Regulatory Limit (if MCL displayed)
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Analyte accreditation is not offered
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
V	The Continuing Calibration Verification was outside of control criteria
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Holland Laboratory Certifications[1]

Agency	Type	ID	Issued	Expires
Alabama	Drinking Water (Secondary)	42500	1/1/2024	12/31/2024
Colorado	UST		1/1/2024	6/30/2024
Connecticut	Drinking Water (Secondary)	PH-0155	1/23/2023	12/31/2024
Florida	NELAP (Primary)	E871106	6/28/2023	6/30/2024
Illinois	NELAP (Secondary)	200076	12/14/2023	12/31/2024
Indiana	Drinking Water (Secondary)	C-MI-08	4/4/2024	9/4/2026
Iowa	State Specific	403	9/18/2023	9/1/2025
Kansas	NELAP (Secondary)	E-10411	7/26/2023	7/31/2024
Kentucky	Waste Water	KY98004	12/5/2023	12/31/2024
Kentucky	UST	120474	7/6/2023	6/30/2024
Michigan	Drinking Water (Primary)	0022	12/19/2023	9/4/2026
Minnesota	NELAP (Secondary)	026-999-449	12/29/2023	12/31/2024
New Jersey	NELAP (Secondary)	MI015	6/5/2023	6/30/2024
New York	Drinking Water (Secondary)	12128	3/29/2024	4/1/2025
North Dakota	State Specific	R-192	9/12/2023	6/30/2024
Ohio	Drinking Water (Secondary)	87783	7/5/2023	6/30/2024
Pennsylvania	NELAP (Secondary)	68-03827	12/21/23	7/31/2024
Texas	NELAP (Secondary)	T104704494	2/1/2024	1/31/2025
USDA	Domestic CA	Soil-MI-007	8/21/2023	2/18/2025
USDA	Soil Import	P330-19-00039	3/3/2023	3/3/2026
West Virginia	State Specific	355	8/25/2023	8/31/2024
Wisconsin	State Specific	399084510	8/11/2023	8/31/2024

1 - Scope available upon request

ANALYST SUMMARY

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill		

Sample Name: MW-34
Laboratory Code: HN2402325-001
Sample Matrix: GROUNDWATER

Date Collected: 05/14/24
Date Received: 05/21/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1462008	Chloe Patrick	2270844	Denise Coffey
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-29
Laboratory Code: HN2402325-002
Sample Matrix: GROUNDWATER

Date Collected: 05/14/24
Date Received: 05/21/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1462008	Chloe Patrick	2270844	Denise Coffey
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-30
Laboratory Code: HN2402325-003
Sample Matrix: GROUNDWATER

Date Collected: 05/14/24
Date Received: 05/21/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-18
Laboratory Code: HN2402325-004
Sample Matrix: GROUNDWATER

Date Collected: 05/14/24
Date Received: 05/21/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

ANALYST SUMMARY

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill

Sample Name: MW-19 **Date Collected:** 05/14/24
Laboratory Code: HN2402325-005 **Date Received:** 05/21/24
Sample Matrix: GROUNDWATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-26 **Date Collected:** 05/16/24
Laboratory Code: HN2402325-006 **Date Received:** 05/21/24
Sample Matrix: GROUNDWATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-23 **Date Collected:** 05/16/24
Laboratory Code: HN2402325-007 **Date Received:** 05/21/24
Sample Matrix: GROUNDWATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson
EPA 8260D	1467815	John Garvale	2279849	Nathan Jenkins

Sample Name: MW-25 **Date Collected:** 05/16/24
Laboratory Code: HN2402325-008 **Date Received:** 05/21/24
Sample Matrix: GROUNDWATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

ANALYST SUMMARY

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill

Sample Name: MW-21 **Date Collected:** 05/16/24
Laboratory Code: HN2402325-009 **Date Received:** 05/21/24
Sample Matrix: GROUNDWATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-22 **Date Collected:** 05/16/24
Laboratory Code: HN2402325-010 **Date Received:** 05/21/24
Sample Matrix: GROUNDWATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-10 **Date Collected:** 05/16/24
Laboratory Code: HN2402325-011 **Date Received:** 05/21/24
Sample Matrix: GROUNDWATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson
EPA 8260D	1467815	John Garvale	2279849	Nathan Jenkins

Sample Name: MW-1 **Date Collected:** 05/16/24
Laboratory Code: HN2402325-012 **Date Received:** 05/21/24
Sample Matrix: GROUNDWATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

ANALYST SUMMARY

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill		

Sample Name: MW-20
Laboratory Code: HN2402325-013
Sample Matrix: GROUNDWATER

Date Collected: 05/16/24
Date Received: 05/21/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: DUP-1
Laboratory Code: HN2402325-014
Sample Matrix: GROUNDWATER

Date Collected: 05/16/24
Date Received: 05/21/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-33
Laboratory Code: HN2402325-015
Sample Matrix: GROUNDWATER

Date Collected: 05/17/24
Date Received: 05/21/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-32
Laboratory Code: HN2402325-016
Sample Matrix: GROUNDWATER

Date Collected: 05/17/24
Date Received: 05/21/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1469176	Nicolee Allen	2286546	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

ANALYST SUMMARY

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill		

Sample Name:	MW-31	**Date Collected:**	05/17/24
Laboratory Code:	HN2402325-017	**Date Received:**	05/21/24
Sample Matrix:	GROUNDWATER		

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1471644	Amber Luke	2290058	Stephanie Pierson
EPA 6020B	1471645	Amber Luke	2288538	Stephanie Pierson

Sample Results

Organics

Analytical Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill/	**Date Collected:**	05/16/24 11:05
Sample Matrix:	GROUNDWATER	**Date Received:**	05/21/24 08:00
Sample Name:	MW-23	**Units:**	µg/L
Lab Code:	HN2402325-007		

Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D
Prep Method: EPA 5030B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1-Trichloroethane	ND U	1.00	0.460	1	05/30/24 23:23	05/30/24 18:20	
1,1,2,2-Tetrachloroethane	ND U	1.00	0.400	1	05/30/24 23:23	05/30/24 18:20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND U	1.00	0.520	1	05/30/24 23:23	05/30/24 18:20	
1,1,2-Trichloroethane	ND U	1.00	0.460	1	05/30/24 23:23	05/30/24 18:20	
1,1-Dichloroethane	ND U	1.00	0.440	1	05/30/24 23:23	05/30/24 18:20	
1,1-Dichloroethylene	ND U	1.00	0.400	1	05/30/24 23:23	05/30/24 18:20	
1,2,4-Trichlorobenzene	ND U	1.00	0.940	1	05/30/24 23:23	05/30/24 18:20	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	1.00	0.430	1	05/30/24 23:23	05/30/24 18:20	
1,2-Dibromoethane (EDB, Ethylene dibromide)	ND SU	1.00	0.410	1	05/30/24 23:23	05/30/24 18:20	
1,2-Dichlorobenzene (o-Dichlorobenzene)	ND U	1.00	0.320	1	05/30/24 23:23	05/30/24 18:20	
1,2-Dichloroethane (Ethylene dichloride)	ND U	1.00	0.440	1	05/30/24 23:23	05/30/24 18:20	
1,2-Dichloropropane	ND U	1.00	0.480	1	05/30/24 23:23	05/30/24 18:20	
1,3-Dichlorobenzene (m-Dichlorobenzene)	ND U	1.00	0.330	1	05/30/24 23:23	05/30/24 18:20	
1,4-Dichlorobenzene (p-Dichlorobenzene)	ND U	1.00	0.350	1	05/30/24 23:23	05/30/24 18:20	
2-Butanone (Methyl ethyl ketone, MEK)	ND U	5.00	2.43	1	05/30/24 23:23	05/30/24 18:20	
2-Hexanone	ND U	5.00	0.590	1	05/30/24 23:23	05/30/24 18:20	
4-Methyl-2-pentanone (MIBK)	ND U	1.00	0.520	1	05/30/24 23:23	05/30/24 18:20	
Acetone	ND U	10.0	4.53	1	05/30/24 23:23	05/30/24 18:20	
Benzene	**1.28**	1.00	0.460	1	05/30/24 23:23	05/30/24 18:20	
Bromodichloromethane	ND U	1.00	0.490	1	05/30/24 23:23	05/30/24 18:20	
Bromoform	ND U	1.00	0.560	1	05/30/24 23:23	05/30/24 18:20	
Carbon disulfide	ND U	1.00	0.560	1	05/30/24 23:23	05/30/24 18:20	
Carbon tetrachloride	ND U	1.00	0.490	1	05/30/24 23:23	05/30/24 18:20	
Chlorobenzene	**41.5**	1.00	0.400	1	05/30/24 23:23	05/30/24 18:20	
Chlorodibromomethane	ND U	1.00	0.400	1	05/30/24 23:23	05/30/24 18:20	
Chloroethane (Ethyl chloride)	ND U	1.00	0.680	1	05/30/24 23:23	05/30/24 18:20	
Chloroform	ND U	1.00	0.460	1	05/30/24 23:23	05/30/24 18:20	
cis-1,2-Dichloroethylene	ND U	1.00	0.420	1	05/30/24 23:23	05/30/24 18:20	
cis-1,3-Dichloropropene	ND U	1.00	0.570	1	05/30/24 23:23	05/30/24 18:20	
Cyclohexane	ND U	2.00	0.630	1	05/30/24 23:23	05/30/24 18:20	
Dichlorodifluoromethane (Freon-12)	ND U	1.00	0.680	1	05/30/24 23:23	05/30/24 18:20	
Ethylbenzene	ND U	1.00	0.340	1	05/30/24 23:23	05/30/24 18:20	
Isopropylbenzene	ND U	1.00	0.350	1	05/30/24 23:23	05/30/24 18:20	
Methyl acetate	ND U	2.00	0.590	1	05/30/24 23:23	05/30/24 18:20	
Methyl bromide (Bromomethane)	ND U	1.00	0.900	1	05/30/24 23:23	05/30/24 18:20	
Methyl chloride (Chloromethane)	ND U	5.00	0.830	1	05/30/24 23:23	05/30/24 18:20	
Methyl tert-butyl ether (MTBE)	ND U	1.00	0.450	1	05/30/24 23:23	05/30/24 18:20	
Methylcyclohexane	ND U	1.00	0.350	1	05/30/24 23:23	05/30/24 18:20	

Analytical Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill/	**Date Collected:**	05/16/24 11:05
Sample Matrix:	GROUNDWATER	**Date Received:**	05/21/24 08:00
Sample Name:	MW-23	**Units:**	µg/L
Lab Code:	HN2402325-007		

Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D
Prep Method: EPA 5030B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Methylene chloride (Dichloromethane)	ND U	5.00	0.860	1	05/30/24 23:23	05/30/24 18:20	
Styrene	ND U	1.00	0.330	1	05/30/24 23:23	05/30/24 18:20	
Tetrachloroethylene (Perchloroethylene)	ND U	1.00	0.390	1	05/30/24 23:23	05/30/24 18:20	
Toluene	ND U	1.00	0.450	1	05/30/24 23:23	05/30/24 18:20	
Total Xylene	ND U	2.00	0.810	1	05/30/24 23:23	05/30/24 18:20	
trans-1,2-Dichloroethylene	ND U	1.00	0.480	1	05/30/24 23:23	05/30/24 18:20	
trans-1,3-Dichloropropylene	ND U	1.00	0.380	1	05/30/24 23:23	05/30/24 18:20	
Trichloroethene (Trichloroethylene)	ND U	1.00	0.430	1	05/30/24 23:23	05/30/24 18:20	
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	ND U	1.00	0.520	1	05/30/24 23:23	05/30/24 18:20	
Vinyl chloride (Chloroethene)	ND U	1.00	0.530	1	05/30/24 23:23	05/30/24 18:20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	99.2	80 - 120	05/30/24 23:23	
4-Bromofluorobenzene	96.0	80 - 120	05/30/24 23:23	
Dibromofluoromethane	103	80 - 120	05/30/24 23:23	
Toluene-d8	96.6	80 - 120	05/30/24 23:23	

Analytical Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill/	**Date Collected:**	05/16/24 15:05
Sample Matrix:	GROUNDWATER	**Date Received:**	05/21/24 08:00
Sample Name:	MW-10	**Units:**	µg/L
Lab Code:	HN2402325-011		

Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D
Prep Method: EPA 5030B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1-Trichloroethane	ND	U	1.00	0.460	1	05/30/24 23:41	05/30/24 18:20	
1,1,2,2-Tetrachloroethane	ND	U	1.00	0.400	1	05/30/24 23:41	05/30/24 18:20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	U	1.00	0.520	1	05/30/24 23:41	05/30/24 18:20	
1,1,2-Trichloroethane	ND	U	1.00	0.460	1	05/30/24 23:41	05/30/24 18:20	
1,1-Dichloroethane	ND	U	1.00	0.440	1	05/30/24 23:41	05/30/24 18:20	
1,1-Dichloroethylene	ND	U	1.00	0.400	1	05/30/24 23:41	05/30/24 18:20	
1,2,4-Trichlorobenzene	ND	U	1.00	0.940	1	05/30/24 23:41	05/30/24 18:20	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	1.00	0.430	1	05/30/24 23:41	05/30/24 18:20	
1,2-Dibromoethane (EDB, Ethylene dibromide)	ND	SU	1.00	0.410	1	05/30/24 23:41	05/30/24 18:20	
1,2-Dichlorobenzene (o-Dichlorobenzene)	ND	U	1.00	0.320	1	05/30/24 23:41	05/30/24 18:20	
1,2-Dichloroethane (Ethylene dichloride)	ND	U	1.00	0.440	1	05/30/24 23:41	05/30/24 18:20	
1,2-Dichloropropane	ND	U	1.00	0.480	1	05/30/24 23:41	05/30/24 18:20	
1,3-Dichlorobenzene (m-Dichlorobenzene)	ND	U	1.00	0.330	1	05/30/24 23:41	05/30/24 18:20	
1,4-Dichlorobenzene (p-Dichlorobenzene)	ND	U	1.00	0.350	1	05/30/24 23:41	05/30/24 18:20	
2-Butanone (Methyl ethyl ketone, MEK)	ND	U	5.00	2.43	1	05/30/24 23:41	05/30/24 18:20	
2-Hexanone	ND	U	5.00	0.590	1	05/30/24 23:41	05/30/24 18:20	
4-Methyl-2-pentanone (MIBK)	ND	U	1.00	0.520	1	05/30/24 23:41	05/30/24 18:20	
Acetone	ND	U	10.0	4.53	1	05/30/24 23:41	05/30/24 18:20	
Benzene	**2.62**		1.00	0.460	1	05/30/24 23:41	05/30/24 18:20	
Bromodichloromethane	ND	U	1.00	0.490	1	05/30/24 23:41	05/30/24 18:20	
Bromoform	ND	U	1.00	0.560	1	05/30/24 23:41	05/30/24 18:20	
Carbon disulfide	ND	U	1.00	0.560	1	05/30/24 23:41	05/30/24 18:20	
Carbon tetrachloride	ND	U	1.00	0.490	1	05/30/24 23:41	05/30/24 18:20	
Chlorobenzene	**24.8**		1.00	0.400	1	05/30/24 23:41	05/30/24 18:20	
Chlorodibromomethane	ND	U	1.00	0.400	1	05/30/24 23:41	05/30/24 18:20	
Chloroethane (Ethyl chloride)	ND	U	1.00	0.680	1	05/30/24 23:41	05/30/24 18:20	
Chloroform	ND	U	1.00	0.460	1	05/30/24 23:41	05/30/24 18:20	
cis-1,2-Dichloroethylene	ND	U	1.00	0.420	1	05/30/24 23:41	05/30/24 18:20	
cis-1,3-Dichloropropene	ND	U	1.00	0.570	1	05/30/24 23:41	05/30/24 18:20	
Cyclohexane	ND	U	2.00	0.630	1	05/30/24 23:41	05/30/24 18:20	
Dichlorodifluoromethane (Freon-12)	ND	U	1.00	0.680	1	05/30/24 23:41	05/30/24 18:20	
Ethylbenzene	ND	U	1.00	0.340	1	05/30/24 23:41	05/30/24 18:20	
Isopropylbenzene	ND	U	1.00	0.350	1	05/30/24 23:41	05/30/24 18:20	
Methyl acetate	ND	U	2.00	0.590	1	05/30/24 23:41	05/30/24 18:20	
Methyl bromide (Bromomethane)	ND	U	1.00	0.900	1	05/30/24 23:41	05/30/24 18:20	
Methyl chloride (Chloromethane)	ND	U	5.00	0.830	1	05/30/24 23:41	05/30/24 18:20	
Methyl tert-butyl ether (MTBE)	ND	U	1.00	0.450	1	05/30/24 23:41	05/30/24 18:20	
Methylcyclohexane	ND	U	1.00	0.350	1	05/30/24 23:41	05/30/24 18:20	

Analytical Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill/	**Date Collected:**	05/16/24 15:05
Sample Matrix:	GROUNDWATER	**Date Received:**	05/21/24 08:00
Sample Name:	MW-10	**Units:**	µg/L
Lab Code:	HN2402325-011		

Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D
Prep Method: EPA 5030B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Methylene chloride (Dichloromethane)	ND U	5.00	0.860	1	05/30/24 23:41	05/30/24 18:20	
Styrene	ND U	1.00	0.330	1	05/30/24 23:41	05/30/24 18:20	
Tetrachloroethylene (Perchloroethylene)	ND U	1.00	0.390	1	05/30/24 23:41	05/30/24 18:20	
Toluene	ND U	1.00	0.450	1	05/30/24 23:41	05/30/24 18:20	
Total Xylene	ND U	2.00	0.810	1	05/30/24 23:41	05/30/24 18:20	
trans-1,2-Dichloroethylene	ND U	1.00	0.480	1	05/30/24 23:41	05/30/24 18:20	
trans-1,3-Dichloropropylene	ND U	1.00	0.380	1	05/30/24 23:41	05/30/24 18:20	
Trichloroethene (Trichloroethylene)	ND U	1.00	0.430	1	05/30/24 23:41	05/30/24 18:20	
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	ND U	1.00	0.520	1	05/30/24 23:41	05/30/24 18:20	
Vinyl chloride (Chloroethene)	ND U	1.00	0.530	1	05/30/24 23:41	05/30/24 18:20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97.6	80 - 120	05/30/24 23:41	
4-Bromofluorobenzene	95.9	80 - 120	05/30/24 23:41	
Dibromofluoromethane	101	80 - 120	05/30/24 23:41	
Toluene-d8	100	80 - 120	05/30/24 23:41	

Metals

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/14/24 11:50
Date Received: 05/21/24 08:00

Sample Name: MW-34
Laboratory Code: HN2402325-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0575**	mg/L	0.0100	0.00573	1	05/28/24 23:01	05/28/24 12:26	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:01	06/02/24 16:24	
Iron	EPA 6020B	**2.70**	mg/L	0.0800	0.0470	1	05/28/24 23:01	05/28/24 12:26	
Iron, dissolved	EPA 6020B	**1.79**	mg/L	0.0800	0.0470	1	06/04/24 20:01	06/02/24 16:24	
Manganese	EPA 6020B	**0.246**	mg/L	0.00500	0.00167	1	05/28/24 23:01	05/28/24 12:26	
Manganese, dissolved	EPA 6020B	**0.228**	mg/L	0.00500	0.00167	1	06/04/24 20:01	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/14/24 13:05
Date Received: 05/21/24 08:00

Sample Name: MW-29
Laboratory Code: HN2402325-002

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.00593 J**	mg/L	0.0100	0.00573	1	05/28/24 23:02	05/28/24 12:26	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:10	06/02/24 16:24	
Iron	EPA 6020B	**1.66**	mg/L	0.0800	0.0470	1	05/28/24 23:02	05/28/24 12:26	
Iron, dissolved	EPA 6020B	**1.40**	mg/L	0.0800	0.0470	1	06/04/24 20:10	06/02/24 16:24	
Manganese	EPA 6020B	**0.118**	mg/L	0.00500	0.00167	1	05/28/24 23:02	05/28/24 12:26	
Manganese, dissolved	EPA 6020B	**0.117**	mg/L	0.00500	0.00167	1	06/04/24 20:10	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/14/24 14:10
Date Received: 05/21/24 08:00

Sample Name: MW-30
Laboratory Code: HN2402325-003

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0639**	mg/L	0.0100	0.00573	1	06/03/24 19:15	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:12	06/02/24 16:24	
Iron	EPA 6020B	**0.474**	mg/L	0.0800	0.0470	1	06/03/24 19:15	05/31/24 15:14	
Iron, dissolved	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	06/04/24 20:12	06/02/24 16:24	
Manganese	EPA 6020B	**0.152**	mg/L	0.00500	0.00167	1	06/03/24 19:15	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.0421**	mg/L	0.00500	0.00167	1	06/04/24 20:12	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/14/24 16:00
Date Received: 05/21/24 08:00

Sample Name: MW-18
Laboratory Code: HN2402325-004

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0648**	mg/L	0.0100	0.00573	1	06/03/24 19:17	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:14	06/02/24 16:24	
Iron	EPA 6020B	**1.63**	mg/L	0.0800	0.0470	1	06/03/24 19:17	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**1.47**	mg/L	0.0800	0.0470	1	06/04/24 20:14	06/02/24 16:24	
Manganese	EPA 6020B	**0.424**	mg/L	0.00500	0.00167	1	06/03/24 19:17	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.397**	mg/L	0.00500	0.00167	1	06/04/24 20:14	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/14/24 16:45
Date Received: 05/21/24 08:00

Sample Name: MW-19
Laboratory Code: HN2402325-005

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.161**	mg/L	0.0100	0.00573	1	06/03/24 19:19	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	**0.00899 J**	mg/L	0.0100	0.00573	1	06/04/24 20:15	06/02/24 16:24	
Iron	EPA 6020B	**3.40**	mg/L	0.0800	0.0470	1	06/03/24 19:19	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**2.68**	mg/L	0.0800	0.0470	1	06/04/24 20:15	06/02/24 16:24	
Manganese	EPA 6020B	**0.489**	mg/L	0.00500	0.00167	1	06/03/24 19:19	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.485**	mg/L	0.00500	0.00167	1	06/04/24 20:15	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/16/24 10:00
Date Received: 05/21/24 08:00

Sample Name: MW-26
Laboratory Code: HN2402325-006

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0469**	mg/L	0.0100	0.00573	1	06/03/24 19:21	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:17	06/02/24 16:24	
Iron	EPA 6020B	**0.172**	mg/L	0.0800	0.0470	1	06/03/24 19:21	05/31/24 15:14	
Iron, dissolved	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	06/04/24 20:17	06/02/24 16:24	
Manganese	EPA 6020B	**0.00682**	mg/L	0.00500	0.00167	1	06/03/24 19:21	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	06/04/24 20:17	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/16/24 11:05
Date Received: 05/21/24 08:00

Sample Name: MW-23
Laboratory Code: HN2402325-007

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.112**	mg/L	0.0100	0.00573	1	06/03/24 19:26	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	**0.0105**	mg/L	0.0100	0.00573	1	06/04/24 20:19	06/02/24 16:24	
Iron	EPA 6020B	**11.8**	mg/L	0.0800	0.0470	1	06/03/24 19:26	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**10.9**	mg/L	0.0800	0.0470	1	06/04/24 20:19	06/02/24 16:24	
Manganese	EPA 6020B	**0.107**	mg/L	0.00500	0.00167	1	06/03/24 19:26	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.0852**	mg/L	0.00500	0.00167	1	06/04/24 20:19	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/16/24 12:00
Date Received: 05/21/24 08:00

Sample Name: MW-25
Laboratory Code: HN2402325-008

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.720**	mg/L	0.0100	0.00573	1	06/03/24 19:27	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	**0.00814 J**	mg/L	0.0100	0.00573	1	06/04/24 20:21	06/02/24 16:24	
Iron	EPA 6020B	**1.78**	mg/L	0.0800	0.0470	1	06/03/24 19:27	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**0.387**	mg/L	0.0800	0.0470	1	06/04/24 20:21	06/02/24 16:24	
Manganese	EPA 6020B	**0.617**	mg/L	0.00500	0.00167	1	06/03/24 19:27	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.597**	mg/L	0.00500	0.00167	1	06/04/24 20:21	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/16/24 13:25
Date Received: 05/21/24 08:00

Sample Name: MW-21
Laboratory Code: HN2402325-009

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0508**	mg/L	0.0100	0.00573	1	06/03/24 19:29	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:22	06/02/24 16:24	
Iron	EPA 6020B	**0.436**	mg/L	0.0800	0.0470	1	06/03/24 19:29	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**0.274**	mg/L	0.0800	0.0470	1	06/04/24 20:22	06/02/24 16:24	
Manganese	EPA 6020B	**0.256**	mg/L	0.00500	0.00167	1	06/03/24 19:29	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.215**	mg/L	0.00500	0.00167	1	06/04/24 20:22	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/16/24 14:15
Date Received: 05/21/24 08:00

Sample Name: MW-22
Laboratory Code: HN2402325-010

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0330**	mg/L	0.0100	0.00573	1	06/03/24 19:31	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:24	06/02/24 16:24	
Iron	EPA 6020B	**6.85**	mg/L	0.0800	0.0470	1	06/03/24 19:31	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**6.35**	mg/L	0.0800	0.0470	1	06/04/24 20:24	06/02/24 16:24	
Manganese	EPA 6020B	**0.212**	mg/L	0.00500	0.00167	1	06/03/24 19:31	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.211**	mg/L	0.00500	0.00167	1	06/04/24 20:24	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/16/24 15:05
Date Received: 05/21/24 08:00

Sample Name: MW-10
Laboratory Code: HN2402325-011

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0199**	mg/L	0.0100	0.00573	1	06/03/24 19:33	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	**0.00600 J**	mg/L	0.0100	0.00573	1	06/04/24 20:26	06/02/24 16:24	
Iron	EPA 6020B	**18.2**	mg/L	0.0800	0.0470	1	06/03/24 19:33	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**19.0**	mg/L	0.0800	0.0470	1	06/04/24 20:26	06/02/24 16:24	
Manganese	EPA 6020B	**0.598**	mg/L	0.00500	0.00167	1	06/03/24 19:33	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.599**	mg/L	0.00500	0.00167	1	06/04/24 20:26	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/16/24 15:55
Date Received: 05/21/24 08:00

Sample Name: MW-1
Laboratory Code: HN2402325-012

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**1.78**	mg/L	0.0100	0.00573	1	06/03/24 19:35	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	**0.0378**	mg/L	0.0100	0.00573	1	06/04/24 20:31	06/02/24 16:24	
Iron	EPA 6020B	**15.8**	mg/L	0.0800	0.0470	1	06/03/24 19:35	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**18.6**	mg/L	0.0800	0.0470	1	06/04/24 20:31	06/02/24 16:24	
Manganese	EPA 6020B	**0.350**	mg/L	0.00500	0.00167	1	06/03/24 19:35	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.260**	mg/L	0.00500	0.00167	1	06/04/24 20:31	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/16/24 16:55
Date Received: 05/21/24 08:00

Sample Name: MW-20
Laboratory Code: HN2402325-013

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.111**	mg/L	0.0100	0.00573	1	06/03/24 19:36	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	**0.0102**	mg/L	0.0100	0.00573	1	06/04/24 20:33	06/02/24 16:24	
Iron	EPA 6020B	**4.85**	mg/L	0.0800	0.0470	1	06/03/24 19:36	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**4.01**	mg/L	0.0800	0.0470	1	06/04/24 20:33	06/02/24 16:24	
Manganese	EPA 6020B	**0.162**	mg/L	0.00500	0.00167	1	06/03/24 19:36	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.156**	mg/L	0.00500	0.00167	1	06/04/24 20:33	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/16/24
Date Received: 05/21/24 08:00

Sample Name: DUP-1
Laboratory Code: HN2402325-014

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**1.64**	mg/L	0.0100	0.00573	1	06/03/24 19:38	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	**0.00913 J**	mg/L	0.0100	0.00573	1	06/04/24 20:35	06/02/24 16:24	
Iron	EPA 6020B	**15.0**	mg/L	0.0800	0.0470	1	06/03/24 19:38	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**18.4**	mg/L	0.0800	0.0470	1	06/04/24 20:35	06/02/24 16:24	
Manganese	EPA 6020B	**0.357**	mg/L	0.00500	0.00167	1	06/03/24 19:38	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.241**	mg/L	0.00500	0.00167	1	06/04/24 20:35	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/17/24 10:40
Date Received: 05/21/24 08:00

Sample Name: MW-33
Laboratory Code: HN2402325-015

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0652**	mg/L	0.0100	0.00573	1	06/03/24 19:40	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:37	06/02/24 16:24	
Iron	EPA 6020B	**4.10**	mg/L	0.0800	0.0470	1	06/03/24 19:40	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**3.94**	mg/L	0.0800	0.0470	1	06/04/24 20:37	06/02/24 16:24	
Manganese	EPA 6020B	**0.0777**	mg/L	0.00500	0.00167	1	06/03/24 19:40	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.0762**	mg/L	0.00500	0.00167	1	06/04/24 20:37	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/17/24 11:50
Date Received: 05/21/24 08:00

Sample Name: MW-32
Laboratory Code: HN2402325-016

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0260**	mg/L	0.0100	0.00573	1	06/03/24 19:42	05/31/24 15:14	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:38	06/02/24 16:24	
Iron	EPA 6020B	**3.70**	mg/L	0.0800	0.0470	1	06/03/24 19:42	05/31/24 15:14	
Iron, dissolved	EPA 6020B	**4.23**	mg/L	0.0800	0.0470	1	06/04/24 20:38	06/02/24 16:24	
Manganese	EPA 6020B	**0.0402**	mg/L	0.00500	0.00167	1	06/03/24 19:42	05/31/24 15:14	
Manganese, dissolved	EPA 6020B	**0.0433**	mg/L	0.00500	0.00167	1	06/04/24 20:38	06/02/24 16:24	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/17/24 12:35
Date Received: 05/21/24 08:00

Sample Name: MW-31
Laboratory Code: HN2402325-017

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.00918 J**	mg/L	0.0100	0.00573	1	06/05/24 00:10	06/02/24 16:25	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 20:40	06/02/24 16:24	
Iron	EPA 6020B	**1.35**	mg/L	0.0800	0.0470	1	06/05/24 00:10	06/02/24 16:25	
Iron, dissolved	EPA 6020B	**1.21**	mg/L	0.0800	0.0470	1	06/04/24 20:40	06/02/24 16:24	
Manganese	EPA 6020B	**0.368**	mg/L	0.00500	0.00167	1	06/05/24 00:10	06/02/24 16:25	
Manganese, dissolved	EPA 6020B	**0.373**	mg/L	0.00500	0.00167	1	06/04/24 20:40	06/02/24 16:24	

QC Summary Forms

Organics

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill
Sample Matrix: GROUNDWATER

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D **Analysis Lab Lot:** 2279849
Extraction Method: EPA 5030B

Sample Name	Lab Code	1,2-Dichloroethane-d4 80 - 120	4-Bromofluorobenzene 80 - 120	Dibromofluoromethane 80 - 120
MW-23	HN2402325-007	99.2	96.0	103
MW-10	HN2402325-011	97.6	95.9	101

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill
Sample Matrix: GROUNDWATER

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D **Analysis Lab Lot:** 2279849
Extraction Method: EPA 5030B

Sample Name	Lab Code	Toluene-d8 80 - 120
MW-23	HN2402325-007	96.6
MW-10	HN2402325-011	100

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill
Sample Matrix: WATER

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D **Analysis Lab Lot:** 2279849
Extraction Method: EPA 5030B

Sample Name	Lab Code	1,2-Dichloroethane-d4 80 - 120	4-Bromofluorobenzene 80 - 120	Dibromofluoromethane 80 - 120
Method Blank	QC-MRG2-1467815001	99.7	96.0	100
Laboratory Control Sample	QC-MRG2-1467815002	98.8	105	105

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill
Sample Matrix: WATER

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D **Analysis Lab Lot:** 2279849
Extraction Method: EPA 5030B

Sample Name	Lab Code	Toluene-d8 80 - 120
Method Blank	QC-MRG2-1467815001	99.0
Laboratory Control Sample	QC-MRG2-1467815002	101

QA/QC Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill/	**Date Collected:**	NA
Sample Matrix:	WATER	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	QC-MRG2-1467815001		

Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D
Prep Method: EPA 5030B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1-Trichloroethane	ND U	1.00	0.460	1	05/30/24 21:02	05/30/24 18:21	
1,1,2,2-Tetrachloroethane	ND U	1.00	0.400	1	05/30/24 21:02	05/30/24 18:21	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND U	1.00	0.520	1	05/30/24 21:02	05/30/24 18:21	
1,1,2-Trichloroethane	ND U	1.00	0.460	1	05/30/24 21:02	05/30/24 18:21	
1,1-Dichloroethane	ND U	1.00	0.440	1	05/30/24 21:02	05/30/24 18:21	
1,1-Dichloroethylene	ND U	1.00	0.400	1	05/30/24 21:02	05/30/24 18:21	
1,2,4-Trichlorobenzene	ND U	1.00	0.940	1	05/30/24 21:02	05/30/24 18:21	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	1.00	0.430	1	05/30/24 21:02	05/30/24 18:21	
1,2-Dibromoethane (EDB, Ethylene dibromide)	ND U	1.00	0.410	1	05/30/24 21:02	05/30/24 18:21	
1,2-Dichlorobenzene (o-Dichlorobenzene)	ND U	1.00	0.320	1	05/30/24 21:02	05/30/24 18:21	
1,2-Dichloroethane (Ethylene dichloride)	ND U	1.00	0.440	1	05/30/24 21:02	05/30/24 18:21	
1,2-Dichloropropane	ND U	1.00	0.480	1	05/30/24 21:02	05/30/24 18:21	
1,3-Dichlorobenzene (m-Dichlorobenzene)	ND U	1.00	0.330	1	05/30/24 21:02	05/30/24 18:21	
1,4-Dichlorobenzene (p-Dichlorobenzene)	ND U	1.00	0.350	1	05/30/24 21:02	05/30/24 18:21	
2-Butanone (Methyl ethyl ketone, MEK)	ND U	5.00	2.43	1	05/30/24 21:02	05/30/24 18:21	
2-Hexanone	ND U	5.00	0.590	1	05/30/24 21:02	05/30/24 18:21	
4-Methyl-2-pentanone (MIBK)	ND U	1.00	0.520	1	05/30/24 21:02	05/30/24 18:21	
Acetone	ND U	10.0	4.53	1	05/30/24 21:02	05/30/24 18:21	
Benzene	ND U	1.00	0.460	1	05/30/24 21:02	05/30/24 18:21	
Bromodichloromethane	ND U	1.00	0.490	1	05/30/24 21:02	05/30/24 18:21	
Bromoform	ND U	1.00	0.560	1	05/30/24 21:02	05/30/24 18:21	
Carbon disulfide	ND U	1.00	0.490	1	05/30/24 21:02	05/30/24 18:21	
Carbon tetrachloride	ND U	1.00	0.400	1	05/30/24 21:02	05/30/24 18:21	
Chlorobenzene	ND U	1.00	0.400	1	05/30/24 21:02	05/30/24 18:21	
Chlorodibromomethane	ND U	1.00	0.400	1	05/30/24 21:02	05/30/24 18:21	
Chloroethane (Ethyl chloride)	ND U	1.00	0.680	1	05/30/24 21:02	05/30/24 18:21	
Chloroform	ND U	1.00	0.460	1	05/30/24 21:02	05/30/24 18:21	
cis-1,2-Dichloroethylene	ND U	1.00	0.420	1	05/30/24 21:02	05/30/24 18:21	
cis-1,3-Dichloropropene	ND U	1.00	0.570	1	05/30/24 21:02	05/30/24 18:21	
Cyclohexane	ND U	2.00	0.630	1	05/30/24 21:02	05/30/24 18:21	
Dichlorodifluoromethane (Freon-12)	ND U	1.00	0.680	1	05/30/24 21:02	05/30/24 18:21	
Ethylbenzene	ND U	1.00	0.340	1	05/30/24 21:02	05/30/24 18:21	
Isopropylbenzene	ND U	1.00	0.350	1	05/30/24 21:02	05/30/24 18:21	
Methyl acetate	ND U	2.00	0.590	1	05/30/24 21:02	05/30/24 18:21	
Methyl bromide (Bromomethane)	ND U	1.00	0.900	1	05/30/24 21:02	05/30/24 18:21	
Methyl chloride (Chloromethane)	ND U	5.00	0.830	1	05/30/24 21:02	05/30/24 18:21	
Methyl tert-butyl ether (MTBE)	ND U	1.00	0.450	1	05/30/24 21:02	05/30/24 18:21	
Methylcyclohexane	ND U	1.00	0.350	1	05/30/24 21:02	05/30/24 18:21	

QA/QC Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill/	**Date Collected:**	NA
Sample Matrix:	WATER	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	QC-MRG2-1467815001		

Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D
Prep Method: EPA 5030B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Methylene chloride (Dichloromethane)	ND U	5.00	0.860	1	05/30/24 21:02	05/30/24 18:21	
Styrene	ND U	1.00	0.330	1	05/30/24 21:02	05/30/24 18:21	
Tetrachloroethylene (Perchloroethylene)	ND U	1.00	0.390	1	05/30/24 21:02	05/30/24 18:21	
Toluene	ND U	1.00	0.450	1	05/30/24 21:02	05/30/24 18:21	
Total Xylene	ND U	2.00	0.810	1	05/30/24 21:02	05/30/24 18:21	
trans-1,2-Dichloroethylene	ND U	1.00	0.480	1	05/30/24 21:02	05/30/24 18:21	
trans-1,3-Dichloropropylene	ND U	1.00	0.380	1	05/30/24 21:02	05/30/24 18:21	
Trichloroethene (Trichloroethylene)	ND U	1.00	0.430	1	05/30/24 21:02	05/30/24 18:21	
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	ND U	1.00	0.520	1	05/30/24 21:02	05/30/24 18:21	
Vinyl chloride (Chloroethene)	ND U	1.00	0.530	1	05/30/24 21:02	05/30/24 18:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	99.7	80 - 120	05/30/24 21:02	
4-Bromofluorobenzene	96.0	80 - 120	05/30/24 21:02	
Dibromofluoromethane	100	80 - 120	05/30/24 21:02	
Toluene-d8	99.0	80 - 120	05/30/24 21:02	

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill **Date Analyzed:** 05/30/2024
Sample Matrix: WATER **Date Extracted:** 05/30/2024

Laboratory Control Sample Summary
Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D **Units:** µg/L
Prep Method: EPA 5030B **Analysis Lab Lot:** 2279849

QC-MRG2-1467815002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane	17.6	20	88.0	75-119
1,1,2,2-Tetrachloroethane	18.5	20	92.3	80-123
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	18.4	20	91.8	64-133
1,1,2-Trichloroethane	19.3	20	96.7	83-118
1,1-Dichloroethane	18.1	20	90.4	73-122
1,1-Dichloroethylene	19.2	20	95.8	66-131
1,2,4-Trichlorobenzene	19.3	20	96.4	73-127
1,2-Dibromo-3-chloropropane (DBCP)	19.8	20	99.2	52-141
1,2-Dibromoethane (EDB, Ethylene dibromide)	33.3	20	166 S	60-159
1,2-Dichlorobenzene (o-Dichlorobenzene)	19.0	20	95.2	80-119
1,2-Dichloroethane (Ethylene dichloride)	17.0	20	85.2	78-121
1,2-Dichloropropane	17.8	20	88.8	78-120
1,3-Dichlorobenzene (m-Dichlorobenzene)	18.7	20	93.7	80-120
1,4-Dichlorobenzene (p-Dichlorobenzene)	19.0	20	94.8	81-119
2-Butanone (Methyl ethyl ketone, MEK)	16.5	20	82.7	69-147
2-Hexanone	22.7	20	114	67-140
4-Methyl-2-pentanone (MIBK)	27.2	20	136	68-199
Acetone	19.0	20	95.0	70-166
Benzene	18.7	20	93.4	78-120
Bromodichloromethane	20.0	20	99.8	73-126
Bromoform	18.8	20	94.2	60-124
Carbon disulfide	17.8	20	88.8	67-159
Carbon tetrachloride	18.5	20	92.6	69-124
Chlorobenzene	18.7	20	93.4	80-118
Chlorodibromomethane	17.8	20	88.8	63-117
Chloroethane (Ethyl chloride)	15.6	20	77.8	35-136
Chloroform	17.1	20	85.6	75-119
cis-1,2-Dichloroethylene	17.9	20	89.6	75-123
cis-1,3-Dichloropropene	17.6	20	87.8	69-120
Cyclohexane	17.6	20	88.1	66-128
Dichlorodifluoromethane (Freon-12)	9.58	20	47.9	36-133
Ethylbenzene	19.6	20	97.8	76-116
Isopropylbenzene	21.0	20	105	77-118
Methyl bromide (Bromomethane)	21.6	20	108	20-183
Methyl chloride (Chloromethane)	9.94	20	49.7	26-117
Methyl tert-butyl ether (MTBE)	19.8	20	98.9	77-137
Methylcyclohexane	18.5	20	92.6	66-125
Methylene chloride (Dichloromethane)	17.7	20	88.3	68-125
Styrene	19.4	20	96.8	76-123
Tetrachloroethylene (Perchloroethylene)	20.1	20	101	80-124
Toluene	18.7	20	93.6	78-116

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill **Date Analyzed:** 05/30/2024
Sample Matrix: WATER **Date Extracted:** 05/30/2024

Laboratory Control Sample Summary
Volatile Organic Compounds by GC-MS

Analysis Method: EPA 8260D **Units:** µg/L
Prep Method: EPA 5030B **Analysis Lab Lot:** 2279849

QC-MRG2-1467815002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Total Xylene	58.0	60	96.7	77-119
trans-1,2-Dichloroethylene	18.5	20	92.7	73-124
trans-1,3-Dichloropropylene	17.8	20	88.8	67-118
Trichloroethene (Trichloroethylene)	17.8	20	89.0	75-122
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	14.8	20	74.1	52-115
Vinyl chloride (Chloroethene)	13.1	20	65.3	49-122

Metals

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2402325
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Laboratory Code: QC-1462008-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	05/28/24 22:29	05/28/24 12:27	
Iron	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	05/28/24 22:29	05/28/24 12:27	
Manganese	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	05/28/24 22:29	05/28/24 12:27	

Analytical Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill/	**Date Collected:**	NA
Sample Matrix:	WATER	**Date Received:**	NA

Sample Name: Method Blank
Laboratory Code: QC-1469176-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/03/24 19:05	05/31/24 15:15	
Iron	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	06/03/24 19:05	05/31/24 15:15	
Manganese	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	06/03/24 19:05	05/31/24 15:15	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2402325
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Laboratory Code: QC-1471644-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/05/24 18:14	06/02/24 16:26	
Iron	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	06/05/24 18:14	06/02/24 16:26	
Manganese	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	06/05/24 18:14	06/02/24 16:26	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2402325
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Laboratory Code: QC-1471645-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/04/24 19:58	06/02/24 16:25	
Iron, dissolved	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	06/04/24 19:58	06/02/24 16:25	
Manganese, dissolved	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	06/04/24 19:58	06/02/24 16:25	

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2402325
Date Collected: 05/17/2024
Date Received: 05/17/2024
Date Analyzed: 05/28/2024
Date Extracted: 05/28/2024

Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2270844

Matrix Spike
QC-1462008-004

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.0404	0.145	0.1	104	75-125
Iron	2.22	11.9	10	96.5	75-125
Manganese	0.152	0.240	0.1	88.0	75-125

QA/QC Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402325
Project:	Racer Van Buren Landfill	**Date Collected:**	05/23/2024
Sample Matrix:	GROUNDWATER	**Date Received:**	05/25/2024
		Date Analyzed:	06/05/2024
		Date Extracted:	06/02/2024

Matrix Spike Summary
Metals

Sample Name:	Batch QC	**Units:**	mg/L
Laboratory Code:	Batch QC	**Analysis Lab Lot:**	2290058
Analysis Method:	EPA 6020B		
Prep Method:	EPA 3015A		

Matrix Spike
QC-1471644-004

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.0184	0.113	0.1	95.1	75-125
Iron	1.89	11.3	10	94.4	75-125
Manganese	0.167	0.254	0.1	87.0	75-125

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/14/2024
Date Received: 05/21/2024
Date Analyzed: 06/04/2024
Date Extracted: 06/02/2024

Matrix Spike Summary
Metals

Sample Name: MW-34
Laboratory Code: HN2402325-001
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2288538

Matrix Spike
QC-1471645-004

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, dissolved	ND	0.0979	0.1	93.8	75-125
Iron, dissolved	1.79	11.2	10	94.5	75-125
Manganese, dissolved	0.228	0.315	0.1	86.3	75-125

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2402325
Date Collected: 05/17/2024
Date Received: 05/17/2024
Date Analyzed: 05/28/2024
Date Extracted: 05/28/2024

Duplicate Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2270844

	Matrix Spike				Duplicate Matrix Spike					
	QC-1462008-004				QC-1462008-005					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	0.0404	0.145	0.1	104	0.188 RS	0.1	148 S	75-125	26.1 R	20
Iron	2.22	11.9	10	96.5	12.0	10	97.8	75-125	1.08	20
Manganese	0.152	0.240	0.1	88.0	0.241	0.1	89.1	75-125	0.492	20

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/23/2024
Date Received: 05/25/2024
Date Analyzed: 06/05/2024
Date Extracted: 06/02/2024

Duplicate Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2290058

	Matrix Spike				Duplicate Matrix Spike					
	QC-1471644-004				QC-1471644-005					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	0.0184	0.113	0.1	95.1	0.132	0.1	114	75-125	15.2	20
Iron	1.89	11.3	10	94.4	11.4	10	95.5	75-125	1.02	20
Manganese	0.167	0.254	0.1	87.0	0.254	0.1	87.2	75-125	0.0813	20

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: GROUNDWATER

Work Order: HN2402325
Date Collected: 05/14/2024
Date Received: 05/21/2024
Date Analyzed: 06/04/2024
Date Extracted: 06/02/2024

Duplicate Matrix Spike Summary
Metals

Sample Name: MW-34
Laboratory Code: HN2402325-001
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2288538

		Matrix Spike			Duplicate Matrix Spike					
		QC-1471645-004			QC-1471645-005					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum, dissolved	ND	0.0979	0.1	93.8	0.106	0.1	102	75-125	7.69	20
Iron, dissolved	1.79	11.2	10	94.5	11.3	10	95.1	75-125	0.552	20
Manganese, dissolved	0.228	0.315	0.1	86.3	0.317	0.1	88.3	75-125	0.646	20

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill **Date Analyzed:** 05/28/2024
Sample Matrix: WATER **Date Extracted:** 05/28/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B **Units:** mg/L
Prep Method: EPA 3015A **Analysis Lab Lot:** 2270844

QC-1462008-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.107	0.1	107	80-120
Iron	10.3	10	103	80-120
Manganese	0.0993	0.1	99.3	80-120

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2402325
Date Analyzed: 06/03/2024
Date Extracted: 05/31/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2286546

QC-1469176-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.104	0.1	104	80-120
Iron	9.72	10	97.2	80-120
Manganese	0.0963	0.1	96.3	80-120

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402325
Project: Racer Van Buren Landfill **Date Analyzed:** 06/05/2024
Sample Matrix: WATER **Date Extracted:** 06/02/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B **Units:** mg/L
Prep Method: EPA 3015A **Analysis Lab Lot:** 2290058

QC-1471644-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.0964	0.1	96.4	80-120
Iron	9.63	10	96.3	80-120
Manganese	0.0949	0.1	94.9	80-120

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2402325
Date Analyzed: 06/04/2024
Date Extracted: 06/02/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2288538

QC-1471645-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, dissolved	0.103	0.1	103	80-120
Iron, dissolved	9.46	10	94.6	80-120
Manganese, dissolved	0.0938	0.1	93.8	80-120

CERTIFICATE OF ANALYSIS

Work Order

HN2402532

Client

The Mannik & Smith Group, Inc.

Project

Racer Van Buren Landfill

Project Date

May 18, 2024

Reporting Contact

Kevin Lund

3352 128th Avenue, Holland, MI 49424 | 616-399-6070 | www.alsglobal.com

June 14, 2024

Kevin Lund
The Mannik & Smith Group, Inc.
2365 Haggerty Road South
Suite 100
Canton, MI 48188

Work Order: **HN2402532**

Re: **Racer Van Buren Landfill**

Dear Kevin ,
Enclosed are the results of the sample(s) submitted to our laboratory.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to contact me:
ADDRESS: 3352 128th Avenue, Holland, MI, USA PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Bill Carey
/S/ BILL CAREY

Project Manager

Narrative Documents

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402532
Project: Racer Van Buren Landfill **Date Received:** 25-May-2024
Sample Matrix: Groundwater

CASE NARRATIVE

Sample Receipt:

Four groundwater samples were received for analysis at ALS Environmental on 25-May-2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

The MS and MSD recoveries were outside of the control limit for sample "HN2402532-001" in batch "1471644"; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for these analytes: Ca, Na, Sr.
The concentration in the Method Blank was greater than the quantitation limit. Samples "HN2402532-003 and -004" in batch "1471646" were non-detect; therefore, no qualification is needed for this analyte: Al.
The MS and MSD recoveries were outside of the control limit for sample "HN2402532-002" in batch "1474778"; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for these analytes: Ca, Mg, Mn, Na, Sr.
Matrix spike value was outside upper limit of calibration for sample "HN2402532-002" in batch "1474778" for this analyte: B. Processed at equivalent dilution level as the parent.

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting limits.

For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-8	Lab ID: HN2402532-001					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0184		0.00573	0.0100	mg/L	EPA 6020B
Iron	1.89		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	1.80		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.167		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.173		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-7	Lab ID: HN2402532-002					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0286		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00675	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	5.17		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	4.69		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.528		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.498		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-5	Lab ID: HN2402532-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0601		0.00573	0.0100	mg/L	EPA 6020B
Iron	5.54		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	6.16		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.0619		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.0579		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-9	Lab ID: HN2402532-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0264		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00598	BJ	0.00573	0.0100	mg/L	EPA 6020B
Iron	29.0		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	24.3		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.243		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.233		0.00167	0.00500	mg/L	EPA 6020B

Sample Receipt Information

SAMPLE SUMMARY

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Workorder: HN2402532

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2402532-001	MW-8	GROUNDWATER	05/23/24 11:45	05/25/24 08:00
HN2402532-002	MW-7	GROUNDWATER	05/23/24 12:35	05/25/24 08:00
HN2402532-003	MW-5	GROUNDWATER	05/24/24 11:10	05/25/24 08:00
HN2402532-004	MW-9	GROUNDWATER	05/24/24 11:50	05/25/24 08:00

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South Charleston, WV +1 304 356 3168
Rochester, NY +1 585 288 5380

Chain of Custody Form

Page 1 of 1

COC ID: 063860

ALS Project Manager:
ALS Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Quote #		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	
Send Report To	Kevin Lund	Invoice Attn	Accounts Payable	D	
Address	2365 S Haggerty Rd	Address	2365 S Haggerty Rd	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	(734) 397-3100	Phone	(734) 397-3100	H	
Fax		Fax		I	
e-Mail Address	KLUND@manniksmithgroup.com	e-Mail Address		J	

Environmental Division Holland
Work Order Reference
HN2402532
Telephone : +1 616 399 6070

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-8	5/23/24	1145	GW	HNO_3	2	X	X									
2	MW-7	↓	1235	↓	↓	↓	↓	↓									
3	MW-5	5/24/24	1110	GW	HNO_3	2	X	X									
4	MW-9	↓	1150	↓	↓	↓	↓	↓									
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Kaitlin Kosnurba [signature]

Shipment Method:

Turnaround Time in Business Days (BD): ☐ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD Other: ____

Results Due Date:

Relinquished by: [signature]	Date: 5/24/24	Time: 1345	Received by: [signature]
Relinquished by: [signature]	Date: 5/24/24	Time: 1700	Received by (Laboratory): [signature]
Logged by (Laboratory): DFS	Date: 5/28/24	Time: 1230	Checked by (Laboratory):

Notes: Rec'd 5/25/24 0800 [signature]

Cooler ID	Cooler Temp.
1R3	3.2°C
	pH 37

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other ____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

right solutions.
right partner.

ALS Holland Sample Receiving Checklist

Received by:	Diane F. Shaw
Date/Time:	5/25/24 0800
Carrier Name:	Courier
Shipping container/cooler in good condition?	(Yes) / No / Not Present
Custody seals intact on shipping container/cooler?	Yes / No / (Not Present)
Custody seals intact on sample bottles?	Yes / No / (Not Present)
Chain of Custody present?	(Yes) / No
COC signed when relinquished and received?	(Yes) / No
COC agrees with sample labels?	(Yes) / No
Samples in proper container/bottle?	(Yes) / No
Sample containers intact?	(Yes) / No
Sufficient sample volume for indicated test?	(Yes) / No
All samples received within holding time?	(Yes) / No
Container/Temp Blank temperature in compliance?	(Yes) / No
Temperature(s) (°C):	3.2/4.2'c
Thermometer(s):	1R3
Sample(s) received on ice?	(Yes) / No
Matrix/Matrices:	GW
Cooler(s)/Kit(s):	1
Date/Time sample(s) sent to storage:	5/28/24 1230
Water – VOA vials have zero headspace?	Yes / No / (No Vials)
Water – pH acceptable upon receipt?	(Yes) / No / N/A
pH strip lot #: 37	< 2 X > 12 _____ Other _____
pH adjusted (note adjustments below)?	Yes / (No) / N/A
pH adjusted by:	_____

Login Notes:

HN-SHT-160-R00, Sample Receipt Checklist 1-25-24

Miscellaneous Forms

REPORT QUALIFIERS AND DEFINITIONS

*	Value exceeds Regulatory Limit (if MCL displayed)
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Analyte accreditation is not offered
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
V	The Continuing Calibration Verification was outside of control criteria
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Holland Laboratory Certifications[1]

Agency	Type	ID	Issued	Expires
Alabama	Drinking Water (Secondary)	42500	1/1/2024	12/31/2024
Colorado	UST		1/1/2024	6/30/2024
Connecticut	Drinking Water (Secondary)	PH-0155	1/23/2023	12/31/2024
Florida	NELAP (Primary)	E871106	6/28/2023	6/30/2024
Illinois	NELAP (Secondary)	200076	12/14/2023	12/31/2024
Indiana	Drinking Water (Secondary)	C-MI-08	4/4/2024	9/4/2026
Iowa	State Specific	403	9/18/2023	9/1/2025
Kansas	NELAP (Secondary)	E-10411	7/26/2023	7/31/2024
Kentucky	Waste Water	KY98004	12/5/2023	12/31/2024
Kentucky	UST	120474	7/6/2023	6/30/2024
Michigan	Drinking Water (Primary)	0022	12/19/2023	9/4/2026
Minnesota	NELAP (Secondary)	026-999-449	12/29/2023	12/31/2024
New Jersey	NELAP (Secondary)	MI015	6/5/2023	6/30/2024
New York	Drinking Water (Secondary)	12128	3/29/2024	4/1/2025
North Dakota	State Specific	R-192	9/12/2023	6/30/2024
Ohio	Drinking Water (Secondary)	87783	7/5/2023	6/30/2024
Pennsylvania	NELAP (Secondary)	68-03827	12/21/23	7/31/2024
Texas	NELAP (Secondary)	T104704494	2/1/2024	1/31/2025
USDA	Domestic CA	Soil-MI-007	8/21/2023	2/18/2025
USDA	Soil Import	P330-19-00039	3/3/2023	3/3/2026
West Virginia	State Specific	355	8/25/2023	8/31/2024
Wisconsin	State Specific	399084510	8/11/2023	8/31/2024

1 - Scope available upon request

ANALYST SUMMARY

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402532
Project:	Racer Van Buren Landfill		

Sample Name: MW-8
Laboratory Code: HN2402532-001
Sample Matrix: GROUNDWATER

Date Collected: 05/23/24
Date Received: 05/25/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1471644	Amber Luke	2290058	Stephanie Pierson
EPA 6020B	1471646	Amber Luke	2288538	Stephanie Pierson
EPA 6020B	1483968	Amber Luke	2305513	Stephanie Pierson

Sample Name: MW-7
Laboratory Code: HN2402532-002
Sample Matrix: GROUNDWATER

Date Collected: 05/23/24
Date Received: 05/25/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1474778	Amber Luke	2295826	Stephanie Pierson
EPA 6020B	1471646	Amber Luke	2288538	Stephanie Pierson
EPA 6020B	1483968	Amber Luke	2305513	Stephanie Pierson

Sample Name: MW-5
Laboratory Code: HN2402532-003
Sample Matrix: GROUNDWATER

Date Collected: 05/24/24
Date Received: 05/25/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1474778	Amber Luke	2295826	Stephanie Pierson
EPA 6020B	1471646	Amber Luke	2288538	Stephanie Pierson

Sample Name: MW-9
Laboratory Code: HN2402532-004
Sample Matrix: GROUNDWATER

Date Collected: 05/24/24
Date Received: 05/25/24

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1474778	Amber Luke	2295826	Stephanie Pierson
EPA 6020B	1471646	Amber Luke	2288538	Stephanie Pierson

Sample Results

Metals

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402532
Date Collected: 05/23/24 11:45
Date Received: 05/25/24 08:00

Sample Name: MW-8
Laboratory Code: HN2402532-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0184**	mg/L	0.0100	0.00573	1	06/05/24 00:51	06/02/24 16:25	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/10/24 17:32	06/09/24 16:32	
Iron	EPA 6020B	**1.89**	mg/L	0.0800	0.0470	1	06/05/24 00:51	06/02/24 16:25	
Iron, dissolved	EPA 6020B	**1.80**	mg/L	0.0800	0.0470	1	06/04/24 21:03	06/02/24 16:30	
Manganese	EPA 6020B	**0.167**	mg/L	0.00500	0.00167	1	06/05/24 00:51	06/02/24 16:25	
Manganese, dissolved	EPA 6020B	**0.173**	mg/L	0.00500	0.00167	1	06/04/24 21:03	06/02/24 16:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402532
Date Collected: 05/23/24 12:35
Date Received: 05/25/24 08:00

Sample Name: MW-7
Laboratory Code: HN2402532-002

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0286**	mg/L	0.0100	0.00573	1	06/06/24 13:24	06/04/24 16:41	
Aluminum, dissolved	EPA 6020B	**0.00675 J**	mg/L	0.0100	0.00573	1	06/10/24 17:34	06/09/24 16:32	
Iron	EPA 6020B	**5.17**	mg/L	0.0800	0.0470	1	06/06/24 13:24	06/04/24 16:41	
Iron, dissolved	EPA 6020B	**4.69**	mg/L	0.0800	0.0470	1	06/04/24 21:05	06/02/24 16:30	
Manganese	EPA 6020B	**0.528**	mg/L	0.00500	0.00167	1	06/06/24 13:24	06/04/24 16:41	
Manganese, dissolved	EPA 6020B	**0.498**	mg/L	0.00500	0.00167	1	06/04/24 21:05	06/02/24 16:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402532
Date Collected: 05/24/24 11:10
Date Received: 05/25/24 08:00

Sample Name: MW-5
Laboratory Code: HN2402532-003

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0601**	mg/L	0.0100	0.00573	1	06/06/24 13:29	06/04/24 16:41	
Aluminum, dissolved	EPA 6020B	ND BU	mg/L	0.0100	0.00573	1	06/04/24 21:07	06/02/24 16:30	
Iron	EPA 6020B	**5.54**	mg/L	0.0800	0.0470	1	06/06/24 13:29	06/04/24 16:41	
Iron, dissolved	EPA 6020B	**6.16**	mg/L	0.0800	0.0470	1	06/04/24 21:07	06/02/24 16:30	
Manganese	EPA 6020B	**0.0619**	mg/L	0.00500	0.00167	1	06/06/24 13:29	06/04/24 16:41	
Manganese, dissolved	EPA 6020B	**0.0579**	mg/L	0.00500	0.00167	1	06/04/24 21:07	06/02/24 16:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: GROUNDWATER

Work Order: HN2402532
Date Collected: 05/24/24 11:50
Date Received: 05/25/24 08:00

Sample Name: MW-9
Laboratory Code: HN2402532-004

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0264**	mg/L	0.0100	0.00573	1	06/06/24 13:31	06/04/24 16:41	
Aluminum, dissolved	EPA 6020B	**0.00598 BJ**	mg/L	0.0100	0.00573	1	06/04/24 21:08	06/02/24 16:30	
Iron	EPA 6020B	**29.0**	mg/L	0.0800	0.0470	1	06/06/24 13:31	06/04/24 16:41	
Iron, dissolved	EPA 6020B	**24.3**	mg/L	0.0800	0.0470	1	06/04/24 21:08	06/02/24 16:30	
Manganese	EPA 6020B	**0.243**	mg/L	0.00500	0.00167	1	06/06/24 13:31	06/04/24 16:41	
Manganese, dissolved	EPA 6020B	**0.233**	mg/L	0.00500	0.00167	1	06/04/24 21:08	06/02/24 16:30	

QC Summary Forms

Metals

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2402532
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Laboratory Code: QC-1471644-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/05/24 18:14	06/02/24 16:26	
Iron	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	06/05/24 18:14	06/02/24 16:26	
Manganese	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	06/05/24 18:14	06/02/24 16:26	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2402532
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Laboratory Code: QC-1471646-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, dissolved	EPA 6020B	**0.0203**	mg/L	0.0100	0.00573	1	06/04/24 20:52	06/02/24 16:31	
Iron, dissolved	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	06/04/24 20:52	06/02/24 16:31	
Manganese, dissolved	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	06/04/24 20:52	06/02/24 16:31	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2402532
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Laboratory Code: QC-1474778-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/06/24 13:21	06/04/24 16:42	
Iron	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	06/06/24 13:21	06/04/24 16:42	
Manganese	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	06/06/24 13:21	06/04/24 16:42	

Analytical Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402532
Project:	Racer Van Buren Landfill/	**Date Collected:**	NA
Sample Matrix:	WATER	**Date Received:**	NA

Sample Name: Method Blank
Laboratory Code: QC-1483968-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	06/10/24 17:16	06/09/24 16:33	
Iron, dissolved	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	06/10/24 17:16	06/09/24 16:33	
Manganese, dissolved	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	06/10/24 17:16	06/09/24 16:33	

QA/QC Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402532
Project:	Racer Van Buren Landfill	**Date Collected:**	05/23/2024
Sample Matrix:	GROUNDWATER	**Date Received:**	05/25/2024
		Date Analyzed:	06/05/2024
		Date Extracted:	06/02/2024

Matrix Spike Summary
Metals

Sample Name:	MW-8	**Units:**	mg/L
Laboratory Code:	HN2402532-001	**Analysis Lab Lot:**	2290058
Analysis Method:	EPA 6020B		
Prep Method:	EPA 3015A		

Matrix Spike
QC-1471644-004

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.0184	0.113	0.1	95.1	75-125
Iron	1.89	11.3	10	94.4	75-125
Manganese	0.167	0.254	0.1	87.0	75-125

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2402532
Date Collected: 05/21/2024
Date Received: 05/24/2024
Date Analyzed: 06/04/2024
Date Extracted: 06/02/2024

Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2288538

Matrix Spike
QC-1471646-004

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron, dissolved	0.0507	9.57	10	95.2	75-125
Manganese, dissolved	0.0130	0.107	0.1	94.2	75-125

QA/QC Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402532
Project:	Racer Van Buren Landfill	**Date Collected:**	05/23/2024
Sample Matrix:	GROUNDWATER	**Date Received:**	05/25/2024
		Date Analyzed:	06/06/2024
		Date Extracted:	06/04/2024

Matrix Spike Summary
Metals

Sample Name:	MW-7	**Units:**	mg/L
Laboratory Code:	HN2402532-002	**Analysis Lab Lot:**	2295826
Analysis Method:	EPA 6020B		
Prep Method:	EPA 3015A		

Matrix Spike
QC-1474778-004

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.0286	0.109	0.1	80.9	75-125
Iron	5.17	14.6	10	94.2	75-125
Manganese	0.528	0.608 O	0.1	NC	75-125

QA/QC Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402532
Project:	Racer Van Buren Landfill	**Date Collected:**	05/17/2024
Sample Matrix:	WATER	**Date Received:**	05/18/2024
		Date Analyzed:	06/10/2024
		Date Extracted:	06/09/2024

Matrix Spike Summary
Metals

Sample Name:	Batch QC	**Units:**	mg/L
Laboratory Code:	Batch QC	**Analysis Lab Lot:**	2305513
Analysis Method:	EPA 6020B		
Prep Method:	EPA 3015A		

Matrix Spike
QC-1483968-004

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, dissolved	0.0185	0.126	0.1	107	75-125
Iron, dissolved	0.0488	9.96	10	99.1	75-125
Manganese, dissolved	0.0799	0.176	0.1	96.1	75-125

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: GROUNDWATER

Work Order: HN2402532
Date Collected: 05/23/2024
Date Received: 05/25/2024
Date Analyzed: 06/05/2024
Date Extracted: 06/02/2024

Duplicate Matrix Spike Summary
Metals

Sample Name: MW-8
Laboratory Code: HN2402532-001
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2290058

	Matrix Spike				Duplicate Matrix Spike					
	QC-1471644-004				QC-1471644-005					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	0.0184	0.113	0.1	95.1	0.132	0.1	114	75-125	15.2	20
Iron	1.89	11.3	10	94.4	11.4	10	95.5	75-125	1.02	20
Manganese	0.167	0.254	0.1	87.0	0.254	0.1	87.2	75-125	0.0813	20

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2402532
Date Collected: 05/21/2024
Date Received: 05/24/2024
Date Analyzed: 06/04/2024
Date Extracted: 06/02/2024

Duplicate Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2288538

		Matrix Spike				Duplicate Matrix Spike					
		QC-1471646-004				QC-1471646-005					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Iron, dissolved	0.0507	9.57	10	95.2	9.44	10	93.9	75-125	1.37	20
Manganese, dissolved	0.0130	0.107	0.1	94.2	0.106	0.1	93.5	75-125	0.674	20

QA/QC Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2402532
Project:	Racer Van Buren Landfill	**Date Collected:**	05/23/2024
Sample Matrix:	GROUNDWATER	**Date Received:**	05/25/2024
		Date Analyzed:	06/06/2024
		Date Extracted:	06/04/2024

Duplicate Matrix Spike Summary
Metals

Sample Name:	MW-7	**Units:**	mg/L
Laboratory Code:	HN2402532-002	**Analysis Lab Lot:**	2295826
Analysis Method:	EPA 6020B		
Prep Method:	EPA 3015A		

		Matrix Spike			Duplicate Matrix Spike					
		QC-1474778-004			QC-1474778-005					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	0.0286	0.109	0.1	80.9	0.109	0.1	80.2	75-125	0.661	20
Iron	5.17	14.6	10	94.2	14.4	10	92.8	75-125	0.987	20
Manganese	0.528	0.608 O	0.1	NC	0.608 O	0.1	NC	75-125	0.0652	20

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2402532
Date Collected: 05/17/2024
Date Received: 05/18/2024
Date Analyzed: 06/10/2024
Date Extracted: 06/09/2024

Duplicate Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2305513

		Matrix Spike				Duplicate Matrix Spike					
		QC-1483968-004				QC-1483968-005					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum, dissolved	0.0185	0.126	0.1	107	0.118	0.1	99.0	75-125	6.75	20
Iron, dissolved	0.0488	9.96	10	99.1	9.88	10	98.3	75-125	0.790	20
Manganese, dissolved	0.0799	0.176	0.1	96.1	0.175	0.1	94.8	75-125	0.733	20

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402532
Project: Racer Van Buren Landfill **Date Analyzed:** 06/05/2024
Sample Matrix: WATER **Date Extracted:** 06/02/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B **Units:** mg/L
Prep Method: EPA 3015A **Analysis Lab Lot:** 2290058

QC-1471644-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.0964	0.1	96.4	80-120
Iron	9.63	10	96.3	80-120
Manganese	0.0949	0.1	94.9	80-120

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402532
Project: Racer Van Buren Landfill **Date Analyzed:** 06/04/2024
Sample Matrix: WATER **Date Extracted:** 06/02/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B **Units:** mg/L
Prep Method: EPA 3015A **Analysis Lab Lot:** 2288538

QC-1471646-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, dissolved	0.107	0.1	107	80-120
Iron, dissolved	9.46	10	94.6	80-120
Manganese, dissolved	0.0943	0.1	94.3	80-120

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402532
Project: Racer Van Buren Landfill **Date Analyzed:** 06/06/2024
Sample Matrix: WATER **Date Extracted:** 06/04/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B **Units:** mg/L
Prep Method: EPA 3015A **Analysis Lab Lot:** 2295826

QC-1474778-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.108	0.1	108	80-120
Iron	10.1	10	101	80-120
Manganese	0.100	0.1	100	80-120

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2402532
Project: Racer Van Buren Landfill **Date Analyzed:** 06/10/2024
Sample Matrix: WATER **Date Extracted:** 06/09/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B **Units:** mg/L
Prep Method: EPA 3015A **Analysis Lab Lot:** 2305513

QC-1483968-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, dissolved	0.103	0.1	103	80-120
Iron, dissolved	9.90	10	99.0	80-120
Manganese, dissolved	0.100	0.1	100	80-120

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Everett, WA +1 425 356 2600
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Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
Middletown, PA +1 717 944 5541
Valparaiso, IN +1 219 299 8127
Salt Lake City, UT +1 801 266 7700
South Charleston, WV +1 304 356 3168
Rochester, NY +1 585 288 5380

Chain of Custody Form

COC ID: 063855

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Quote #		Project Number	R23300031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	VOCs
Send Report To	Kevin Lund	Invoice Attn	Accounts Payable	D	
Address	2365 Haggerty Rd South	Address	2365 Haggerty Rd South	E	
				F	
City/State/Zip	Canton, MI, 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@mannikSmithgroup.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-34	5/14/24	1150	GW	HNO_3	2	X	X									
2	MW-29		1305														
3	MW-30		1410														
4	MW-18		1600														
5	MW-19		1645														
6	MW-26	5/16/24	1000														
7	MW-23		1105		HNO_3/HCl	5	X	X	X								
8	MW-25		1200		HNO_3	2	X	X									
9	MW-21		1325		HNO_3	2	X	X									
10	MW-22		1415		HNO_3	2	X	X									

Sampler(s) Please Print & Sign	Shipment Method	Turnaround Time in Business Days (BD)	Results Due Date:
Kaitlin Kosiurba / KKosiurba		Other: ☐ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD	

Relinquished by:	Date:	Time:	Received by:	Notes:
Kaitlin Kosiurba	5/20/24			
Relinquished by:	Date: 5/20/24	Time:	Received by (Laboratory):	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)
		☐ Level II Std QC ☐ TRRP Checklist ☐ Level III Std QC/Raw Date ☐ TRRP Level IV ☐ Level IV SW846/CLP ☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
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South Charleston, WV +1 304 356 3168
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Chain of Custody Form

COC ID: 463663

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Quote #		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	VOCs
Send Report To	Kevin Lund	Invoice Attn	Accounts Payable	D	
Address	2365 S Haggerty Rd	Address	2365 S Haggerty Rd	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@mannikSmithgroup.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-10	5/16/24	1505	GW	HCl/HNO_3	5	X	X	X								
2	MW-1	↓	1555	↓	HNO_3	2	X	X									
3	MW-20	↓	1655	↓	↓	↓	↓	↓									
4	DUP-1	↓	0000	↓	↓	↓	↓	↓									
5	MW-33	5/17/24	1040	↓	↓	↓	↓	↓									
6	MW-32	↓	1150	↓	↓	↓	↓	↓									
7	MW-31	↓	1235	↓	↓	↓	↓	↓									
8																	
9																	
10																	

Sampler(s) Please Print & Sign	Shipment Method	Turnaround Time in Business Days (BD)	Results Due Date:
Kaitlin Kashurba / KKashurba		☐ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD Other:	

Relinquished by:	Date:	Time:	Received by:	Notes:
Kaitlin Kashurba	5/20/24			
Relinquished by:	Date:	Time:	Received by (Laboratory):	
	5/20/24			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)
		☐ Level II Std QC ☐ TRRP Checklist ☐ Level III Std QC/Raw Date ☐ TRRP Level IV ☐ Level IV SW846/CLP ☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
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Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
Middletown, PA +1 717 944 5541
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Salt Lake City, UT +1 801 266 7700
South Charleston, WV +1 304 356 3168
Rochester, NY +1 585 288 5380

Chain of Custody Form

Page 1 of 1

COC ID: 065060

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Quote #		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	
Send Report To	Kevin Lund	Invoice Attn	Accounts Payable	D	
Address	2365 S Haggerty Rd	Address	2365 S Haggerty Rd	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	(734) 397-3100	Phone	(734) 397-3100	H	
Fax		Fax		I	
e-Mail Address	KLUND@mannikSmithgroup.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-8	5/23/24	1145	GW	HNO_3	2	X	X									
2	MW-7	↓	1235	↓	↓	↓	↓	↓									
3	MW-5	5/24/24	1110	GW	HNO_3	2	X	X									
4	MW-9	↓	1150	↓	↓	↓	↓	↓									
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign	Shipment Method	Turnaround Time in Business Days (BD)	Results Due Date:
Kaitlin Kosnurba KKosnurba		☐ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD Other:	

Relinquished by:	Date:	Time:	Received by:	Notes:
Relinquished by:	Date:	Time:	Received by (Laboratory):	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other _____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
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ALS-COC-2022-R00

CERTIFICATE OF ANALYSIS

Work Order

HN2403717

Client

The Mannik & Smith Group, Inc.

Project

Racer Van Buren Landfill

Project Date

June 22, 2024

Reporting Contact

Kevin Lund

3352 128th Avenue, Holland, MI 49424 | 616-399-6070 | www.alsglobal.com

July 17, 2024

Kevin Lund
The Mannik & Smith Group, Inc.
2365 Haggerty Road South
Suite 100
Canton, MI 48188

Work Order: **HN2403717**

Re: **Racer Van Buren Landfill**

Dear Kevin ,
Enclosed are the results of the sample(s) submitted to our laboratory.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to contact me:
ADDRESS: 3352 128th Avenue, Holland, MI, USA PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Bill Carey
/S/ BILL CAREY

Project Manager

Narrative Documents

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2403717
Project:	Racer Van Buren Landfill	**Date Received:**	02-Jul-2024
Sample Matrix:	Water		

CASE NARRATIVE

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 02-Jul-2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

The MS and MSD recoveries were outside of the control limit for sample "HN2403717-004" in batch "1541017"; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for this analyte: Ca.
The MS and MSD recovery was above the upper control limit for HN2403717-004 batch 1541017. The corresponding result in the parent sample may be biased high for this analyte:Al
The MS and MSD recovery was outside of the control limit for HN2403717-009 batch 1546783; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for this analyte:Ba, Ca, Mg, Mn, Na, Sr
MS and MSD was outside upper limit of calibration for HN2403717-009 batch 1546783. Processed at equivalent dilution level as the parent for Si

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting limits.

For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-14			Lab ID: HN2403717-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0480		0.00573	0.0100	mg/L	EPA 6020B
Iron	21.0		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	20.6		0.0470	0.0800	mg/L	EPA 6020B
Manganese	1.38		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	1.45		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-28			Lab ID: HN2403717-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.00889	J	0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00577	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	11.0		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	19.9		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.469		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.450		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-4			Lab ID: HN2403717-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0260		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00586	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	7.24		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	10.6		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.283		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.210		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-3			Lab ID: HN2403717-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.297	S	0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00664	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	4.34		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	3.80		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.167		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.210		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-12			Lab ID: HN2403717-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0673		0.00573	0.0100	mg/L	EPA 6020B
Iron	12.9		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	8.52		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.298		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.290		0.00167	0.00500	mg/L	EPA 6020B

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting limits.

For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-15	Lab ID: HN2403717-006					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.00710	J	0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00637	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	23.6		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	23.7		0.0470	0.0800	mg/L	EPA 6020B
Manganese	1.19		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	1.23		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-6	Lab ID: HN2403717-007					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0164		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.0134		0.00573	0.0100	mg/L	EPA 6020B
Iron	7.69		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	6.44		0.0470	0.0800	mg/L	EPA 6020B
Manganese	1.66		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	1.61		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-27	Lab ID: HN2403717-008					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.00597	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	3.10		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	2.84		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.0791		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.0902		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-16	Lab ID: HN2403717-009					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0242		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.0143		0.00573	0.0100	mg/L	EPA 6020B
Iron	23.8		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	24.1		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.670		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.788		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-13	Lab ID: HN2403717-010					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.00771	J	0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.0118		0.00573	0.0100	mg/L	EPA 6020B
Iron	18.7		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	19.7		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.241		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.279		0.00167	0.00500	mg/L	EPA 6020B

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting limits.

For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-17			Lab ID: HN2403717-011			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0295		0.00573	0.0100	mg/L	EPA 6020B
Aluminum, dissolved	0.00597	J	0.00573	0.0100	mg/L	EPA 6020B
Iron	3.06		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	2.94		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.384		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.428		0.00167	0.00500	mg/L	EPA 6020B

CLIENT ID: MW-11			Lab ID: HN2403717-012			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum	0.0130		0.00573	0.0100	mg/L	EPA 6020B
Iron	2.63		0.0470	0.0800	mg/L	EPA 6020B
Iron, dissolved	2.40		0.0470	0.0800	mg/L	EPA 6020B
Manganese	0.157		0.00167	0.00500	mg/L	EPA 6020B
Manganese, dissolved	0.141		0.00167	0.00500	mg/L	EPA 6020B

Sample Receipt Information

SAMPLE SUMMARY

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Workorder: HN2403717

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2403717-001	MW-14	WATER	06/27/24 16:03	07/02/24 06:30
HN2403717-002	MW-28	WATER	06/27/24 17:48	07/02/24 06:30
HN2403717-003	MW-4	WATER	06/28/24 10:10	07/02/24 06:30
HN2403717-004	MW-3	WATER	06/28/24 11:27	07/02/24 06:30
HN2403717-005	MW-12	WATER	06/28/24 11:34	07/02/24 06:30
HN2403717-006	MW-15	WATER	06/28/24 13:05	07/02/24 06:30
HN2403717-007	MW-6	WATER	06/28/24 14:43	07/02/24 06:30
HN2403717-008	MW-27	WATER	06/28/24 16:10	07/02/24 06:30
HN2403717-009	MW-16	WATER	06/28/24 18:04	07/02/24 06:30
HN2403717-010	MW-13	WATER	06/28/24 18:51	07/02/24 06:30
HN2403717-011	MW-17	WATER	07/01/24 13:33	07/02/24 06:30
HN2403717-012	MW-11	WATER	07/01/24 12:13	07/02/24 06:30

ALS Environmental

Laboratory location:

Chain of Custody Form

Page 1 of 2

ALS Project Manager:

Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Work Order		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	
Send Report To	Kevin Lund	Invoice Attn.	Acounts Payable	D	
Address	2365 Haggerty Rd South	Address	2365 Haggerty Rd South	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@mannikSmithgroup.com	e-Mail Address		J	

Environmental Division Holland

Work Order Reference

HN2403717

Telephone : +1 616 399 6070

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-14	6/27/24	16:03	GW	HNO_3	2	X	X									
2	MW-28	↓	17:48	↓	↓	↓	↓	↓									
3	MW-4	6/28/24	10:10														
4	MW-3		11:27														
5	MW-12		11:34														
6	MW-15		13:05														
7	MW-6		14:43														
8	MW-27		16:10														
9	MW-16		18:04														
10	MW-13	↓	18:51	↓	↓	↓	↓	↓									

Sampler(s): Please Print & Sign: Rose Allen

Shipment Method:

Required Turnaround Time: ☐ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date: 7/1/24	Time: 16:19	Received by:	Notes:	
Relinquished by:	Date: 7/1/24	Time: 16:19	Received by (Laboratory): 7-2-24 6:30	Cooler Temp.	QC Package: (Check Box Below)
Logged by (Laboratory):	Date: 7-2-24	Time: 8:40	Checked by (Laboratory):	4.0c DF	☐ Level II: Standard QC ☐ TRRP-Checklist
					☐ Level III: Std QC + Raw Data ☐ TRRP Level IV
					☐ Level IV: SW846 CLP-Like
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035				PH 3-7	☐ Other:

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

ALS Environmental

Laboratory location:

Chain of Custody Form

Page 2 of 2

ALS Project Manager: | Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Work Order		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	
Send Report To	Kevin Lund	Invoice Attn.	Acounts payable	D	
Address	2365 Haggerty Rd South	Address	2365 Haggerty Rd South	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@mannikSmithgroup.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-17	7/1/2024	13:33	GW	HNO_3	2	X	X									
2	MW-11	7/1/2024	12:13	↓	↓	↓	↓	↓									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign: Rose Allen

Shipment Method:

Required Turnaround Time: ☐STD 10 Wk Days ☐5 Wk Days ☐2 Wk Days ☐24 Hour ☐Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
	7/1/24	16:19		
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler Temp.
	7/1/24	1619	Q5 Calib Krafts 7-2-24 6:30	4.0c
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	
Calib Krafts	7-2-24	8:40		pH37

QC Package: (Check Box Below)

- ☐ Level II: Standard QC
- ☐ Level III: Std QC + Raw Data
- ☐ Level IV: SW846 CLP-Like
- ☐ Other: _____
- ☐ TRRP-Checklist
- ☐ TRRP Level IV

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

ALS Holland Sample Receiving Checklist

Received by:	Caleb Kamp
Date/Time:	7-1-24 6:30
Carrier Name:	QC
Shipping container/cooler in good condition?	(Yes) / No / Not Present
Custody seals intact on shipping container/cooler?	Yes / No / (Not Present)
Custody seals intact on sample bottles?	Yes / No / (Not Present)
Chain of Custody present?	(Yes) / No
COC signed when relinquished and received?	(Yes) / No
COC agrees with sample labels?	(Yes) / No
Samples in proper container/bottle?	(Yes) / No
Sample containers intact?	(Yes) / No
Sufficient sample volume for indicated test?	(Yes) / No
All samples received within holding time?	(Yes) / No
Container/Temp Blank temperature in compliance?	(Yes) / No
Temperature(s) (°C):	4.0c
Thermometer(s):	DF2
Sample(s) received on ice?	(Yes) / No
Matrix/Matrices:	water
Cooler(s)/Kit(s):	1
Date/Time sample(s) sent to storage:	7-2-24
Water – VOA vials have zero headspace?	Yes / No / (No Vials)
Water – pH acceptable upon receipt?	(Yes) / No / N/A
pH strip lot #: 37	< 2 ✓ > 12 _____ Other _____
pH adjusted (note adjustments below)?	Yes / No / (N/A)
pH adjusted by:	_____
Login Notes:	

ALS Environmental

Laboratory location:

Chain of Custody Form

Page 1 of 2

ALS Project Manager: | **Work Order #:**

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Work Order		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	
Send Report To	Kevin Lund	Invoice Attn.	Acounts Payable	D	
Address	2365 Haggerty Rd South	Address	2365 Haggerty Rd South	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@manniksmithgroup.com	e-Mail Address		J	

Environmental Division Holland

Work Order Reference

HN2403717

Telephone +1 616 399 6070

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-14	6/27/24	16:03	GW	HNO_3	2	X	X									
2	MW-28	↓	17:48	↓	↓	↓	↓	↓									
3	MW-4	6/28/24	10:10														
4	MW-3		11:27														
5	MW-12		11:34														
6	MW-15		13:05														
7	MW-6		14:43														
8	MW-27		16:10														
9	MW-16		18:04														
10	MW-13	↓	18:51	↓	↓	↓	↓	↓									

Sampler(s): Please Print & Sign: Rose Allen

Shipment Method:

Required Turnaround Time: ☐STD 10 Wk Days ☐5 Wk Days ☐2 Wk Days ☐24 Hour ☐Other

Results Due Date:

	Date:	Time:		
Relinquished by:	7/1/24	16:19	Received by:	Notes:
Relinquished by:	7/1/24	16:19	Received by (Laboratory): 7-2-24 6:30	Cooler Temp.
Logged by (Laboratory):	7-2-24	8:40	Checked by (Laboratory):	4.0c Pfz

QC Package: (Check Box Below)

- ☐ Level II: Standard QC
- ☐ Level III: Std QC + Raw Data
- ☐ Level IV: SW846 CLP-Like
- ☐ TRRP-Checklist
- ☐ TRRP Level IV
- ☐ Other:

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035

PH 3-7

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

ALS Environmental

Laboratory location:

Chain of Custody Form

Page 2 of 2

ALS Project Manager:		Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Von Buren Landfill	A	Dissolved Metals
Work Order		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	
Send Report To	Kevin Lund	Invoice Attn.	Acounts payable	D	
Address	2365 Haggerty Rd South	Address	2365 Haggerty Rd South	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@mannıksmithgroup.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-17	7/1/2024	13:33	GW	HNO_3	2	X	X									
2	MW-11	7/1/2024	12:13	↓	↓	↓	↓	↓									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign: Rose Allen [signature]

Shipment Method:

Required Turnaround Time: ☐ Other ______ ☐ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
[signature]	7/1/24	16:19	[signature]	

Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler Temp.	QC Package: (Check Box Below)	
[signature]	7/1/24	1619	Q5 [signature] 7-2-24 6:30		☐ Level II: Standard QC	☐ TRRP-Checklist
Logged by (Laboratory): [signature]	Date: 7-2-24	Time: 8:40	Checked by (Laboratory):	4.0 DC	☐ Level III: Std QC + Raw Data	☐ TRRP Level IV
				pH37	☐ Level IV: SW846 CLP-Like	
					Other: ______	

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

ALS Holland Sample Receiving Checklist

Received by:	Caleb Kamp
Date/Time:	7-1-24 6:30
Carrier Name:	QC
Shipping container/cooler in good condition?	(Yes) / No / Not Present
Custody seals intact on shipping container/cooler?	Yes / No / (Not Present)
Custody seals intact on sample bottles?	Yes / No / (Not Present)
Chain of Custody present?	(Yes) / No
COC signed when relinquished and received?	(Yes) / No
COC agrees with sample labels?	(Yes) / No
Samples in proper container/bottle?	(Yes) / No
Sample containers intact?	(Yes) / No
Sufficient sample volume for indicated test?	(Yes) / No
All samples received within holding time?	(Yes) / No
Container/Temp Blank temperature in compliance?	(Yes) / No
Temperature(s) (°C):	4.0c
Thermometer(s):	DF2
Sample(s) received on ice?	(Yes) / No
Matrix/Matrices:	water
Cooler(s)/Kit(s):	1
Date/Time sample(s) sent to storage:	7-2-24
Water – VOA vials have zero headspace?	Yes / No / (No Vials)
Water – pH acceptable upon receipt?	(Yes) / No / N/A
pH strip lot #: 37	< 2 ✓ > 12 _____ Other _____
pH adjusted (note adjustments below)?	Yes / No / (N/A)
pH adjusted by:	_____
Login Notes:	

Miscellaneous Forms

REPORT QUALIFIERS AND DEFINITIONS

*	Value exceeds Regulatory Limit (if MCL displayed)
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Analyte accreditation is not offered
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
V	The Continuing Calibration Verification was outside of control criteria
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Holland Laboratory Certifications[1]

Agency	Type	ID	Issued	Expires
Alabama	Drinking Water (Secondary)	42500	1/1/2024	12/31/2024
Colorado	UST		6/21/2024	6/30/2025
Connecticut	Drinking Water (Secondary)	PH-0155	1/23/2023	12/31/2024
Florida	NELAP (Primary)	E871106	7/1/2024	6/30/2025
Illinois	NELAP (Secondary)	200076	12/14/2023	12/31/2024
Indiana	Drinking Water (Secondary)	C-MI-08	4/4/2024	9/4/2026
Iowa	State Specific	403	9/18/2023	9/1/2025
Kansas	NELAP (Secondary)	E-10411	7/26/2023	7/31/2024
Kentucky	Waste Water	KY98004	12/5/2023	12/31/2024
Kentucky	UST	120474	6/24/24	6/30/2025
Michigan	Drinking Water (Primary)	0022	12/19/2023	9/4/2026
Minnesota	NELAP (Secondary)	026-999-449	12/29/2023	12/31/2024
New Jersey	NELAP (Secondary)	MI015	7/1/2024	6/30/2025
New York	Drinking Water (Secondary)	12128	3/29/2024	4/1/2025
North Dakota	State Specific	R-192	9/12/2023	6/30/2024
Ohio	Drinking Water (Secondary)	87783	7/1/2024	6/30/2025
Pennsylvania	NELAP (Secondary)	68-03827	6/14/2024	7/31/2025
Texas	NELAP (Secondary)	T104704494	2/1/2024	1/31/2025
USDA	Domestic CA	Soil-MI-007	8/21/2023	2/18/2025
USDA	Soil Import	P330-19-00039	3/3/2023	3/3/2026
West Virginia	State Specific	355	6/24/2024	8/31/2025
Wisconsin	State Specific	399084510	8/11/2023	8/31/2024

1 - Scope available upon request

ANALYST SUMMARY

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2403717
Project: Racer Van Buren Landfill

Sample Name: MW-14 **Date Collected:** 06/27/24
Laboratory Code: HN2403717-001 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1529358	Nicolee Allen	2375366	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey

Sample Name: MW-28 **Date Collected:** 06/27/24
Laboratory Code: HN2403717-002 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey
EPA 6020B	1529358	Nicolee Allen	2375366	Stephanie Pierson

Sample Name: MW-4 **Date Collected:** 06/28/24
Laboratory Code: HN2403717-003 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1529358	Nicolee Allen	2375366	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey

Sample Name: MW-3 **Date Collected:** 06/28/24
Laboratory Code: HN2403717-004 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1529358	Nicolee Allen	2375366	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey

ANALYST SUMMARY

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2403717
Project: Racer Van Buren Landfill

Sample Name: MW-12 **Date Collected:** 06/28/24
Laboratory Code: HN2403717-005 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1529358	Nicolee Allen	2375366	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey

Sample Name: MW-15 **Date Collected:** 06/28/24
Laboratory Code: HN2403717-006 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1529358	Nicolee Allen	2375366	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey

Sample Name: MW-6 **Date Collected:** 06/28/24
Laboratory Code: HN2403717-007 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey
EPA 6020B	1529358	Nicolee Allen	2375366	Stephanie Pierson

Sample Name: MW-27 **Date Collected:** 06/28/24
Laboratory Code: HN2403717-008 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1541017	Alexa Montague	2395183	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey
EPA 6020B	1529358	Nicolee Allen	2375366	Stephanie Pierson

ANALYST SUMMARY

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2403717
Project: Racer Van Buren Landfill

Sample Name: MW-16 **Date Collected:** 06/28/24
Laboratory Code: HN2403717-009 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1541017	Alexa Montague	2395183	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey
EPA 6020B	1546783	Alexa Montague	2403145	Denise Coffey

Sample Name: MW-13 **Date Collected:** 06/28/24
Laboratory Code: HN2403717-010 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1541017	Alexa Montague	2395183	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey
EPA 6020B	1546783	Alexa Montague	2403145	Denise Coffey

Sample Name: MW-17 **Date Collected:** 07/01/24
Laboratory Code: HN2403717-011 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1541017	Alexa Montague	2395183	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey
EPA 6020B	1546783	Alexa Montague	2403145	Denise Coffey

Sample Name: MW-11 **Date Collected:** 07/01/24
Laboratory Code: HN2403717-012 **Date Received:** 07/02/24
Sample Matrix: WATER

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1541017	Alexa Montague	2395183	Stephanie Pierson
EPA 6020B	1541017	Alexa Montague	2399996	Denise Coffey

ANALYST SUMMARY

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2403717
Project:	Racer Van Buren Landfill		

Sample Name:	MW-11	**Date Collected:**	07/01/24
Laboratory Code:	HN2403717-012	**Date Received:**	07/02/24
Sample Matrix:	WATER		

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	1546783	Alexa Montague	2403145	Denise Coffey

Sample Results

Metals

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/27/24 16:03
Date Received: 07/02/24 06:30

Sample Name: MW-14
Laboratory Code: HN2403717-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0480**	mg/L	0.0100	0.00573	1	07/15/24 21:21	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	07/05/24 19:15	07/05/24 11:30	
Iron	EPA 6020B	**21.0**	mg/L	0.0800	0.0470	1	07/15/24 21:21	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**20.6**	mg/L	0.0800	0.0470	1	07/05/24 19:15	07/05/24 11:30	
Manganese	EPA 6020B	**1.38**	mg/L	0.00500	0.00167	1	07/15/24 21:21	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**1.45**	mg/L	0.00500	0.00167	1	07/05/24 19:15	07/05/24 11:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/27/24 17:48
Date Received: 07/02/24 06:30

Sample Name: MW-28
Laboratory Code: HN2403717-002

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.00889 J**	mg/L	0.0100	0.00573	1	07/15/24 21:23	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	**0.00577 J**	mg/L	0.0100	0.00573	1	07/05/24 19:17	07/05/24 11:30	
Iron	EPA 6020B	**11.0**	mg/L	0.0800	0.0470	1	07/15/24 21:23	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**19.9**	mg/L	0.0800	0.0470	1	07/05/24 19:17	07/05/24 11:30	
Manganese	EPA 6020B	**0.469**	mg/L	0.00500	0.00167	1	07/15/24 21:23	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**0.450**	mg/L	0.00500	0.00167	1	07/05/24 19:17	07/05/24 11:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/24 10:10
Date Received: 07/02/24 06:30

Sample Name: MW-4
Laboratory Code: HN2403717-003

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0260**	mg/L	0.0100	0.00573	1	07/15/24 21:25	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	**0.00586 J**	mg/L	0.0100	0.00573	1	07/05/24 19:19	07/05/24 11:30	
Iron	EPA 6020B	**7.24**	mg/L	0.0800	0.0470	1	07/15/24 21:25	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**10.6**	mg/L	0.0800	0.0470	1	07/05/24 19:19	07/05/24 11:30	
Manganese	EPA 6020B	**0.283**	mg/L	0.00500	0.00167	1	07/15/24 21:25	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**0.210**	mg/L	0.00500	0.00167	1	07/05/24 19:19	07/05/24 11:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/24 11:27
Date Received: 07/02/24 06:30

Sample Name: MW-3
Laboratory Code: HN2403717-004

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.297 S**	mg/L	0.0100	0.00573	1	07/15/24 21:27	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	**0.00664 J**	mg/L	0.0100	0.00573	1	07/05/24 19:21	07/05/24 11:30	
Iron	EPA 6020B	**4.34**	mg/L	0.0800	0.0470	1	07/15/24 21:27	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**3.80**	mg/L	0.0800	0.0470	1	07/05/24 19:21	07/05/24 11:30	
Manganese	EPA 6020B	**0.167**	mg/L	0.00500	0.00167	1	07/15/24 21:27	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**0.210**	mg/L	0.00500	0.00167	1	07/05/24 19:21	07/05/24 11:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/24 11:34
Date Received: 07/02/24 06:30

Sample Name: MW-12
Laboratory Code: HN2403717-005

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0673**	mg/L	0.0100	0.00573	1	07/15/24 21:32	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	07/05/24 19:22	07/05/24 11:30	
Iron	EPA 6020B	**12.9**	mg/L	0.0800	0.0470	1	07/15/24 21:32	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**8.52**	mg/L	0.0800	0.0470	1	07/05/24 19:22	07/05/24 11:30	
Manganese	EPA 6020B	**0.298**	mg/L	0.00500	0.00167	1	07/15/24 21:32	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**0.290**	mg/L	0.00500	0.00167	1	07/05/24 19:22	07/05/24 11:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/24 13:05
Date Received: 07/02/24 06:30

Sample Name: MW-15
Laboratory Code: HN2403717-006

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.00710 J**	mg/L	0.0100	0.00573	1	07/15/24 21:34	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	**0.00637 J**	mg/L	0.0100	0.00573	1	07/05/24 19:24	07/05/24 11:30	
Iron	EPA 6020B	**23.6**	mg/L	0.0800	0.0470	1	07/15/24 21:34	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**23.7**	mg/L	0.0800	0.0470	1	07/05/24 19:24	07/05/24 11:30	
Manganese	EPA 6020B	**1.19**	mg/L	0.00500	0.00167	1	07/15/24 21:34	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**1.23**	mg/L	0.00500	0.00167	1	07/05/24 19:24	07/05/24 11:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/24 14:43
Date Received: 07/02/24 06:30

Sample Name: MW-6
Laboratory Code: HN2403717-007

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0164**	mg/L	0.0100	0.00573	1	07/15/24 21:39	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	**0.0134**	mg/L	0.0100	0.00573	1	07/05/24 19:26	07/05/24 11:30	
Iron	EPA 6020B	**7.69**	mg/L	0.0800	0.0470	1	07/15/24 21:39	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**6.44**	mg/L	0.0800	0.0470	1	07/05/24 19:26	07/05/24 11:30	
Manganese	EPA 6020B	**1.66**	mg/L	0.00500	0.00167	1	07/15/24 21:39	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**1.61**	mg/L	0.00500	0.00167	1	07/05/24 19:26	07/05/24 11:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/24 16:10
Date Received: 07/02/24 06:30

Sample Name: MW-27
Laboratory Code: HN2403717-008

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.00597 J**	mg/L	0.0100	0.00573	1	07/12/24 23:43	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	07/05/24 19:28	07/05/24 11:30	
Iron	EPA 6020B	**3.10**	mg/L	0.0800	0.0470	1	07/15/24 21:40	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**2.84**	mg/L	0.0800	0.0470	1	07/05/24 19:28	07/05/24 11:30	
Manganese	EPA 6020B	**0.0791**	mg/L	0.00500	0.00167	1	07/12/24 23:43	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**0.0902**	mg/L	0.00500	0.00167	1	07/05/24 19:28	07/05/24 11:30	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/24 18:04
Date Received: 07/02/24 06:30

Sample Name: MW-16
Laboratory Code: HN2403717-009

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0242**	mg/L	0.0100	0.00573	1	07/12/24 23:45	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	**0.0143**	mg/L	0.0100	0.00573	1	07/16/24 18:32	07/16/24 13:33	
Iron	EPA 6020B	**23.8**	mg/L	0.0800	0.0470	1	07/15/24 21:42	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**24.1**	mg/L	0.0800	0.0470	1	07/16/24 18:32	07/16/24 13:33	
Manganese	EPA 6020B	**0.670**	mg/L	0.00500	0.00167	1	07/12/24 23:45	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**0.788**	mg/L	0.00500	0.00167	1	07/16/24 18:32	07/16/24 13:33	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/24 18:51
Date Received: 07/02/24 06:30

Sample Name: MW-13
Laboratory Code: HN2403717-010

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.00771 J**	mg/L	0.0100	0.00573	1	07/12/24 23:47	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	**0.0118**	mg/L	0.0100	0.00573	1	07/16/24 18:41	07/16/24 13:33	
Iron	EPA 6020B	**18.7**	mg/L	0.0800	0.0470	1	07/15/24 21:44	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**19.7**	mg/L	0.0800	0.0470	1	07/16/24 18:41	07/16/24 13:33	
Manganese	EPA 6020B	**0.241**	mg/L	0.00500	0.00167	1	07/12/24 23:47	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**0.279**	mg/L	0.00500	0.00167	1	07/16/24 18:41	07/16/24 13:33	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 07/01/24 13:33
Date Received: 07/02/24 06:30

Sample Name: MW-17
Laboratory Code: HN2403717-011

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0295**	mg/L	0.0100	0.00573	1	07/12/24 23:49	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	**0.00597 J**	mg/L	0.0100	0.00573	1	07/16/24 18:42	07/16/24 13:33	
Iron	EPA 6020B	**3.06**	mg/L	0.0800	0.0470	1	07/15/24 21:46	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**2.94**	mg/L	0.0800	0.0470	1	07/16/24 18:42	07/16/24 13:33	
Manganese	EPA 6020B	**0.384**	mg/L	0.00500	0.00167	1	07/12/24 23:49	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**0.428**	mg/L	0.00500	0.00167	1	07/16/24 18:42	07/16/24 13:33	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 07/01/24 12:13
Date Received: 07/02/24 06:30

Sample Name: MW-11
Laboratory Code: HN2403717-012

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	**0.0130**	mg/L	0.0100	0.00573	1	07/12/24 23:50	07/12/24 11:33	
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	07/16/24 18:44	07/16/24 13:33	
Iron	EPA 6020B	**2.63**	mg/L	0.0800	0.0470	1	07/15/24 21:47	07/12/24 11:33	
Iron, dissolved	EPA 6020B	**2.40**	mg/L	0.0800	0.0470	1	07/16/24 18:44	07/16/24 13:33	
Manganese	EPA 6020B	**0.157**	mg/L	0.00500	0.00167	1	07/12/24 23:50	07/12/24 11:33	
Manganese, dissolved	EPA 6020B	**0.141**	mg/L	0.00500	0.00167	1	07/16/24 18:44	07/16/24 13:33	

QC Summary Forms

Metals

Analytical Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2403717
Project:	Racer Van Buren Landfill/	**Date Collected:**	NA
Sample Matrix:	WATER	**Date Received:**	NA

Sample Name: Method Blank
Laboratory Code: QC-1529358-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	07/05/24 18:41	07/05/24 11:31	
Iron, dissolved	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	07/05/24 18:41	07/05/24 11:31	
Manganese, dissolved	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	07/05/24 18:41	07/05/24 11:31	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Laboratory Code: QC-1541017-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	07/15/24 21:06	07/12/24 11:34	
Iron	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	07/15/24 21:06	07/12/24 11:34	
Manganese	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	07/15/24 21:06	07/12/24 11:34	

Analytical Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill/
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Laboratory Code: QC-1546783-001

Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, dissolved	EPA 6020B	ND U	mg/L	0.0100	0.00573	1	07/16/24 18:29	07/16/24 13:34	
Iron, dissolved	EPA 6020B	ND U	mg/L	0.0800	0.0470	1	07/16/24 18:29	07/16/24 13:34	
Manganese, dissolved	EPA 6020B	ND U	mg/L	0.00500	0.00167	1	07/16/24 18:29	07/16/24 13:34	

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/19/2024
Date Received: 06/22/2024
Date Analyzed: 07/08/2024
Date Extracted: 07/05/2024

Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2380532

Matrix Spike
QC-1529358-004

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, dissolved	ND	0.354 S	0.1	350 S	75-125

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/19/2024
Date Received: 06/22/2024
Date Analyzed: 07/05/2024
Date Extracted: 07/05/2024

Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2375366

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron, dissolved	ND				75-125
Manganese, dissolved	ND				75-125

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/2024
Date Received: 07/02/2024
Date Analyzed: 07/15/2024
Date Extracted: 07/12/2024

Matrix Spike Summary
Metals

Sample Name: MW-3
Laboratory Code: HN2403717-004
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2399996

Matrix Spike
QC-1541017-016

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.297 S	0.908 S	0.1	611 S	75-125
Iron	4.34	13.7	10	93.3	75-125
Manganese	0.167	0.254	0.1	87.0	75-125

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/2024
Date Received: 07/02/2024
Date Analyzed: 07/16/2024
Date Extracted: 07/16/2024

Matrix Spike Summary
Metals

Sample Name: MW-16
Laboratory Code: HN2403717-009
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2403145

Matrix Spike
QC-1546783-004

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, dissolved	0.0143	0.104	0.1	90.1	75-125
Iron, dissolved	24.1	33.2	10	90.7	75-125
Manganese, dissolved	0.788	0.862 O	0.1	NC	75-125

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/19/2024
Date Received: 06/22/2024
Date Analyzed: 07/08/2024
Date Extracted: 07/05/2024

Duplicate Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2380532

	Matrix Spike	Duplicate Matrix Spike
	QC-1529358-004	QC-1529358-005

Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum, dissolved	ND	0.354 S	0.1	350 S	0.109 R	0.1	104	75-125	106 R	20

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/19/2024
Date Received: 06/22/2024
Date Analyzed: 07/05/2024
Date Extracted: 07/05/2024

Duplicate Matrix Spike Summary
Metals

Sample Name: Batch QC
Laboratory Code: Batch QC
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2375366

	Matrix Spike	Duplicate Matrix Spike
	QC-1529358-004	QC-1529358-005

Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Iron, dissolved	ND	9.89	10	98.7	10.1	10	101	75-125	2.02	20
Manganese, dissolved	ND	0.100	0.1	99.1	0.101	0.1	100	75-125	1.01	20

QA/QC Report

Client:	The Mannik & Smith Group, Inc.	**Work Order:**	HN2403717
Project:	Racer Van Buren Landfill	**Date Collected:**	06/28/2024
Sample Matrix:	WATER	**Date Received:**	07/02/2024
		Date Analyzed:	07/15/2024
		Date Extracted:	07/12/2024

Duplicate Matrix Spike Summary
Metals

Sample Name:	MW-3	**Units:**	mg/L
Laboratory Code:	HN2403717-004	**Analysis Lab Lot:**	2399996
Analysis Method:	EPA 6020B		
Prep Method:	EPA 3015A		

		Matrix Spike			Duplicate Matrix Spike					
		QC-1541017-016			QC-1541017-017					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	0.297 S	0.908 S	0.1	611 S	0.917 S	0.1	620 S	75-125	0.952	20
Iron	4.34	13.7	10	93.3	14.1	10	97.5	75-125	3.00	20
Manganese	0.167	0.254	0.1	87.0	0.258	0.1	91.5	75-125	1.78	20

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2403717
Date Collected: 06/28/2024
Date Received: 07/02/2024
Date Analyzed: 07/16/2024
Date Extracted: 07/16/2024

Duplicate Matrix Spike Summary
Metals

Sample Name: MW-16
Laboratory Code: HN2403717-009
Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2403145

		Matrix Spike				Duplicate Matrix Spike					
		QC-1546783-004				QC-1546783-005					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum, dissolved	0.0143	0.104	0.1	90.1	0.105	0.1	90.5	75-125	0.412	20
Iron, dissolved	24.1	33.2	10	90.7	33.4	10	92.5	75-125	0.536	20
Manganese, dissolved	0.788	0.862 O	0.1	NC	0.865 O	0.1	NC	75-125	0.411	20

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2403717
Date Analyzed: 07/05/2024
Date Extracted: 07/05/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2375366

QC-1529358-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, dissolved	0.118	0.1	118	80-120
Iron, dissolved	10.4	10	104	80-120
Manganese, dissolved	0.105	0.1	105	80-120

QA/QC Report

Client: The Mannik & Smith Group, Inc. **Work Order:** HN2403717
Project: Racer Van Buren Landfill **Date Analyzed:** 07/15/2024
Sample Matrix: WATER **Date Extracted:** 07/12/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B **Units:** mg/L
Prep Method: EPA 3015A **Analysis Lab Lot:** 2399996

QC-1541017-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	0.102	0.1	102	80-120
Iron	9.43	10	94.3	80-120
Manganese	0.0982	0.1	98.2	80-120

QA/QC Report

Client: The Mannik & Smith Group, Inc.
Project: Racer Van Buren Landfill
Sample Matrix: WATER

Work Order: HN2403717
Date Analyzed: 07/16/2024
Date Extracted: 07/16/2024

Laboratory Control Sample Summary
Metals

Analysis Method: EPA 6020B
Prep Method: EPA 3015A

Units: mg/L
Analysis Lab Lot: 2403145

QC-1546783-002

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, dissolved	0.101	0.1	101	80-120
Iron, dissolved	10.2	10	102	80-120
Manganese, dissolved	0.101	0.1	101	80-120

ALS Environmental

Laboratory location:

Chain of Custody Form

Page 1 of 2

ALS Project Manager:

Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Van Buren Landfill	A	Dissolved Metals
Work Order		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	
Send Report To	Kevin Lund	Invoice Attn.	Acounts Payable	D	
Address	2365 Haggerty Rd South	Address	2365 Haggerty Rd South	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@manniksmithgroup.com	e-Mail Address		J	

Environmental Division
Holland
Work Order Reference
HN2403717

Telephone : +1 616 399 6070

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-14	6/27/24	16:03	GW	HNO_3	2	X	X									
2	MW-28	↓	17:48	↓	↓	↓	↓	↓									
3	MW-4	6/28/24	10:10														
4	MW-3		11:27														
5	MW-12		11:34														
6	MW-15		13:05														
7	MW-6		14:43														
8	MW-27		16:10														
9	MW-16		18:04														
10	MW-13	↓	18:51	↓	↓	↓	↓	↓									

Sampler(s): Please Print & Sign: Rose Allen

Shipment Method:

Required Turnaround Time: ☐STD 10 Wk Days ☐5 Wk Days ☐2 Wk Days ☐24 Hour ☐Other

Results Due Date:

	Date:	Time:		
Relinquished by:	7/1/24	16:19	Received by:	Notes:
Relinquished by:	7/1/24	16:19	Received by (Laboratory): 7-2-24 6:30	Cooler Temp. 4.8c Dfz
Logged by (Laboratory):	7-2-24	8:40	Checked by (Laboratory):	pH 7

QC Package: (Check Box Below)

- ☐ Level II: Standard QC
- ☐ Level III: Std QC + Raw Data
- ☐ Level IV: SW846 CLP-Like
- ☐ TRRP-Checklist
- ☐ TRRP Level IV
- ☐ Other:

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

ALS Environmental

Laboratory location:

Chain of Custody Form

Page 2 of 2

ALS Project Manager:

Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Racer Von Buren Landfill	A	Dissolved Metals
Work Order		Project Number	R2330031	B	Total Metals
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	
Send Report To	Kevin Lund	Invoice Attn.	Acounts payable	D	
Address	2365 Haggerty Rd South	Address	2365 Haggerty Rd South	E	
				F	
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	
Phone	734-397-3100	Phone	734-397-3100	H	
Fax		Fax		I	
e-Mail Address	KLund@manniksmithgroup.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-17	7/1/2024	13:33	GW	HNO_3	2	X	X									
2	MW-11	7/1/2024	12:13	↓	↓	↓	↓	↓									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign: Rose Allen [signature]

Shipment Method:

Required Turnaround Time: ☐ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other ______

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
[signature]	7/1/24	16:19	[signature]	
Relinquished by: [signature]	7/1/24	1619	Received by (Laboratory): QS [signature] 7-2-24 6:30	Cooler Temp.
Logged by (Laboratory): [signature]	7-2-24	8:40	Checked by (Laboratory):	4.0 [illegible]

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035

pH37

QC Package: (Check Box Below)

☐	Level II: Standard QC	☐	TRRP-Checklist
☐	Level III: Std QC + Raw Data	☐	TRRP Level IV
☐	Level IV: SW846 CLP-Like		
	Other: ______		

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

right solutions.
right partner.

ALS Holland Sample Receiving Checklist

Received by:	Caleb Kemp
Date/Time:	7-1-24 6:30
Carrier Name:	QC
Shipping container/cooler in good condition?	(Yes) / No / Not Present
Custody seals intact on shipping container/cooler?	Yes / No / (Not Present)
Custody seals intact on sample bottles?	Yes / No / (Not Present)
Chain of Custody present?	(Yes) / No
COC signed when relinquished and received?	(Yes) / No
COC agrees with sample labels?	(Yes) / No
Samples in proper container/bottle?	(Yes) / No
Sample containers intact?	(Yes) / No
Sufficient sample volume for indicated test?	(Yes) / No
All samples received within holding time?	(Yes) / No
Container/Temp Blank temperature in compliance?	(Yes) / No
Temperature(s) (°C):	4.0c
Thermometer(s):	DF2
Sample(s) received on ice?	(Yes) / No
Matrix/Matrices:	water
Cooler(s)/Kit(s):	1
Date/Time sample(s) sent to storage:	7-2-24
Water – VOA vials have zero headspace?	Yes / No / (No Vials)
Water – pH acceptable upon receipt?	(Yes) / No / N/A
pH strip lot #: 37	< 2 ✓ > 12 _____ Other _____
pH adjusted (note adjustments below)?	Yes / No / (N/A)
pH adjusted by:	

Login Notes: