Engineering and Environmental Science



An Olgoonik Company

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May 13, 2025

Ms. Jasmine Stefansky Division of Environmental Remediation New York State Department of Environmental Conservation 625 Broadway Albany, NY 12233-7013

Re: Groundwater Monitoring Report - Revised Liberty Industrial Finishing Site, NYSDEC #152108 500-550 Suffolk Avenue, Brentwood, NY FPM File #1389g-22-03

Dear Jasmine:

FPM Group, Ltd. (FPM) initially prepared this report in November 2024 on behalf of 550 Liberty Plaza, LLC to document the October 8, 2024 groundwater monitoring activities at the above-referenced Site. This revised report addresses the comments in the The monitoring was conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP) and the NYSDEC-accepted recommendations in our prior (June 4, 2024) groundwater monitoring report . The locations of the onsite wells used for long-term groundwater monitoring are denoted in red on the attached Figure 1. The groundwater monitoring procedures and results are documented below. All monitoring work was performed by FPM environmental professionals (EPs).

Wells MW-2A, MW-3A, MW-4A MW-7A and MW-17A were installed in April 2023 as replacements for wells MW-02, MW-03, MW-04, MW-07 and MW-17, respectively, which were destroyed during Site redevelopment. The replacement wells were installed in close proximity to and with the same screened intervals as the wells they replaced, as documented in our June 26, 2023 well installation report. The replacement wells were monitored on August 28, 2023 and the results were documented in our June 4, 2024 report.

Based on the 2023 monitoring results it was recommended that monitoring for 1,4-dioxane be discontinued for this Site as this constituent was not detected in any of the onsite monitoring wells. Continued sampling for this constituent was not anticipated to provide any useful information and would require resources that could otherwise be conserved. It was also recommended that monitoring of well MW-2A be discontinued as Site-related metals impacts formerly detected at low levels at this location were not present above applicable regulatory criteria from 2015 to 2023. The most recent exceedances of the NYSDEC Standards noted for Site-related metals in this well were for chromium in 2013 and cadmium in 2011. Continued monitoring at MW-2A location was not anticipated to provide any further useful information to assess Site-related groundwater impacts and would require resources that could otherwise be conserved. As a contingency, it was recommended that monitoring at well MW-2A be restarted if Site-related metals were detected in nearby well MW-3A above Standards. The NYSDEC accepted this report and its recommendations on July 1, 2024.

Groundwater Monitoring Procedures

FPM EPs conducted groundwater monitoring on October 8, 2024 in coordination with the NYSDEC's contractor (EA Engineering, Science and Technology, Inc., or EA) that conducts offsite groundwater monitoring. Each well was observed to be intact and secured with no indications of damage or tampering. The depth to the static water level and depth of each well to be monitored were measured to the nearest

0.01 foot with a decontaminated interface probe and the measurements were recorded on well sampling forms, copies of which are included in Attachment A. The potential presence of non-aqueous-phase liquid (NAPL) was also assessed and no NAPL was identified. Each well was purged using a decontaminated low-flow Geotech GeoSub pump with dedicated HDPE tubing at a rate of approximately 0.5 liters per minute. Purging was conducted until the turbidity level was well below 25 NTU (all samples exhibited 0.0 NTU upon completion of purging) as the NYSDEC had directed that the samples could not be filtered.

Field parameters, including dissolved oxygen (DO), pH, turbidity, specific conductivity, and temperature, were monitored and recorded. When all stability parameters varied by less than 10 percent between measurements and the turbidity was 0.0 NTU, the well was sampled. Well purging water was examined and no visible indications suggestive of potential contamination were noted.

Samples for per- and polyfluoroalkyl substances (PFAS) were obtained before any other sampling was performed. PFAS samples were obtained using only dedicated disposable HDPE tubing. The retrieved samples were decanted into laboratory-supplied sample containers that were sealed, labeled, managed, transported, and tracked as described below.

Following the completion of PFAS sampling, and after those samples were properly secured, the wells were each sampled for Target Analyte List (TAL) metals. Samples for all analyses were obtained directly from the pump using the HDPE tubing. These samples were also obtained, containerized, labeled and managed under chain of custody procedures and in accordance with laboratory recommendations, as described below.

Each sample was collected into laboratory-provided containers, which were labeled as to the sample name, date and time of sampling, sampler initials, and analyses to be performed. The filled sample containers were placed into a cooler with ice and a chain of custody form was completed to document the sequence of sample custody. Samples to be tested for PFAS were managed in a separate cooler from the other samples. At the end of the sampling event, the filled coolers were transported to FPM's office for pickup by a laboratory courier.

Quality assurance/quality control (QA/QC) samples were also collected in accordance with the SMP. QA/QC samples included one blind duplicate sample, one matrix spike/matrix spike duplicate (MS/MSD) sample, and one equipment blank sample.

The groundwater and QA/QC samples were managed under chain of custody and transmitted to Eurofins Edison, NJ lab, which is New York State Department of Health ELAP-certified for the analyses that were performed. The samples were tested for TAL metals, including mercury, and PFAS, as required in the updated SMP. The lab data were provided to FPM in Category B deliverables, together with information needed for upload to the NYSDEC's data management system.

FPM reviewed the laboratory data packages and compared the groundwater sample results to the NYSDEC's Class GA Ambient Water Quality Standards (Standards). FPM also prepared Data Usability Summary Reports (DUSRs) to evaluate data quality, as required in the SMP. As documented in the DUSRs (Attachment B), no significant issues were identified with data quality and the data can be relied on for their intended purpose. The sample information has been uploaded to the NYSDEC's EIMS.

Groundwater Monitoring Results

Groundwater Flow Direction

The depth to groundwater and previously-surveyed top of casing elevations were integrated to calculate the water table elevations or, in the case of MW-17A, the potentiometric surface elevation as this well has a fully-submerged screen and does not monitor the water table. These data are listed on Table 1



and shown graphically on Figure 2. The groundwater flow direction for the water table aquifer is to the south-southeast, consistent with prior groundwater flow direction determinations. The horizontal hydraulic gradient is calculated as 0.00077, which is also consistent with prior gradients.

A comparison of the water levels for paired wells MW-7A and MW-17A shows that the vertical direction of groundwater flow is downward from the water table toward deeper portions of the aquifer. The vertical hydraulic gradient is calculated as -0.0002, which is also generally consistent with prior measurements.

We note that the water levels in all the onsite and offsite wells in October 2024 increased by about four feet relative to the water levels observed in August 2023. A review of online rainfall data published by the National Weather Service for the Site vicinity (Islip, NY data) indicates that 2023 monthly rainfall levels were close the normal level for the area, but 2024 monthly rainfall levels through late August were above normal. This increase in rainfall levels likely resulted in the higher water levels observed in October 2024.

Groundwater Quality

The sample results for metals from this monitoring event are presented on Table 2 and are compared to the NYSDEC Standards. The results for the metals of interest for this Site (cadmium, chromium, copper, nickel, and zinc) are noted in red type on this table and exceedances of the NYSDEC Standards are noted by gray shading. Data from prior monitoring events extending back to 2011 are also shown on Table 2 for comparison purposes (note: prior data for MW-7 and MW-17 are available for 2018 and 2019 only). The data from the October 2024 monitoring event are shown on Figure 3, together with the data provided by EA for the offsite monitoring wells.

The following observations were noted for metals:

- For MW-3A/MW-3 the Site-related metal cadmium was detected at 9.2 micrograms per liter (ug/l) in 2024, which is above its Standard of 5 ug/l. Sodium (not Site-related) was also detected at 37,100 ug/l in 2024, which is above its Standard of 20,000 ug/l. In 2023 no Site-related metals were detected above Standards, but sodium (not Site-related) was detected at 32,700 ug/l, which was above its Standard. Cadmium and/or chromium were detected above NYSDEC Standards in filtered samples collected in 2019 and prior years. These results indicate that the well MW-3A/MW-3 location was previously in the Site-related groundwater plume and appears to remain in the plume near its eastern edge, as shown on Figure 3.
- For MW-4A/MW-4, four metals were detected above their Standards, including the Site-related metals cadmium at 1,030 ug/l (Standard = 5 ug/l), chromium at 112 ug/l (Standard = 50 ug/l), and nickel at 216 ug/l (Standard = 100 ug/l), and sodium (not Site-related) at 114,000 ug/l (Standard = 20,000 ug/l). Cadmium (at 90.6 ug/l) and/or chromium (at 99.5 ug/l) were detected above Standards in well MW-4 in 2023 and prior years, but nickel was not previously detected above its Standard. These results indicate that the well MW-4A/MW-4 location is in the Site-related groundwater plume. The levels of Site-related metals remained relatively constant between 2011 and 2023; the cadmium and nickel levels increased in 2024 relative to prior years.
- For MW-7A/MW-7, sodium (not Site-related) was the only metal detected in 2024 (at 48,400 ug/l, Standard = 20,000 ug/l) above the Standards. Sodium was also detected (24,400 ug/l) above its Standard in 2023, iron (420 ug/l, Standard 300 ug/l) and sodium (87,000 ug/l) were detected above Standards in former well MW-7 in 2019, and no exceedances were detected in 2018. These results indicate that the well MW-7A/MW-7 location, which is on the north side of the Site upgradient of historical Site operations, is not within the Site-related groundwater plume. The results from MW-7/MW-7A are indicative of the quality of shallow groundwater migrating onto the Site.



• For MW-17A/MW-17, beryllium (at 4.8 ug/l, Standard = 3 ug/l) and manganese (at 925 ug/l, Standard = 300 ug/l), which are not Site-related metals, were the only metals detected in 2024 above the Standards. Beryllium (5.3 ug/l), iron (437 ug/l, Standard = 300 ug/l), manganese (622 ug/l) and sodium (26,400 ug/l, Standard = 20,000), none of which is Site-related, were detected in MW-17A in 2023. Cadmium (Site-related), manganese, and sodium were detected above Standards in the filtered sample from former well MW-17 in 2019; cadmium was not detected above its Standard in the filtered sample from MW-17 in 2018. The well MW-17A/MW-17 location is on the north edge of the Site and upgradient of historical Site operations and the Site-related groundwater plume. The MW-17/MW-17A results are indicative of the quality of deeper groundwater migrating onto the Site.

The sample results for PFAS are presented on Table 3 and are compared to current (April 2023) NYSDEC Guidance. PFAS detections are noted in bold type and exceedances of the current NYSDEC Guidance Values are highlighted in yellow. The following observations were noted for PFAS compounds:

- PFOS and/or PFOA were detected in both upgradient wells, including the water table well MW-7A and the deeper well MW-17A, at levels above NYSDEC Guidance in 2024. The PFOS concentration in MW-7A was 10.2 nanograms per liter (ng/l) and PFOA concentrations ranged from 20.7 to 30.1 ng/l in these wells. The detected concentrations are somewhat higher than the concentrations detected in 2023, except for PFOS in MW-17A, which was noted to decrease to below its Guidance Value.
- PFOS and PFOA were detected in the downgradient wells MW-3A and MW-4A, with all detections
 exceeding NYSDEC Guidance. PFOS concentrations ranged from 383 ng/l in MW-3A to 709 ng/l
 in MW-4A and are higher in these wells than in the upgradient wells. PFOA concentrations ranged
 from 15.2 ng/l in MW-4A to 21.3 ng/l in MW-4A and are comparable to but slightly lower than the
 concentrations in the upgradient wells.
- Other PFAS compounds, including PFBA, PFBS, PFHpA, PFHxS, PFHxA, and PFPeA, were detected in nearly all the wells, with comparable concentrations detected in both the upgradient and downgradient wells.

Collectively, these results demonstrate that PFAS compounds are present in onsite groundwater both upgradient and downgradient of the historic operations area and are present in both shallow and deeper groundwater. PFOS and/or PFOA were detected in both upgradient wells, including the water table well MW-7A and the deeper well MW-17A, at levels above NYSDEC Guidance. The concentrations of PFOS and PFOA exceed NYSDEC Guidance in both the upgradient and downgradient wells, although the concentrations of PFOS are higher in the downgradient wells than in the upgradient wells. The PFOS concentrations are highest at MW-4A, which also exhibited the highest concentrations of Site-related metals.

Discussion

For MW-3 the following observations and conclusions were noted for Site-related metals:

• There have been no exceedances of the NYSDEC Standards for copper, nickel, or zinc in this well from 2011 to the present. Cadmium was detected in 2016 (5.8 ug/l) and 2017 (8.5 ug/l) in filtered samples at levels just above the NYSDEC Standard of 5 ug/l. Cadmium was also detected in 2024 at 9.2 ug/l, which is somewhat above its Standard. Although chromium was detected above its Standard (50 ug/l) in filtered samples during several sampling events between 2012 and 2015 (61 to 103 ug/l), only one detection (56 ug/l in 2019) above the Standard has been reported for filtered samples since 2015. Based on these observations, Site-related cadmium and chromium impacts



formerly detected in this well had decreased to below or just above Standards by 2018/2019. The current data show an exceedance for cadmium and no exceedance for chromium. Continued monitoring at the MW-3/MW-3A location is anticipated to provide information to define the eastern lateral extent of groundwater impacts from Site-related metals.

For MW-4 the following observations and conclusions were noted for Site-related metals:

There have been no exceedances of the NYSDEC Standards for copper or zinc from 2011 to the present. Nickel at 216 ug/l exceeded its Standard (100 ug/l) in 2024 but had not previously exceeded its Standard. Cadmium was detected in filtered samples during the 2011 to 2019 sampling events at levels (11 to 83 ug/l) above the NYSDEC Standard of 5 ug/l; the 2023 result (90.6 ug/l) was similar and the 2024 result (1,030 ug/l) is somewhat higher. Chromium was detected in 2024 (112 ug/l), 2023 (99.5 ug/l), and in some of the historic sampling events in filtered samples at levels somewhat above its Standard of 50 ug/l. There does not appear to be any discernable trend in the chromium levels, which have ranged from non-detect to 142 ug/l in filtered samples. Based on these observations, Site-related cadmium, chromium, and nickel impacts are present in this well at levels above Standards. Increases in cadmium and chromium levels were noted in 2024. Monitoring of this well should be continued to assess groundwater impacts from Site-related metals.

For MW-7A the following observations and conclusions were noted for Site-related metals:

• Site-related metals have not been detected above Standards in this well, which is on the north side of the Site upgradient of historical Site operations and not within the Site-related groundwater plume. The results from this well are indicative of the quality of shallow groundwater migrating onto the Site.

For MW-17A the following observations and conclusions were noted:

No Site-related metals were detected above the Standards in 2023 or 2024. Cadmium was
detected above its Standard (5 ug/l) at 11 ug/l in 2019 in the filtered sample from former well MW17 but was not detected above its Standard in the filtered sample in 2018. The MW-17A/MW-17
well location is on the north side of the Site and upgradient of historical Site operations. Based on
its location, well MW-17/MW-17A is not within the Site-related groundwater plume and the results
are indicative of the quality of deeper groundwater migrating onto the Site.

As noted above, in 2024 the water levels in all the onsite wells increased by about four feet relative to the water levels observed in August 2023, likely in response to higher rainfall in 2024. During this same period increases in Site-related metals concentrations were noted in MW-3A and MW-4A, the onsite wells located in the area where soil contamination remains present at depth. We expect that the higher water table likely resulted in increased groundwater contact with the remaining contaminated soil and contributed to the observed increases in certain metals. This area is fully capped and, therefore, the remaining contaminated soil is protected from infiltrating rainfall.

Conclusions and Recommendations

Site-related metals impacts remain present at the MW-4/MW-4A location and, to a lesser extent, at the MW-3/MW-3A location. PFOS and PFOA are present in the onsite groundwater at levels above current NYSDEC Guidance in both upgradient and downgradient groundwater. The concentrations of PFOS, PFOA, and other PFAS compounds are similar at both the upgradient and downgradient wells, except for PFOS at MW-3A and MW-4A where somewhat higher concentrations were noted.

We note that the remaining source area has been capped since 2001 (over 20 years). The cap was recently removed for redevelopment, additional source soil was removed and disposed, and the cap was



re-established in 2022 during construction. Based on the 2023 monitoring data these activities did not appear to have resulted in any significant changes to groundwater conditions. An elevated water table in 2024 appears likely to have contributed to increases in some Site-related metals concentrations observed in the 2024 monitoring results for wells MW-3A and MW-4A.

Based on the foregoing, we recommend the following:

- Monitoring at well MW-2A was discontinued after the 2023 sampling event as Site-related metals impacts formerly present at low levels at this location were not detected above applicable regulatory criteria from 2015 to 2023. As noted in the 2023 groundwater monitoring report, continued monitoring at MW-2A location was not anticipated to provide any further useful information to assess Site-related groundwater impacts and would require resources that could otherwise be conserved. Accordingly, well MW-2A was not monitored in 2024. As a contingency, it was recommended that monitoring at well MW-2A be restarted if Site-related metals were detected in nearby well MW-3A above Standards. As the 2024 results for well MW-3A show cadmium above its Standard, it is recommended that monitoring at well MW-2A be restarted.
- In the 2023 monitoring report it was recommended that one additional round of monitoring be
 performed at the deeper upgradient well MW-17A to confirm the 2023 results. If the results
 continued to show no exceedances of the NYSDEC Standards for Site-related metals, then it was
 recommended that monitoring be discontinued as the data obtained from the shallow well in this
 area provide sufficient information to assess upgradient groundwater quality in the zone of interest.
 The 2024 monitoring data continue to show no exceedances of the NYSDEC Standards for Siterelated metals in MW-17A. Continued monitoring at MW-17A location is not anticipated to provide
 any further useful information to assess the quality of groundwater that is migrating onto the Site
 and will require resources that could otherwise be conserved. Based on these considerations, it is
 recommended that monitoring be discontinued at well MW-17A.
- Monitoring for Site-related metals and for PFAS should be continued at the shallow upgradient well (MW-7A) and the shallow downgradient wells MW-3A and MW-4A. Site-related impacts remain present in these downgradient wells and the monitoring data are anticipated to provide useful information to assess the nature and extent of the remaining onsite impacts, evaluate changes in Site-related groundwater conditions over time, and provide water quality information upgradient of the offsite plume.

If you have any questions, please contact me at (631) 737-6200, ext. 528.

Very truly yours,

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Stephanie O. Davis, PG Senior Project Manager Vice President

Cc: Aaron Daniels and Cristina Mendez, 550 Liberty Plaza, LLC

Attachments SOD/sod S:\Liberty Industrial\GW Monitoring\2024Monitoring\GW Monitoring Report 10-2024-Rev 5-2025-LibertyIndustrial.docx









Table 1Well Construction and Depth to Water DataLiberty Industrial Finishing Site, #152108500-550 Suffolk Avenue, Brentwood, NY

Well No.	Latitude	Longitude	Top of Manhole Elevation	Top of Casing Elevation	Total Well Depth (feet below TOC)	Well Screen Interval (feet below TOC)	Well Diameter (inches)	Screen Slot Size (inches)	Initial Depth to Water (feet below TOC) April 2023	Depth to Water (feet below TOC) August 28, 2023	Water Table Elevation* (feet) August 28, 2023	Depth to Water (feet below TOC) October 8, 2024	Water Table Elevation* (feet) October 8, 2024
MW-2A	40° 46' 43.44" N	73° 15' 13.15" W	92.53	92.26	55.12	35 to 55	2	0.02	46.88	47.41	44.85	-	-
MW-3A	40° 46' 43.33" N	73° 15' 13.46" W	92.62	92.29	55.20	35 to 55	2	0.02	46.93	47.45	44.84	43.63	48.66
MW-4A	40° 46' 43.24" N	73° 15' 13.73" W	92.31	91.98	54.51	35 to 55	2	0.02	46.59	47.11	44.87	43.27	48.71
MW-7A	40° 46' 44.95" N	73° 15' 16.27" W	93.21	92.93	54.87	35 to 55	2	0.02	47.36	47.81	45.12	44.03	48.90
MW-17A	40° 46' 44.91" N	73° 15' 16.42" W	93.26	93.01	99.21	90 to 100	2	0.02	52.45	47.96	45.05	44.12	48.89

Notes:

TOC = Top of casing Elevations based on NAVD 1988 * MW-17A is not a water table well and the water table elevation noted is actually a potentiometric surface elevation.

- = Well not monitored

Table 2

Groundwater Chemical Analytical Results - MW-3/MW-3A

Liberty Industrial Finishing Site

May 2011 Through October 2024 Sampling Events

Sample Location		MW-3												MV	MW-3A				
Well Depth (feet)	NYSDEC Class GA								5	3.9								5	55
Sampling Date:	Standards ⁽¹⁾	5/26,	/2011	8/23,	/2012	11/14	l/2013	3/18	/2015	5/11	/2016	9/13	/2017	11/14	/2018	12/9/	/2019	8/28/2023	10/8/2024
Sample Type:		Unfiltered	Filtered	d Unfiltered Filtered		Unfiltered	d Filtered Unfiltered Filtered		Unfiltered	Unfiltered Filtered		Unfiltered Filtered		Filtered	Unfiltered Filtered		Unfiltered		
Target Analyte List N	letals by USEPA Me	thod 6010 in	micrograms	per liter (ug/L)	•	•		•	•	•								
Aluminum	NS	346	ND	360	ND	470	ND	1,400	ND	330	ND	240	ND	730	ND	ND	ND	11.7 U	11.7 U
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48 U	0.48 U
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2 U	1.2 U
Barium	1,000	19.1 B	18.1 B	28.9 B	27.9 B	ND	ND	ND	ND	ND	ND	ND	ND	65	ND	ND	ND	45.7	43.9
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 U	0.12 U
Cadmium	5	6.6	4.6 B	3.0 B	2.8 B	4.7	3.5	4.2	2.4	ND	5.8	9.6	8.5	5.0	3.8	2.7	ND	1.6 J	9.2
Calcium	NS	16,900	16,800	28,600	29,400	29,000	27,000	16,000	16,000	26,000	25,000	23,000	23,000	17,000	16,000	23,000	24,000	34,000	30,700
Chromium	50	59.6	32.6	118	103	140	95.0	170	61.0	97.0	ND	67.0	ND	52.0	ND	57.0	56.0	48.4	46.9
Cobalt	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.81 J	0.41 U
Copper	200	45.5	11.7 B	14.2 B	6.5 B	ND	ND	ND	ND	ND	ND	ND	ND	58.0	ND	ND	ND	2.0 U	2.0 U
Iron	300	462	ND	414	45.4 B	650	ND	1,800	ND	700	ND	350	ND	1,000	ND	430	370	275	52.5 J
Lead	25	14.1	ND	ND	ND	8.5	ND	18.0	ND	7.2	ND	3.9	ND	12.0	ND	ND	ND	0.42 U	0.42 U
Magnesium	35,000	2,710	2,760	5,100	5,180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,480	4,380
Manganese	300	11.8 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.2	5.5 J
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.091 U	0.091 U
Nickel	100	ND	4.3 B	3.8 B	3.4 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6	2.3 J
Potassium	NS	1,950	1,770	2,560 E	2,480	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,130	3,450
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 U	0.73 J
Sliver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 U	1.3 U
Sodium	20,000	12,400	13,200	30,800	31,000	38,000	35,000	24,000	26,000	26,000	25,000	32,000	33,000	25,000	23,000	35,000	36,000	32,700	37,100
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 U	0.19 U
Vanadium	NS	1.4 B	ND	1.1 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.0 U	1.0 U
Zinc	2,000	54.9	40.4 B	19.6 B	19.3 B	ND	ND	61.0	ND	ND	ND	ND	ND	ND	63.0	ND	ND	24.8	4.2 U
1,4-Dioxane by Meth	nod 8270E SIM ID in	ug/l								-							-		
1,4-Dioxane	0.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.072 U	-

Notes:

(1) 6NYCRR Part 703.5 GA Groundwater Quality Standards (GQS) and Guidance Values (GV) 6/1998

NS - No Standard

ND - Not Detected

B- Estimated Value

Groundwater Contaminant of Concern

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U : Indicates the analyte was analyzed for but not detected.

BOLD values exceed NYSDEC Standards.

BOLD shaded values are Site-related metals that exceed NYSDEC Standards.

Table 2 (Continued) Groundwater Chemical Analytical Results - MW-4/MWW-4A

Liberty Industrial Finishing Site

May 2011 Through October 2024 Sampling Events

Sample Location		MW-4											MW-4A	MW-44A (duplicate)	MW-4A	MW-44A (duplicate)				
Well Depth (feet)	NYSDEC Class GA Ambient Water							5	3.4							55				
Sampling Date:	Quality Standards ⁽¹⁾	5/26/	/2011	8/23	/2012	11/4	/2013	3/18	3/18/2015		/2017	11/14	/2018	12/9	/2019	8/28	/2023	10/8	/2024	
Sample Type:		Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered		Unfiltered			
Target Analyte List N	/letals by USEPA M	lethod 6010 in u	ıg/L																	
Aluminum	NS	2,560	ND	1,980	1,130	310	ND	2,200	ND	360	ND	1,400	ND	940	330	35.0 J	32.3 J	23.1 J	27.0 J	
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48 U	0.48 U	0.48 U	0.48 U	
Arsenic	25	4.8 B	ND	6.4 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2 U	1.2 U	1.2 U	1.2 U	
Barium	1,000	27.1 B	13.2 B	22.8 B	21.6 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	40.7	39.7	108	115	
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 U	0.12 U	0.12 U	0.12 U	
Cadmium	5	54.2	19.8	28.2	27.3	26.0	21.0	20.0	11.0	95.0	80.0	98.0	83.0	47.0	46.0	90.6	89.7	1,030	1,090	
Calcium	NS	14,200	12,300	18,700	19,600	33,000	30,000	8,400	8,300	24,000	23,000	33,000	29,000	25,000	25,000	37,100	37,400	46,700	50,900	
Chromium	50	176	142	74.9	58.7	ND	ND	53.0	ND	110	90.0	100	ND	110	85.0	99.5	100	112	120	
Cobalt	NS	3.3 B	2.6 B	0.73 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	1.1 J	1.1 J	1.2 J	
Copper	200	ND	43.5	69.7	58.9	ND	ND	60.0	ND	ND	ND	110	56.0	61.0	ND	4.7	4.8	5.7	4.8	
Iron	300	2,660	109 B	2,000	1,110	320	ND	2,200	ND	430	ND	1,400	340	1,100	380	263	264	65.5 J	84.7 J	
Lead	25	43.2	ND	15.5	9.8 B	ND	ND	22.0	ND	4.3	ND	15.0	3.1	11.0	4.5	0.42 U	0.42 U	0.42 U	0.42 U	
Magnesium	35,000	1,710	1,270	2,770	2,870	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,360	4,350	4,040	4,270	
Manganese	300	47.1 B	12.3 B	18.4 B	14.4 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.7	19.9	8.1	9.1	
Mercury	0.7	0.036 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.091 U	0.091 U	0.091 U	0.091 U	
Nickel	100	ND	12.8 B	17.5 B	15.8 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	38.1	38.2	216	228	
Potassium	NS	6,600	6,790	2,340 E	2,460	ND	ND	ND	ND	ND	5,000	6,300	5,100	6,600	6,700	6,150	6,230	15,400	16,600	
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52 J	0.57 J	0.51 J	0.64 J	
Sliver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 U	1.3 U	1.3 U	1.3 U	
Sodium	20,000	26,100	29,100	13,400	14,400	21,000	21,000	ND	ND	8,900 J	12,000 J	9,600	8,300	12,000	13,000	29,400	29,800	114,000	122,000	
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 U	0.19 U	0.19 U	0.19 U	
Vanadium	NS	7.0 B	1.2 B	4.9 B	3.2 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.0 U	1.0 U	1.0 U	1.0 U	
Zinc	2,000	97	109	257	220	160	130	220	97.0	180	140	430	260	240	180	15.6 J 13.9 J 8.9 J			12.3 J	
1,4-Dioxane by Met	nod 8270E SIM ID i	n ug/l			•											· · · · · · · · · · · · · · · · · · ·				
1,4-Dioxane	0.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.072 U	0.072 U		-	

Notes: (1) 6NYCRR Part 703.5 GA Groundwater Quality Standards (GQS) and Guidance Values (GV) 6/1998 NS - No Standard ND - Not Detected B- Estimated Value

Groundwater Contaminant of Concern

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. U : Indicates the analyte was analyzed for but not detected. BOLD values exceed NYSDEC Standards. BOLD shaded values are Site-related metals that exceed NYSDEC Standards.

Table 2 (Continued) Groundwater Chemical Analytical Results - MW-7/MW-7A

Liberty Industrial Finishing Site

May 2011 Through October 2024 Sampling Events

Sample Location			M	W-7		MW-7A					
Well Depth (feet)	NYSDEC Class GA Ambient		!	55		5	5				
Sampling Date:	Water Quality Standards ⁽¹⁾	11/13	3/2018	12/9	/2019	8/28/2023	10/8/2024				
Sample Type:		Unfiltered	Filtered	Unfiltered	Filtered	Unfil	tered				
Target Analyte List N	Netals by USEPA Method	l 6010 in ug/L			•						
Aluminum	NS	390	ND	660	250	123	35.3 J				
Antimony	3	ND	ND	ND	ND	0.48 U	0.48 U				
Arsenic	25	ND	ND	ND	ND	1.2 U	1.2 U				
Barium	1,000	ND	ND	63	59	69.5	31.4				
Beryllium	3	ND	ND	ND	ND	0.28 J	0.12 U				
Cadmium	5	2.2	ND	2.9	ND	0.77 J	1.1 J				
Calcium	NS	13,000	11,000	31,000	31,000	16,700	29,200				
Chromium	50	ND	ND	ND	ND	1.7 U	1.7 U				
Cobalt	NS	ND	ND	ND	ND	0.64 J	0.41 U				
Copper	200	ND	ND	ND	ND	2.2 J	2.0 U				
Iron	300	ND	ND	960	420	28.5 J	176				
Lead	25	ND	ND	4.4	ND	0.42 U	0.42 U				
Magnesium	35,000	ND	ND	ND	ND	3,130	3,050				
Manganese	300	ND	ND	ND	ND	67.4	12.0				
Mercury	0.7	ND	ND	ND	ND	0.091 U	0.091 U				
Nickel	100	ND	ND	ND	ND	2.3 J	1.4 U				
Potassium	NS	ND	ND	ND	ND	2,960	1,210				
Selenium	10	ND	ND	ND	ND	0.43 U	0.43 U				
Sliver	50	ND	ND	ND	ND	1.3 U	1.3 U				
Sodium	20,000	18,000	16,000	88,000	87,000	24,400 48,400					
Thallium	0.5	ND	ND	ND	ND	0.19 U 0.19 U					
Vanadium	NS	ND	ND	ND	ND	1.0 U 1.0 U					
Zinc	2,000	ND	ND	ND	ND	15.7 J 5.4 J					
1,4-Dioxane by Meth	nod 8270E SIM ID in ug/l			•							
1,4-Dioxane	0.35	-	-	-	-	0.072 U	-				

Notes:

(1) 6NYCRR Part 703.5 GA Groundwater Quality Standards (GQS) and Guidance Values (GV) 6/1998

NS - No Standard

ND - Not Detected B- Estimated Value BOLD values exceed NYSDEC Standards.

BOLD shaded values are Site-related metals that exceed NYSDEC Standards.

Groundwater Contaminant of Concern

Table 2 (Continued) Groundwater Chemical Analytical Results - MW-17/MW-17A

Liberty Industrial Finishing Site

May 2011 Through October 2024 Sampling Events

Sample Location			M	V-17	MW-17A				
Well Depth (feet)	NYSDEC Class GA Ambient		9	99		1	00		
Sampling Date:	Water Quality Standards ⁽¹⁾	11/13	8/2018	12/10	0/2019	8/28/2023	10/8/2024		
Sample Type:		Unfiltered	Filtered	Unfiltered	Filtered	Unfil	Itered		
Target Analyte List N	Aetals by USEPA Method	l 6010 in ug/L							
Aluminum	NS	5,700	ND	2,700	290	1,420	1,620		
Antimony	3	ND	ND	ND	ND	0.48 U	0.48 U		
Arsenic	25	2.9	ND	ND	ND	1.2 U	1.2 U		
Barium	1,000	75	53	210	200	263	197		
Beryllium	3	ND	ND	1.3	ND	5.3	4.8		
Cadmium	5	25	3.6	13	11	1.5 J	1.3 J		
Calcium	NS	31,000	32,000	48,000	49,000	19,800	20,300		
Chromium	50	ND	ND	55	ND	2.6 J	1.7 U		
Cobalt	NS	2.8	ND	3	ND	2.3 J	2.1 J		
Copper	200	ND	ND	ND	ND	8.3	5.2		
Iron	300	7,700	1,800	3,500	ND	437	173		
Lead	25	49	3.2	19	ND	0.63 J	3.1		
Magnesium	35,000	ND	ND	5,800	5,700	2,980	3,420		
Manganese	300	930	940	1,100	1,100	622	925		
Mercury	0.7	ND	ND	ND	ND	0.091 U	0.091 U		
Nickel	100	ND	ND	ND	ND	9.9	13.9		
Potassium	NS	6,500	6,400	7,300	7,400	5,280	4,660		
Selenium	10	ND	ND	ND	ND	0.43 U	0.43 U		
Sliver	50	ND	ND	ND	ND	1.3 U	1.3 U		
Sodium	20,000	23,000	24,000	27,000	27,000	26,400 19,100			
Thallium	0.5	ND	ND	ND	ND	0.19 U 0.19 U			
Vanadium	NS	ND	ND	ND	ND	1.0 U 1.0 U			
Zinc	2,000	600	260	480	350	61.4 35.7			
1,4-Dioxane by Met	nod 8270E SIM ID in ug/l		-	-	-	-	-		
1,4-Dioxane	0.35	-	-	-	-	0.072 U	-		

Notes:

(1) 6NYCRR Part 703.5 GA Groundwater Quality Standards (GQS) and Guidance Values (GV) 6/1998

NS - No Standard

ND - Not Detected

B- Estimated Value

BOLD values exceed NYSDEC Standards.

BOLD shaded values are Site-related metals that exceed NYSDEC Standards.

Groundwater Contaminant of Concern

TABLE 3

GROUNDWATER CHEMICAL ANALYTICAL RESULTS - PFAS LIBERTY INDUSTRIAL FINISHING SITE ONSITE WELLS AUGUST 28, 2023 AND OCTOBER 8, 2024 SAMPLING EVENTS

Client ID	ID MW-2A MW-3A			MW-4A		MW (dupl	-44A icate)	MW-4A		MW-44A (duplicate)				MW-7A				M	W-17A		(EB0828 (equipment blank)		EB1008 (equipment blank)		NYSDEC Class GA Ambient Water Quality Guidance									
Sample Date	8/28 Result	3/2023	8/28/202	3	10/8/2 Result 0	2024 MDI	8/28 Result (3/2023	8/28/2 Secondary	023	8/28, Result (/2023	10/8/2 Result (2024	10/8/20)24	10/8/2 Result 0	024 MDL S	10/8/2024 econdary 0	1 MDL F	8/28/2 Result O	2023 MDI	8/28/2023 Secondary 0	10/	8/2024	8/2 Result	8/2023	1 Resu	0/8/2024		8/28/2	2023 MDI	10/8/2 Result ()	2024 MDI	Values
Per and Polyfluoroalkyl Substances (PI	AS) in na	anograms	ner liter (ng/l)	by Me	ethod 163	3	nesure	4 11.02	becondury		nesure		nesure		becondury		nesure d	1002 0			Lesure q		Secondary a	nesure	Q	nesure	<u> </u>	nesu			an a		incount of	mbe	
	1 76	1 1 76		1 72	1 72 11	1 73	1 60 1	1 1 69		<u> </u>	1.68	1 1 68	1.61	1.61		T	1.60 11	1.60		Т	1 60 11 5	1 1 60		1.62	1 1 63	1 70	1 1 70	17	5 11	1 75 1	71 11	1 71	1 58 11	1.58	-
3·3 FTCA	1.70	U 1.70	1.75 0 1	1 30	2 17 11	2.17	1 27 1	1 1 27	-		1.06	1 1 26	2 02 1	1.01		_	2 12 11	2 12	-		1.09 0 F	1 27	-	2.03	1.03	1.70	1.70	2.1	8 11	1.75 I 2.18 1	28 11	1.71	1.38 0	1.30	-
4.8-Dioxa-2H-perfluoropopapoic acid	1.52	0 1.52	1.50 0	1.50	2.17 0	2.17	1.27	5 1.27			1.20	, 1.20	2.02 0	2.02			2.12 0	2.12			1.27 0	1.27		2.05	0 2.05	1.20	0 1.20	2.1		2.10 1	.20 0	1.20	1.57 0	1.57	
(ADONA)	1.32	U 1.32	1.30 U 1	1.30	1.73 U	1.73	1.27 เ	J 1.27	-		1.26 l	J 1.26	1.61 U	1.61	-		1.69 U	1.69	-		1.27 U	1.27	-	1.63	U 1.63	1.28	U 1.28	1.7	5 U	1.75 1	.28 U	1.28	1.58 U	1.58	-
4:2 FTS	1.49	U 1.49	1.47 U 1	1.47	1.73 U	1.73	1.44 l	J 1.44	-		1.43 l	J 1.43	1.61 L	1.61	-		1.69 U	1.69	-		1.44 U	1.44	-	1.63	U 1.63	1.45	U 1.45	1.7	5 U	1.75 1	.45 U	1.45	1.58 U	1.58	-
5:3 FTCA	8.78	U 8.78	8.65 U 8	8.65	10.8 U	10.8	8.47 L	J 8.47	-		8.39 l	J 8.39	10.1 U	10.1	-		10.6 U	10.6	-		8.46 U	8.46	-	10.2	U 10.2	8.52	U 8.52	10.	9 U	10.9 8	.56 U	8.56	9.87 U	9.87	-
6:2 FTS	4.56	J 2.19	2.16 U 2	2.16	1.73 U	1.73	3.32	2.12	-	_	2.43 J	2.10	1.61 L	1.61	-		1.69 U	1.69	-		2.12 U	2.12	-	1.63	U 1.63	2.13	U 2.13	1.7	5 U	1.75 2	.14 U	2.14	1.58 U	1.58	-
7:3 FTCA	8.78	U 8.78	8.65 U 8	8.65	12.9 U	12.9	8.47 เ	J 8.47	-		8.39 (J 8.39	12.0 L	12.0	-		12.6 U	12.6	-		8.46 U	8.46	-	12.1	U 12.1	8.52	U 8.52	13.	0 U	13.0 8	.56 U	8.56	11.8 U	11.8	-
8:2 FTS	2.28	0 2.28	2.25 U 2	2.25	1.73 U	1.73	2.20	J 2.20	-		2.18	2.18	1.61 U	1.61	-		1.69 U	1.69	-		2.20 U	2.20	-	1.63	U 1.63	2.22	0 2.22	1.7	5 U	1.75 2	.22 U	2.22	1.58 U	1.58	-
9CI-PF3ONS	0.88	0 0.88	0.87 0 0	1.87	1.73 U	1./:	0.85	J 0.85	-		0.84 (0.84	1.61 U	1.61	-		1.69 U	1.69	-		0.85 U F	-1 0.85	-	1.63	0 1.63	0.85	0 0.85	1./	5 0	1.75 0	.86 U	0.86	1.58 U	1.58	-
HFPO-DA (GenX)	1.76	0 1.76	1.73 U	1.73	1.73 U	1./3	1.69	J 1.69	-		1.68	1.68	1.61 L	1.61	-		1.69 U	1.69	-		1.69 U	1.69	-	1.63	U 1.63	1.70	0 1.70	1./	5 0	1.75 1	./1 U	1./1	1.58 U	1.58	-
NETFOSA	0.44	0 0.44	0.43 0 0	0.43	0.45 U	0.43	0.42	J 0.42	-	_	0.42	0.42	0.40 0	0.40	-		0.42 0	0.42	-		0.42 0	0.42	-	0.41	0 0.41	0.43	0 0.43	0.4	4 0	0.44 0	.43 0	0.43	0.39 0	0.39	-
NELFOSA	0.01	0 0.61	4.22 U	4.22	4.22 11	0.43	0.59	J 0.59	- 20 7 11	11 20 7	0.59	0.59	0.42 0	0.42	-		0.44 0	0.44	-		4.32 U	0.59	-	40.2 4.07	0 0.42	0.60	0 0.60	0.4	5 0	4.20 4	20 0	0.60	2.05 U	2.05	-
NEDHA	4.39	0 4.39	4.33 U 4	4.33	4.33 U	4.33	4.24	J 4.24	20.7 0	п 20.7	4.20 0	1 0.84	4.04 0	4.04	-		4.23 U	4.23	-		4.23 U	4.23	49.3 U H	49.3 4.07	0 4.07	4.20	0 4.20	4.3	6 0	4.30 4	.28 U	4.28	3.95 U	3.95	-
	0.88	0 0.88	0.87 0 0	0.07	0.42 11	1.00	0.65	0.83			0.64	0.84	0.99 0	0.99			0.42	0.42	-		0.85 0	0.65	-	0.99	0 0.95	0.85	0 0.83	1.0	4 11	1.00 0	12 11	0.80	0.30 11	0.90	-
NMEFOSA	1.05	1 1 05	1.04 11 1	1 04	0.43 0	0.40	1 02 1	1 1 02			1 01 1	1 1 01	0.40 0	0.40		_	0.52 11	0.42			1.02 11	1.02	11.8 Ц Н	11.8 0.50	0 0.41	1.02	0 0.43	0.4	4 0	0.44 0	03 11	1.03	0.39 0	0.33	
	4 39	1.05	4 33 11 4	4 33	4 33 11	4 33	4 24 1	1 4 74	-		4 20 1	1 4 20	4 04 1	4 04	-		4 23 11	4 23	-		4 23 11	4.23	493 U H	49.3 4.07	U 4.07	4 26	U 4.26	4 3	4 U	436 4	28 11	4 28	3 95 11	3 95	-
Perfluorobutanesulfonic acid (PEBS)	3.28	0.26	4.66 (0.26	4.75	0.43	3.58	0.25	-		3.94	0.25	24.6	0.40	-		22.2	0.42	-		24.5	0.25	-	4.12	0.41	4.84	0.26	6.5	1	0.44 0	26 U	0.26	0.39 U	0.39	-
Perfluorobutanoic acid (PEBA)	6.20	1 1 76	8.37	1 73	8.71	1.85	15.2	1.69	-		15.5	1.68	11.3	1 72	-		11.2	1.80	-		19.6	1.69	-	6.39	1 1 73	6.05	1 1 70	5.3	0 1	1.86 1	71 U	1 71	1.68 U	1.68	-
Perfluorodecanesulfonic acid (PEDS)	0.44	U 0.44	0.43 U (0.43	0.43 U	0.43	0.42 1	J 0.42	-		0.42 1	J 0.42	0.40 L	0.40	-		0.42 U	0.42	-		0.42 U F	1 0.42	4.93 U H	4.93 0.41	U 0.41	0.43	U 0.43	0.4	4 U	0.44 0	.43 U	0.43	0.39 U	0.39	-
Perfluorodecanoic acid (PEDA)	0.44	U 0.44	0.43 U (0.43	0.43 U	0.43	0.42	J 0.42	-		0.42	J 0.42	0.40 L	0.40	-		0.42 U	0.42	-		0.42 U	0.42	-	0.41	U 0.41	0.43	U 0.43	0.4	4 U	0.44 0	.43 U	0.43	0.39 U	0.39	-
Perfluorododecanesulfonic acid (PEDoS)	0.79	U 0.79	0.78 U (0.78	0.43 U	0.43	0.76 1	J 0.76	-		0.76 (J 0.76	0.40 L	0.40	-		0.42 U	0.42	-		0.76 U F	1 0.76	8.88 U H	8.88 0.41	U 0.41	0.77	U 0.77	0.4	4 U	0.44 0	.77 U	0.77	0.39 U	0.39	-
Perfluorododecanoic acid (PFDoA)	0.44	U 0.44	0.43 U (0.43	0.43 U	0.43	0.42 1	J 0.42	-		0.42 เ	J 0.42	0.40 L	0.40	-		0.42 U	0.42	-		0.42 U	0.42	-	0.41	U 0.41	0.43	U 0.43	0.4	4 U	0.44 0	.43 U	0.43	0.39 U	0.39	-
Perfluoroheptanesulfonic acid (PFHpS)	0.40	J 0.35	0.35 J (0.35	2.61	0.43	1.05 J	0.34	-		0.96 J	0.34	9.15	0.40	-		8.52	0.42	-		0.34 U F	1 0.34	3.94 U H	3.94 0.60	J 0.41	0.34	U 0.34	0.4	4 U	0.44 0	.34 U	0.34	0.39 U	0.39	-
Perfluoroheptanoic acid (PFHpA)	3.65	0.46	3.05 (0.45	4.32	0.43	5.52	0.44	-		5.36	0.44	4.27	0.40	-		3.93	0.42	-		5.53	0.44	-	8.03	0.41	8.98	0.44	6.4	2	0.44 0	.44 U	0.44	0.39 U	0.39	-
Perfluorohexanesulfonic acid (PFHxS)	1.47	J 0.50	1.33 J (0.49	2.05	0.45	3.77	0.48	-		3.35	0.48	7.03	0.42	-		6.80	0.44	-		31.1	0.48	-	5.18	0.42	1.32	J 0.49	1.7	6	0.45 0	.49 U	0.49	0.41 U	0.41	-
Perfluorohexanoic acid (PFHxA)	6.62	0.44	4.77 (0.43	7.97	0.43	14.7	0.42	-		13.9	0.42	12.6	0.40	-		12.4	0.42	-		10.8	0.42	-	11.5	0.41	18.8	0.43	13.	0	0.44 0	.43 U	0.43	0.39 U	0.39	-
Perfluorononanesulfonic acid (PFNS)	0.35	U 0.35	0.35 U 0	0.35	0.43 U	0.43	0.34 l	J 0.34	-		0.34 l	J 0.34	0.40 L	0.40	-		0.42 U	0.42	-		0.34 U F	1 0.34	3.94 U H	3.94 0.41	U 0.41	0.34	U 0.34	0.4	4 U	0.44 0	.34 U	0.34	0.39 U	0.39	-
Perfluorononanoic acid (PFNA)	0.82	J 0.44	0.83 J (0.43	2.63	0.43	1.15 J	0.42	-		1.12 J	0.42	1.34 J	0.40	-		1.63 J	0.42	-		0.42 U	0.42	-	1.60	J 0.41	0.50	J 0.43	0.4	4 U	0.44 0	.43 U	0.43	0.39 U	0.39	-
Perfluorooctanesulfonamide (PFOSA)	0.44	U 0.44	0.43 U (0.43	0.43 U	0.43	0.42 เ	J 0.42	-		0.42 l	J 0.42	0.40 L	0.40	-		0.42 U	0.42	-		0.42 U	0.42	-	0.41	U 0.41	0.43	U 0.43	0.4	4 U	0.44 0	.43 U	0.43	0.39 U	0.39	-
Perfluorooctanesulfonic acid (PFOS)	30.4	0.44	207 (0.43	383	0.43	389	0.42	-		392	0.42	-		709 [4.04	-		609 D	4.23	7.27	0.42	9.07 Ј Н	4.93 10.2	0.41	4.54	I 0.43	2.6	0	0.44 0	.43 U	0.43	0.39 U	0.39	2.7
Perfluorooctanoic acid (PFOA)	10.6	0.56	6.48 (0.55	21.3	0.43	9.78	0.54	-		10.5	0.54	15.2	0.40	-		17.2	0.42	-		10.7	0.54	-	30.1	0.41	. 17.7	0.55	20.	7	0.44 0	.55 U	0.55	0.39 U	0.39	6.7
Perfluoropentanesulfonic acid (PFPeS)	0.44	U 0.44	0.43 U (0.43	0.43 U	0.43	0.66 J	0.42	-		0.74 J	0.42	1.49 J	0.40	-		1.67 J	0.42	-		0.75 J	0.42	-	0.56	J 0.41	0.43	U 0.43	0.4	4 U	0.44 0	.43 U	0.43	0.39 U	0.39	-
Perfluoropentanoic acid (PFPeA)	5.65	0.88	4.63 (0.87	6.04	0.87	14.9	0.85	-		14.5	0.84	13.9	0.81	-		13.4	0.85	-		13.7	0.85	-	10.0	0.81	12.7	0.85	13.	0	0.87 0	.86 U	0.86	0.79 U	0.79	-
Perfluorotetradecanoic acid (PFTeDA)	0.44	U 0.44	0.43 U (0.43	0.43 U	0.43	0.42 เ	J 0.42	-		0.42 l	J 0.42	0.40 L	0.40	-		0.42 U	0.42	-		0.42 U	0.42	4.93 U H	4.93 0.41	U 0.41	0.43	U 0.43	0.4	4 U	0.44 0	.43 U	0.43	0.39 U	0.39	-
Perfluorotridecanoic acid (PFTriA)	0.44	U 0.44	0.43 U (0.43	0.43 U	0.43	0.42 เ	J 0.42	-		0.42 l	J 0.42	0.40 L	0.40	-	_	0.42 U	0.42	-		0.42 U F	2 0.42	4.93 U H	4.93 0.41	U 0.41	0.43	U 0.43	0.4	4 U	0.44 0	.43 U	0.43	0.39 U	0.39	-
Perfluoroundecanoic acid (PFUnA)	0.44	U 0.44	0.43 U (0.43	0.43 U	0.43	0.42 เ	J 0.42	-		0.42 l	J 0.42	0.40 L	0.40	-		0.42 U	0.42	-		0.42 U	0.42	-	0.41	U 0.41	0.43	U 0.43	0.4	4 U	0.44 0	.43 U	0.43	0.39 U	0.39	-
PFEESA	0.44	U 0.44	0.43 U (0.43	0.87 U	0.87	0.42 l	J 0.42	-		0.42 l	J 0.42	0.81 L	0.81	-		0.85 U	0.85	-		0.42 U	0.42	-	0.81	U 0.81	0.43	U 0.43	0.8	7 U	0.87 0	.43 U	0.43	0.79 U	0.79	-
PFMBA	0.88	U 0.88	0.87 U (0.87	0.87 U	0.87	0.85 U	J 0.85	-		0.84 l	J 0.84	0.81 L	0.81	-		0.85 U	0.85	-		0.85 U	0.85	-	0.81	U 0.81	0.85	U 0.85	0.8	7 U	0.87 0	.86 U	0.86	0.79 U	0.79	-
PFMPA	0.44	U 0.44	0.43 U (0.43	0.87 U	0.87	0.42 l	J 0.42	-		0.42 l	J 0.42	0.81 L	0.81	-		0.85 U	0.85	-		0.42 U	0.42	-	0.81	U 0.81	0.43	U 0.43	0.8	7 U	0.87 0	.43 U	0.43	0.79 U	0.79	-

Notes:

All samples collected August 28, 2023

Bolded concentrations denote detections.

Bolded yellow-highlighted concentrations exceed NYSDEC Class GA Ambient Water Quality Guidance Values. F1 : MS and/or MSD recovery exceeds control limits. F2 : MS/MSD RPD exceeds control limits

H : Sample was prepared or analyzed outside of the specified holding tirDe: Sample results are from a diluted sample

I : Value is EMPC (estimated maximum possible concentration).

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U : Indicates the analyte was analyzed for but not detected.

- : Not established or not analyzed.

ATTACHMENT A

WELL SAMPLING FORMS



WELL SAMPLING DATA

Project: 550 Liberty Industrial Plaza
Location: 550 Suffolk Avenue, Brentwood NY
Well No.: <u>MW-3A</u>
DTW: 43.63
Total Depth:55'
Pump Type and Rate: Geotech GeoSub Pump (~ 0,5 L/min)
Notes: Pump on at 10:30

TIME (HRS:MINS)	DO	рН	SPECIFIC CONDUCTIVITY (mS)	TEMPERATURE (°C)	TURBIDITY (NTU)
10:33	4.04	6.67	0.431	15.18	35.13
10:36	4.92	6.92	0.420	5.53	0.0
10:39	8.52	6.89	0.423	16.18	0.0
10:42	3.53	6.69	0.419	16.57	0.0
10:45	3.29	6.63	0.413	16.81	0.0
10:49	3.31	6.60	0.418	18.61	0.0
10:53	3.28	6.53	0.422	16.17	0.0
			x		

clients/Hydro Dept Forms/WellSamplingFormLowFlow

FPM

WELL SAMPLING DATA
Project: 550 Liberty Industrial Plaza
Location: 550 Suffolk Ave Brentwood NY
Well No.: MW-4A
DTW: 43.27
Total Depth:55
Pump Type and Rate: Geotech GeoSub Pump (~ 0.5 L/min)
Notes: * DUP (MW-44A) * Pump on 9:42

TIME (HRS:MINS)	DO	рН	SPECIFIC CONDUCTIVITY (mS)	TEMPERATURE (°C)	TURBIDITY (NTU)
9:45	3.73	6.89	974	15.35	14.8
9:48	4.11	6.64	953	15.46	0.0
9:51	3.39	6.61	941	15.43	0.0
9:53	3.44	6.59	938	15.48	0.0
9:56	3.42	6.53	936	15.42	0.0

clients/Hydro Dept Forms/WellSamplingFormLowFlow



WELL SAMPLING DATA

Project: 550 Liberty Industrial Plaza
Location: 550 Suffolk Avenue, Brentwood NY
Well No.: MW-7A
DTW: 44.03
Total Depth:55'
Pump Type and Rate: Geotech Geosub Pump (~ 0.5 L/min)
Notes: (* MS/MSD*) Pump on at 11:45

TIME (HRS:MINS)	DO	pН	SPECIFIC CONDUCTIVITY (mS)	TEMPERATURE (°C)	TURBIDITY (NTU)
11:47	6.03	6.49	0.463	18.73	22.2
11:50	5.29	6.67	0.473	18.92	0,0
11:53	8.21	6.54	0.470	19.63	0.0
11:56	4.47	6.49	0.461	20.52	0.0
11:59	4.51	6.47	0.454	20.99	0,0
12:03	4.62	6.41	0.453	20.19	0.0
12:06	4.58	6.47	0.455	20.13	0.0
12:09	4.61	6.45	O.459	20.03	0.0
12:11	4.59	6.43	0.451	20.09	0.0

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WELL SAMPLING DATA

Project: 550 Liberty Industrial Plaza
Location: 550 Suffolk Avenue, Brentwood NY
Well No.: MW-17A
DTW: 44.12'
Total Depth: 100'
Pump Type and Rate: Geotech GeoSub Pump (~0.5/min)
Notes: Pump on at 13:20

TIME (HRS:MINS)	DO	рН	SPECIFIC CONDUCTIVITY (mS)	TEMPERATURE (°C)	TURBIDITY (NTU)
13:23	0.78	6.08	0.283	20.54	0.0
13:26	1.53	5.87	0.279	18.73	0.0
13:29	0.48	5.76	0.275	18.39	0.0
13:32	0.43	5.69	0,277	18.33	0.0
13:35	0.42	5.68	0.274	18.23	0.0

clients/Hydro Dept Forms/WellSamplingFormLowFlow



ATTACHMENT B

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DATA USABILITY SUMMARY REPORTS



LIBERTY INDUSTRIAL FINISHING SITE, NYSDEC #152108 DATA USABILITY SUMMARY REPORT October 8, 2024 Groundwater Sampling Lab Report #460-313295-1

This data usability summary report (DUSR) was prepared in accordance with Appendix 2B of New York State Department of Environmental Conservation (NYSDEC) DER-10 using the entire original laboratory report, including the sample data summary report and the supporting data package. The sampling event included four primary environmental groundwater samples and associated quality assurance/quality control (QA/QC) samples collected on October 8, 2024.

Sample Collection

The samples were collected in labeled laboratory-provided sample containers; no issues with sample containers or labeling were reported by the laboratory. All sample collection was conducted under Chain of Custody (COC) procedures.

Field QA/QC samples, including a field blank, a duplicate sample, and a matrix spike/matrix spike duplicate (MS/MSD) sample, were collected to evaluate field sampling methods and laboratory procedures.

Sample Analyses

The samples were transmitted to and analyzed by Eurofins Environmental Testing (Eurofins) at their Edison, NJ laboratory, which is New York State Department of Health-certified for the analyses performed. The samples were prepared and analyzed for Target Analyte List (TAL) metals using Methods 3005A and 6020B, and for mercury using Method 7470A. The analytes are appropriate for the intended use of the data and the analytical methods are appropriate for the analyte list. The sample holding times were met and no problems with sample receipt or handling were reported by the laboratory.

QA/QC Results

One field blank sample was collected during sampling event. Field blank samples are prepared by pouring laboratory-provided clean water over or through the sampling equipment and the results are used to evaluate the potential for field contamination to affect the results from the primary environmental samples. The field blank sample was tested for the same analytes that the primary samples were tested for. No detections of any metals were noted in the field blank sample. Based on these results, field contamination does not appear to present a concern for the primary environmental sample results.

A duplicate sample (MW-44A) was collected in the field and prepared and analyzed by the laboratory to evaluate the precision of the laboratory analyses. The results from the parent sample (MW-4A) and the duplicate sample were very similar, indicating that the laboratory data are anticipated to be reasonably precise.

An MS/MSD sample (separate aliquots of a primary environmental sample) was collected in the field and prepared by the lab to evaluate the effect of the matrix on the reliability of the analytical results. Spiking occurs in the laboratory prior to sample preparation and analysis. One MS/MSD sample was included in this sample delivery group and was prepared from the MW-7A primary



environmental sample. Based on information provided by the analytical laboratory, no issues were noted with the MS/MSD results, except as follows:

• The percent recoveries (%Rs) for calcium and sodium were below the recovery limits in the MS and MSD. The results are flagged as the concentrations of these metals in the submitted sample were more than four times the spike amounts. In this case, the control limits are not applicable. No corrective action is required and the data are reported.

Based on these findings, matrix-related effects have not significantly affected the analytical results.

Method blank (MB) batch samples were analyzed by the laboratory to evaluate the potential for cross-contamination associated with the sample preparation and analysis. The MB results did not show concentrations of any analytes above their method detection limits and/or the reporting limits. Based on the MB results, cross-contamination associated with sample preparation and analysis does not appear to present a significant concern.

Laboratory control samples (LCSs) were used by the laboratory to verify the accuracy of the analyses. The LCS results were all within established guidelines. Based on these results, the analytical results do not appear to be affected by laboratory-related accuracy issues.

Questions and Responses as per DER-10

1. Is the data package complete as defined under the current requirements for the NYSDEC ASP Category B deliverables?

The data package is complete under the current requirements for the NYSDEC ASP Category B deliverables.

2. Have all holding times been met?

All samples were received and analyzed within the EPA-recommended holding times for the analyses performed.

3. Do all the QC data, including blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data, fall within the protocol-required limits and specifications?

No – Although the majority of QC data were found to fall within the protocol-required limits and specifications, minor exceptions were noted above; however, these exceptions do not appear to affect the data set at levels of concern.

4. Have all the data been generated using established and agreed-upon analytical protocols?

Yes - the data for TAL metals were generated using Methods 3005A and 6020B, and mercury was analyzed using Method 7470A.

5. Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?

Yes – a representative number of raw data results were checked against the data summary



sheets and quality control verification forms and no issues were noted.

6. Have the correct data qualifiers been used?

Yes – results below the reporting limit and above the method detection limit have been Jqualified and non-detects are U-qualified. No other qualifiers were indicated or applied.

7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheets from the data package been attached to the DUSR?

Yes – exceedances have been noted in the DUSR and the corresponding QC summary sheets are attached.

Conclusions

The groundwater samples were collected in accordance with the requirements for this project. No field or laboratory conditions occurred that would result in non-valid analytical data other than as noted above. The data appear adequate for their intended purpose.

Attachments

S:\Liberty Industrial\GW Monitoring\2024Monitoring\DUSR GW Spls 10-2024-Metals.Docx





Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Stephanie Davis FPM Group Limited 640 Johnson Avenue Suite 101 Bohemia NY 11716 Generated 10/23/2024 8:44 AM

JOB DESCRIPTION

550 Liberty Plaza

JOB NUMBER

460-313295-1

Eurofins Edison 777 New Durham Road Edison NJ 08817

See page two for job notes and contact information.





Eurofins Edison

Job Notes

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

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

Compliance Statement

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Authorization

Jool

Authorized for release by Karen L Smetanka, Project Manager I <u>karen.Smetanka@et.eurofinsus.com</u> Generated 10/23/2024 8:44 AM

CASE NARRATIVE

Client: FPM Group Limited

Project: 550 Liberty Plaza

Report Number: 460-313295-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/09/2024; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.9 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

METALS - TOTAL (ICP/MS)

Samples MW-4A (460-313295-1), MW-4AA (460-313295-2), MW-3A (460-313295-3), MW-7A (460-313295-4), MW-17A (460-313295-5) and EB1008 (460-313295-6) were analyzed for Metals - Total (ICP/MS) in accordance with EPA SW-846 Method 6020B - Total. The samples were prepared on 10/18/2024 and analyzed on 10/22/2024.

Calcium and Sodium failed the recovery criteria low for the MS of sample MW-7AMS (460-313295-4) in batch 460-1002782.

Calcium failed the recovery criteria low for the MSD of sample MW-7AMSD (460-313295-4) in batch 460-1002782.

Refer to the QC report for details.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

MERCURY

Samples MW-4A (460-313295-1), MW-44A (460-313295-2), MW-3A (460-313295-3), MW-7A (460-313295-4), MW-17A (460-313295-5) and EB1008 (460-313295-6) were analyzed for mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 10/18/2024.

No difficulties were encountered during the Hg analysis. -

All quality control parameters were within the acceptance limits.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-313295-1	MW-4A	Water	10/08/24 09:56	10/09/24 21:00
460-313295-2	MW-44A	Water	10/08/24 09:58	10/09/24 21:00
460-313295-3	MVV-3A	Water	10/08/24 11:00	10/09/24 21:00
460-313295-4	MW-7A	Water	10/08/24 12:15	10/09/24 21:00
460-313295-5	MW-17A	Water	10/08/24 13:35	10/09/24 21:00
460-313295-6	EB1008	Water	10/08/24 14:00	10/09/24 21:00

Qualifiers

Metals Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Metals

Prep Batch: 1002260

Lab Sample ID 460-313295-1	Client Sample ID	Prep Type	Matrix Water	Method 7470A	Prep Batch
460-313295-2	MVV-44A	Total/NA	Water	7470A	
460-313295-3	MVV-3A	Total/NA	Water	7470A	
460-313295-4	MW-7A	Total/NA	Water	7470A	
460-313295-5	MW-17A	Total/NA	Water	7470A	
460-313295-6	EB1008	Total/NA	Water	7470A	
MB 460-1002260/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-1002260/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-313295-4 MS	MVV-7A	Total/NA	Water	7470A	
460-313295-4 MSD	MVV-7A	Total/NA	Water	7470A	
460-313295-4 DU	MVV-7A	Total/NA	Water	7470A	

Analysis Batch: 1002310

Lab Sample ID 460-313295-1	Client Sample ID	Prep Type Total/NA	Matrix Water	Method 7470A	Prep Batch 1002260
460-313295-2	MW-44A	Total/NA	Water	7470A	1002260
460-313295-3	MVV-3A	Total/NA	Water	7470A	1002260
460-313295-4	MVV-7A	Total/NA	Water	7470A	1002260
460-313295-5	MVV-17A	Total/NA	Water	7470A	1002260
460-313295-6	EB1008	Total/NA	Water	7470A	1002260
MB 460-1002260/1-A	Method Blank	Total/NA	Water	7470A	1002260
LCS 460-1002260/2-A	Lab Control Sample	Total/NA	Water	7470A	1002260
460-313295-4 MS	MVV-7A	Total/NA	Water	7470A	1002260
460-313295-4 MSD	MVV-7A	Total/NA	Water	7470A	1002260
460-313295-4 DU	MW-7A	Total/NA	Water	7470A	1002260

Prep Batch: 1002339

Lab Sample ID 460-313295-1	Client Sample ID MVV-4A	Prep Type Total Recoverable	Matrix Water	Method 3005A	Prep Batch
460-313295-2	MW-44A	Total Recoverable	Water	3005A	
460-313295-3	MVV-3A	Total Recoverable	Water	3005A	
460-313295-4	MVV-7A	Total Recoverable	Water	3005A	
460-313295-5	MVV-17A	Total Recoverable	Water	3005A	
460-313295-6	EB1008	Total Recoverable	Water	3005A	
MB 460-1002339/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 460-1002339/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
460-313295-4 MS	MVV-7A	Total Recoverable	Water	3005A	
460-313295-4 MSD	MVV-7A	Total Recoverable	Water	3005A	
460-313295-4 DU	MW-7A	Total Recoverable	Water	3005A	

Analysis Batch: 1002782

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
460-313295-1	MW-4A	Total Recoverable	Water	6020B	1002339
460-313295-2	MW-44A	Total Recoverable	Water	6020B	1002339
460-313295-3	MVV-3A	Total Recoverable	Water	6020B	1002339
460-313295-4	MW-7A	Total Recoverable	Water	6020B	1002339
460-313295-5	MW-17A	Total Recoverable	Water	6020B	1002339
460-313295-6	EB1008	Total Recoverable	Water	6020B	1002339
MB 460-1002339/1-A	Method Blank	Total Recoverable	Water	6020B	1002339
LCS 460-1002339/2-A	Lab Control Sample	Total Recoverable	Water	6020B	1002339
LRC 460-1002782/12	Lab Control Sample		Water	6020B	

Eurofins Edison

Metals (Continued)

Analysis Batch: 1002782 (Continued)

Lab Sample ID LRC 460-1002782/13	Client Sample ID Lab Control Sample	Ргер Туре	Matrix Water	Method 6020B	Prep Batch
LRC 460-1002782/14	Lab Control Sample		Water	6020B	
460-313295-4 MS	MW-7A	Total Recoverable	Water	6020B	1002339
460-313295-4 MSD	MW-7A	Total Recoverable	Water	6020B	1002339
460-313295-4 DU	MW-7A	Total Recoverable	Water	6020B	1002339

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

Lab Sample ID: LCS 460-1	002339/2-A					Clie	ent Sar	nple ID	Lab Control	Sample
Matrix: Water							F	rep Typ	e: Total Reco	verable
Analysis Batch: 1002782									Prep Batch: 1	1002339
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Zinc			250	254.7		ug/L		102	80 - 120	
Lah Sampla ID: 460 21220	E A MC							Clie	at Sample ID:	B/1\A/ 7A
Lab Sample ID. 460-51529	5-4 IVI 5						D	Cile	it Sample ID.	Worable
Applyoic Potoby 1002792							F	teb tyt	Prop Batch:	1002220
Allalysis Batch. 1002702	Sample	Samplo	Sniko	MS	MS				Prep Battin.	1002339
Analyto	Rosult	Qualifier		Pocult	Qualifier	Unit	п	%Rec	limite	
Aluminum	35.3		2500	2526	quaimer			100	75 125	
Antimony	0.48	U U	25.0	25 21		ug/L		101	75 125	
Arsenic	1.2	1	50.0	50.11		ug/L		100	75 125	
Barium	31.4	0	50.0	70.07		ug/L		97	75 125	
Bendlium	0 12	п	25.0	26.32		ug/L		105	75 125	
Cadmium	1 1	J	25.0	26.52		ug/L		102	75 125	
Calcium	29200	0	2500	30560	4	ug/L		54	75 125	
Chromium	1 7	n	50.0	51 11	-	ug/L		102	75 125	
Cobalt	0.41	11	25.0	25.02		ug/L		102	75 125	
Copper	2.0	0	50.0	52 14		ug/L		104	75 125	
Irop	176	0	2500	2640		ug/L		00	75 125	
Lead	0.42	11	2500	2040		ug/L		101	75 125	
Magnosium	3050	0	25.0	5565		ug/L		100	75 125	
Mangapasa	12.0		2500	257 4		ug/L		08	75 125	
Nickel	14	11	50.0	51.05		ug/L		102	75 125	
Botassium	1210	0	2500	3658		ug/L		08	75 125	
Selenium	0.43	11	50.0	50 14		ug/L		100	75 125	
Silver	1 3	U U	25.0	24.61		ug/L		08	75 125	
Sodium	48400	0	25.0	40830	1 1	ug/L		572	75 125	
Thallium	40400	п	2000	20.30	4	ug/L		102	75-125	
Vapadium	1.19		20.0	48.00		ug/L		02	75 125	
Zinc	5.4	J	250	249.6		ug/L		98	75 125	
Potassium Selenium Silver Sodium Thallium Vanadium Zinc	1210 0.43 1.3 48400 0.19 1.0 5.4	1 N N	2500 50.0 25.0 2500 20.0 50.0 250	3658 50.14 24.61 49830 20.39 48.99 249.6	4 -	ug/L ug/L ug/L ug/L ug/L ug/L		98 100 98 57 102 98 98	75 - 125 75 - 125	

Lab Sample ID: 460-313295-4 MSD Matrix: Water Analysis Batch: 1002782

Analysis Batch: 1002782									Prep Bat	ch: 100)2339
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aluminum	35.3	J	2500	2611		ug/L		103	75 - 125	3	20
Antimony	0.48	U	25.0	26.44		ug/L		106	75 - 125	5	20
Arsenic	1.2	U	50.0	52.16		ug/L		104	75 ₋ 125	4	20
Barium	31.4		50.0	81.33		ug/L		100	75 - 125	2	20
Beryllium	0.12	U	25.0	27.75		ug/L		111	75 - 125	5	20
Cadmium	1.1	J	25.0	27.27		ug/L		105	75 - 125	3	20
Calcium	29200		2500	31040	4	ug/L		74	75 - 125	2	20
Chromium	1.7	U	50.0	52.90		ug/L		106	75 - 125	3	20
Cobalt	0.41	U	25.0	26.05		ug/L		104	75 - 125	4	20
Copper	2.0	U	50.0	53.65		ug/L		107	75 - 125	3	20
Iron	176		2500	2745		ug/L		103	75 - 125	4	20
Lead	0.42	U	25.0	26.23		ug/L		105	75 - 125	4	20
Magnesium	3050		2500	5718		ug/L		107	75 - 125	3	20
Manganese	12.0		250	269.5		ug/L		103	75 - 125	5	20

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Client Sample ID: MW-7A

Prep Type: Total Recoverable

Client Sample ID: MW-7A

Client Sample ID: MW-7A

Prep Batch: 1002339

Prep Type: Total Recoverable

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

Lab Sample ID: 460-313295-4 MSD

Matrix: Water							F	Prep Ty	pe: Total I	Recove	rable
Analysis Batch: 1002782									Prep Bat	ch: 100)2339
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Nickel	1.4	U	50.0	53.66		ug/L		107	75 - 125	5	20
Potassium	1210		2500	3756		ug/L		102	75 - 125	3	20
Selenium	0.43	U	50.0	52.66		ug/L		105	75 - 125	5	20
Silver	1.3	U	25.0	25.87		ug/L		103	75 - 125	5	20
Sodium	48400		2500	51170	4 🔨	ug/L		111	75 - 125	3	20
Thallium	0.19	U	20.0	21.21		ug/L		106	75 - 125	4	20
Vanadium	1.0	U	50.0	51.01		ug/L		102	75 - 125	4	20
Zinc	5.4	J	250	263.2		ug/L		103	75 - 125	5	20

Lab Sample ID: 460-313295-4 DU Matrix: Water

Analysis Batch: 1002782

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Aluminum	35.3	J	33.31	J	ug/L		6	20
Antimony	0.48	U	0.48	U	ug/L		NC	20
Arsenic	1.2	U	1.2	U	ug/L		NC	20
Barium	31.4		31.03		ug/L		1	20
Beryllium	0.12	U	0.12	U	ug/L		NC	20
Cadmium	1.1	J	1.05	J	ug/L		6	20
Calcium	29200		29370		ug/L		0.6	20
Chromium	1.7	U	1.7	U	ug/L		NC	20
Cobalt	0.41	U	0.41	U	ug/L		NC	20
Copper	2.0	U	2.0	U	ug/L		NC	20
Iron	176		172.5		ug/L		2	20
Lead	0.42	U	0.42	U	ug/L		NC	20
Magnesium	3050		3070		ug/L		0.5	20
Manganese	12.0		11.88		ug/L		1	20
Nickel	1.4	U	1.4	U	ug/L		NC	20
Potassium	1210		1220		ug/L		0.9	20
Selenium	0.43	U	0.43	U	ug/L		NC	20
Silver	1.3	U	1.3	U	ug/L		NC	20
Sodium	48400		47990		ug/L		0.9	20
Thallium	0.19	U	0.19	U	ug/L		NC	20
Vanadium	1.0	U	1.0	U	ug/L		NC	20
Zinc	5.4	J	5.63	J	ug/L		4	20

Lab Sample ID: LRC 460-1002782/12 Matrix: Water

Analysis Batch: 1002782

	Spike	LRC	LRC				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	5000	4849		ug/L		97	90 - 110	
Barium	20000	18300		ug/L		92	90 - 110	
Beryllium	2000	1890		ug/L		95	90 - 110	
Cadmium	5000	4926		ug/L		99	90 - 110	
Chromium	20000	19020		ug/L		95	90 - 110	
Cobalt	2000	1949		ug/L		97	90 - 110	
Copper	20000	19610		ug/L		98	90 - 110	

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Client Sample ID: Lab Control Sample

LIBERTY INDUSTRIAL FINISHING SITE, NYSDEC #152108 DATA USABILITY SUMMARY REPORT August 28, 2023 Groundwater Sampling Lab Report #460-313190-1

This data usability summary report (DUSR) was prepared in accordance with Appendix 2B of New York State Department of Environmental Conservation (NYSDEC) DER-10 using the entire original laboratory report, including the sample data summary report and the supporting data package. The sampling event included four primary environmental groundwater samples and associated quality assurance/quality control (QA/QC) samples collected on October 8, 2024.

Sample Collection

The samples were collected in labeled laboratory-provided sample containers; no issues with sample containers or labeling were reported by the laboratory. All sample collection was conducted under Chain of Custody (COC) procedures.

Field QA/QC samples, including a field blank, a duplicate sample, and a matrix spike/matrix spike duplicate (MS/MSD) sample, were collected to evaluate field sampling methods and laboratory procedures.

Sample Analyses

The samples were transmitted to and analyzed by Eurofins Environmental Testing (Eurofins) at their Barberton, Ohio laboratory, which is National Environmental Laboratory Accreditation Program (NELAP)-certified for the analyses performed. The samples were prepared and analyzed for the NYSDEC's target list of per- and polyfluoroalkyl substances (PFAS) using the draft Method 1633 – PFAS by LC/MS/MS. The analytes are appropriate for the intended use of the data and the analytical method is appropriate for the analyte list. The sample holding times were met and no problems with sample receipt or handling were reported by the laboratory.

The MW-4A and MW-44A samples were diluted due to the nature of the sample matrix. Elevated reporting limits are provided.

QA/QC Results

One field (equipment) blank sample was collected during sampling event. Field blank samples are prepared by pouring laboratory-provided clean water over or through the sampling equipment and the results are used to evaluate the potential for field contamination to affect the results from the primary environmental samples. The field blank sample was tested for the same PFAS analytes that the primary samples were tested for. No PFAS compounds were detected in the field blank sample. Based on these results, field contamination does not appear to present a concern for the primary environmental sample results.

A duplicate sample (MW-44A) was collected in the field and prepared and analyzed by the laboratory to evaluate the precision of the laboratory analyses. The PFAS results from the parent sample (MW-4A) and the duplicate sample were very similar, indicating that the laboratory data are anticipated to be reasonably precise.

An MS/MSD sample (separate aliquots of a primary environmental sample) was collected in the field and prepared by the lab to evaluate the effect of the matrix on the reliability of the analytical results. Spiking occurs in the laboratory prior to sample preparation and analysis. One MS/MSD



sample was included in this sample delivery group and was prepared from the MW-7A primary environmental sample. Based on information provided by the analytical laboratory, no issues were noted with the MS/MSD results. Based on these results, matrix-related effects do not appear to have significantly affected the analytical results.

Method blank (MB) batch samples were analyzed by the laboratory to evaluate the potential for cross-contamination associated with the sample preparation and analysis. The MB results did not show concentrations of any PFAS analytes above their method detection limits and/or the reporting limits. Based on the MB results, cross-contamination associated with sample preparation and analysis does not appear to present a concern.

Laboratory control samples (LCSs) were used by the laboratory to verify the accuracy of the analyses. The LCS results were all within established guidelines. Based on these results, the analytical results do not appear to be affected by laboratory-related accuracy issues.

The low-level continuing calibration verification (CCVL) and the continuing calibration verification (CCV) associated with batch 240-630721 recovered outside control limits for IDA compounds (flagged). As the target analytes associated with this IDA are within spec, the data are reported.

The CCVL associated with batch 240-631117 recovered outside control limits for IDA compounds (flagged). As the target analytes associated with this IDA are within spec, the data are reported.

The CCV recovered outside control limits for IDA compounds (flagged). As the target analytes associated with this IDA are within spec, the data are reported. The following samples are affected: MW-4A and MW44A.

Analyst judgement was used to identify certain PFAS compounds where the transition mass ratio for the analyte was outside of established ratio limits. Qualitative identification has some level of uncertainty and the associated results are I-qualified, indicating estimated maximum possible concentration. This affected two QAQC samples only.

Questions and Responses as per DER-10

1. Is the data package complete as defined under the current requirements for the NYSDEC ASP Category B deliverables?

The data package is complete under the current requirements for the NYSDEC ASP Category B deliverables.

2. Have all holding times been met?

All samples were received and analyzed within the EPA-recommended holding times for the analyses performed.

3. Do all the QC data, including blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data, fall within the protocol-required limits and specifications?

No – Although the majority of QC data were found to fall within the protocol-required limits and specifications, minor exceptions were noted above; however, these exceptions do not appear to affect the data set at levels of concern.

4. Have all the data been generated using established and agreed-upon analytical protocols?



Yes - the data for PFAS were generated using the draft Method 1633 – PFAS by LC/MS/MS.

5. Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?

Yes – a representative number of raw data results were checked against the data summary sheets and quality control verification forms and no issues were noted.

6. Have the correct data qualifiers been used?

Yes – results below the reporting limit and above the method detection limit have been Jqualified, non-detects are U-qualified, and results from qualitative identifications are Iqualified. No other qualifiers were indicated or applied.

7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheets from the data package been attached to the DUSR?

Yes – exceedances have been noted in the DUSR and the corresponding QC summary sheets are attached.

Conclusions

The groundwater samples were collected in accordance with the requirements for this project. No field or laboratory conditions occurred that would result in non-valid analytical data other than as noted above. The data appear adequate for their intended purpose.

Attachments

S:\Liberty Industrial\GW Monitoring\2024Monitoring\DUSR GW Spls 10-2024-PFAS.Docx





Environment Testing



ANALYTICAL REPORT

PREPARED FOR

Attn: Stephanie Davis FPM Group Limited 640 Johnson Avenue Suite 101 Bohemia NY 11716 Generated 10/22/2024 12:17 PM

JOB DESCRIPTION

550 Liberty Plaza

JOB NUMBER

460-313190-1

Eurofins Edison 777 New Durham Road Edison NJ 08817

See page two for job notes and contact information.





Eurofins Edison

Job Notes

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

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

Compliance Statement

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Authorization

Smitel

Generated 10/22/2024 12:17 PM

Authorized for release by Karen L Smetanka, Project Manager I <u>karen.Smetanka@et.eurofinsus.com</u>

CASE NARRATIVE

Client: FPM Group Limited

Project: 550 Liberty Plaza

Report Number: 460-313190-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/09/2024; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.8 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) BY LC/MS/MS

Samples MW-4A (460-313190-1), MW-4AA (460-313190-2), MW-3A (460-313190-3), MW-7A (460-313190-4), MW-17A (460-313190-5) and EB1008(Equipment Blank) (460-313190-6) were analyzed for Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS in accordance with PFAS_DI. The samples were prepared on 10/14/2024 and analyzed on 10/14/2024 and 10/17/2024.

The low level continuing calibration verification (CCVL) and the continuing calibration verification (CCV) associated with batch 240-630721 recovered outside of control limits for IDA compound(s) (flagged). Section 14.3.3 of the finalized EPA 1633 states that the recovery of target analytes for the CCV(s) must be within 70 - 130%, unless the analyte is not of concern for a given project. Since target analyte(s) associated with this IDA are within spec, data is reported.

The low level continuing calibration verification (CCVL) associated with batch 240-631117 recovered outside of control limits for IDA compound(s) (flagged). Section 14.3.3 of the finalized EPA 1633 states that the recovery of target analytes for the CCV(s) must be within 70 - 130%, unless the analyte is not of concern for a given project. Since target analytes associated with this IDA are within spec, data is reported.

The continuing calibration verification (CCV) recovered outside of control limits for IDA compound(s) (flagged). Section 14.3.3 of the finalized EPA 1633 states that the recovery of target analytes for the CCV(s) must be within 70 - 130%, unless the analyte is not of concern for a given project. Since target analytes associated with this IDA are within spec, data is reported. The following samples are impacted: MW-4A (460-313190-1), MW-44A (460-313190-2), (CCV 240-631117/40), (CCV 240-631117/52) and (CCVIS 240-631117/3).

Samples MW-4A (460-313190-1)[10X] and MW-44A (460-313190-2)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the PFAS analysis.

All other quality control parameters were within the acceptance limits.

Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-313190-1	MW-4A	Water	10/08/24 09:56	10/09/24 21:00
460-313190-2	MW-44A	Water	10/08/24 09:58	10/09/24 21:00
460-313190-3	MW-3A	Water	10/08/24 11:00	10/09/24 21:00
460-313190-4	MW-7A	Water	10/08/24 12:15	10/09/24 21:00
460-313190-5	MW-17A	Water	10/08/24 13:35	10/09/24 21:00
460-313190-6	EB1008(Equipment Blank)	Water	10/08/24 14:00	10/09/24 21:00

Method	Method Description	Protocol	Laboratory
Draft-3 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
1633	Solid-Phase Extraction (SPE)	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

LCMS

Prep Batch: 630626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-313190-1	MW-4A	Total/NA	Water	1633	
460-313190-1 - DL	MW-4A	Total/NA	Water	1633	
460-313190-2	MW-44A	Total/NA	Water	1633	
460-313190-2 - DL	MW-44A	Total/NA	Water	1633	
460-313190-3	MW-3A	Total/NA	Water	1633	
460-313190-4	MW-7A	Total/NA	Water	1633	
460-313190-5	MW-17A	Total/NA	Water	1633	
460-313190-6	EB1008(Equipment Blank)	Total/NA	Water	1633	
MB 240-630626/1-A	Method Blank	Total/NA	Water	1633	
LCS 240-630626/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 240-630626/2-A	Lab Control Sample	Total/NA	Water	1633	
460-313190-4 MS	MW-7A	Total/NA	Water	1633	
460-313190-4 MSD	MW-7A	Total/NA	Water	1633	
240-212847-A-8-A DU	Duplicate	Total/NA	Water	1633	

Analysis Batch: 630721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-313190-1	MW-4A	Total/NA	Water	Draft-3 1633	630626
460-313190-2	MW-44A	Total/NA	Water	Draft-3 1633	630626
460-313190-3	MVV-3A	Total/NA	Water	Draft-3 1633	630626
460-313190-4	MW-7A	Total/NA	Water	Draft-3 1633	630626
460-313190-5	MW-17A	Total/NA	Water	Draft-3 1633	630626
460-313190-6	EB1008(Equipment Blank)	Total/NA	Water	Draft-3 1633	630626
MB 240-630626/1-A	Method Blank	Total/NA	Water	Draft-3 1633	630626
LCS 240-630626/3-A	Lab Control Sample	Total/NA	Water	Draft-3 1633	630626
LLCS 240-630626/2-A	Lab Control Sample	Total/NA	Water	Draft-3 1633	630626
460-313190-4 MS	MW-7A	Total/NA	Water	Draft-3 1633	630626
460-313190-4 MSD	MW-7A	Total/NA	Water	Draft-3 1633	630626
240-212847-A-8-A DU	Duplicate	Total/NA	Water	Draft-3 1633	630626
Analysis Batch: 63111	7				

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-313190-1 - DL	MW-4A	Total/NA	Water	Draft-3 1633	630626
460-313190-2 - DL	MW-44A	Total/NA	Water	Draft-3 1633	630626

Client: FPM Group Limited

Login Number: 313190 List Number: 1 Creator: Rivera, Kenneth

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Job Number: 460-313190-1

List Source: Eurofins Edison

Qualifiers

LCMS Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
1	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
υ	Indicates the analyte was analyzed for but not detected.

Glossary

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