Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

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July 7, 2023

*Via Email

Nicole Hinze, Assistant Engineer (Environmental) New York State Department of Environmental Conservation Office of Environmental Quality, Region 5 1115 State Route 86, P.O. Box 296 Ray Brook, New York 12977 <u>nicole.hinze@dec.ny.gov</u>

RE: RI/FS Work Plan Addendum-1 Adirondack Regional Airport Site (Site #517013) Town of Harrietstown, Franklin County NYSDEC Site No.: 517013

Dear Ms. Hinze:

The following serves as Addendum-1 to the July 2022 Remedial Investigation/Feasibility Study (RI/FS) Work Plan for the Adirondack Regional Airport Site (Site #517013) located in the Town of Harrietstown, Franklin County. This addendum to the RI/FS Work Plan was developed pursuant to analytical data obtained from surface and shallow soil sampling conducted at the Site in August and September, 2022, as presented to NYSDEC and NYSDOH in a Technical Memorandum: Preliminary Assessment of Surface Soil and Shallow Soil Sampling Results, dated March 10, 2023 (see Exhibit 1); which proposed modifications to the RI/FS Work Plan based on the data collected to date. NYSDEC responded to the proposed modifications via letter entitled RI/FS Work Plan Modification Requests, dated April 27, 2023 (see Exhibit 2). Based on the Technical Memorandum and NYSDECs letter, Addendum-1 to the RI/FS Work Plan is presented below and will follow the same organizational format (per Area of Concern [AOC] and Areas Outside of the AOCs) as presented in NYSDEC's letter. This addendum also includes the reasoning and logistics for conversion of RI/FS Work Plan proposed permanent shallow overburden monitoring wells into temporary monitoring points to afford an iterative, cost-effective approach to the shallow overburden groundwater investigation. All proposed media sampling will be performed in accordance with procedures detailed in the approved RI/FS Work Plan. The proposed deep overburden monitoring wells and upper bedrock monitoring wells will be advanced, developed, and sampled in accordance with the approved RI/FS Work Plan.

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AOC-1

- Collection of surface and shallow soil samples from nine (9) additional sampling locations, depicted as red circles on Figure 4A, and situated in the western, northwestern and northeastern portions of AOC-1, are proposed to further delineate surface/shallow soil samples that exceeded Protection of Groundwater Soil Cleanup Objectives (SCOs) for PFAS at previous sampling locations RI-AOC1-01, -02, -03, and -10. The proposed samples will be analyzed for PFAS, pH, Total Organic Carbon (TOC), and % Moisture Content. Samples exhibiting field evidence of contamination (FEC), as defined in the RI/FS Work Plan, will also be analyzed for the full TCL/TAL parameters and Cyanide, if applicable.
- Subsurface soil and groundwater samples to be collected from proposed shallow boring/monitoring well RI-AOC1-02 located in the western portion of AOC-1 (see Figure 4A) will also be analyzed for the full TCL/TAL parameters and Cyanide; as pesticides slightly exceeded Unrestricted Use SCOs in surface/shallow soil at this sampling location. More specifically, the subsurface soil sample(s) will be analyzed for PFAS, pH, TOC, % Moisture Content, the full TCL/TAL Parameters, and Cyanide. The groundwater sample will be analyzed for PFAS, pH, TOC, the full TCL/TAL parameters, and Cyanide.
- Shallow monitoring wells RI-AOC1-01 to -10 will be constructed as temporary monitoring points (TMPs) meaning that an iterative approach will be undertaken to evaluate hydrogeologic conditions and groundwater quality at the initial TMPs to determine if the installation of additional monitoring points and/or the abandonment of the initial TMPs is warranted. The TMPs will be constructed, developed, and sampled as described in Section 3.2.5, 3.2.7 and 3.2.8 of the RI/FS Work Plan, with the exception being that all of the TMPs will be protected at the ground surface with flush-mounted road boxes set in concrete pads (guard pipes will not be used to protect the wells as these will interfere with airport safety). More specifically, the vertical elevations of the initial TMPs will be obtained and the TMPs will be gauged to determine groundwater elevations and flow direction. The resultant hydrogeologic data and shallow overburden groundwater quality will be used to evaluate if additional TMPs are needed to further delineate impacts to subsurface soil and/or overburden groundwater. Upon delineation of impacted soil or shallow groundwater, the NYSDEC Project Manager will be consulted to determine which TMPs should remain as permanent monitoring wells and which TMPs should be decommissioned in accordance with NYSDEC's CP-43: Groundwater Monitoring Well Decommissioning Policy (Date Issued: November 3, 2009). This approach will be followed for each of the AOCs (including the Areas Outside of the AOCs).

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> Advancement of the shallow soil borings for installation of the TMPs will remain in accordance with Section 3.2.4 of the RI/FS Work Plan. The subsurface soil sampling and shallow overburden TMP installation procedures proposed for the remaining AOCs and Areas Outside of the AOCs in this Addendum will remain in accordance with Sections 3.2.4 and 3.2.5 of the approved RI/FS Work Plan.

AOC-2

- Collection of surface and shallow soil samples from three (3) additional sampling locations, depicted as two (2) red circles and one (1) blue circle on **Figure 4B**, are situated in the northeastern portions of AOC-2 to further delineate surface/shallow soil samples that exceeded Protection of Groundwater SCOs for PFAS at previous surface/shallow soil samples collected near the staging of the United Arab Emirates (UAE) aircraft. The subject samples will be analyzed for PFAS, pH, TOC, and % Moisture Content. Samples exhibiting FEC will also be analyzed for the full TCL/TAL parameters and Cyanide, if applicable.
- Convert both the proposed surface/shallow soil sampling locations identified as a blue circle and RI-AOC2-11 (see Figure 4B) into shallow soil borings/monitoring wells to aid in the collection of subsurface soil and groundwater samples for laboratory analyses. The subsurface soil samples will be analyzed for PFAS, pH, TOC, and % Moisture Content. The groundwater sample will be analyzed for PFAS, pH, and TOC. Samples exhibiting FEC will also be analyzed for the TCL/TAL parameters and Cyanide, if applicable.

As a note, to not compromise the integrity of asphalt, a surface/shallow soil sample was not collected from RI-AOC2-11 during previous sampling in August and September of 2022. A surface/shallow soil sample will be collected when this sampling location is converted into a shallow soil boring/monitoring well, per the paragraph above. The surface and shallow soil samples will be analyzed for PFAS, pH, TOC, and % Moisture Content. Samples exhibiting FEC will also be analyzed for the full TCL/TAL parameters and Cyanide, if applicable.

Subsurface soil and groundwater samples to be collected from proposed shallow boring/monitoring well RI-AOC2-08 located in the northeastern portions of AOC-(see Figure 4B) will also be analyzed for the full TCL/TAL Parameters and Cyanide; as one (1) pesticide and one (1) SVOC slightly exceeded Unrestricted and Residential Use SCOs in surface/shallow soil at this location during previous sampling. More specifically, the subsurface soil sample(s) will be analyzed for PFAS, pH, TOC, % Moisture Content, full TCL/TAL parameters, and Cyanide. The groundwater sample will be analyzed for PFAS, pH, TOC, TCL/TAL parameters, and Cyanide.

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• Shallow monitoring wells RI-AOC2-01 to -09 and proposed shallow monitoring wells identified as RI-AOC2-11 and a "blue circle" sampling location as described in the second bullet above, will be constructed as TMPs.

As a note, and as discussed in Section 3.2.5 of the RI/FS Work Plan, shallow borings RI-AOC2-02, -04, -07 and -09, or a portion thereof, will be converted into shallow TMPs only if the adjacent existing monitoring wells (ADK-MW-101 to ADK-MW-104) that were installed as part of the 2018 Site Characterization are not functional and cannot be gauged and sampled.

AOC-3

- Collection of surface and shallow soil samples from eight (8) additional sampling locations, depicted as red circles on Figure 4C, that are located in the northern, eastern and southern portions of AOC-3. The rationale for this additional sampling is to further delineate surface/shallow soil samples that exceeded Protection of Groundwater SCOs for PFAS at previous sampling locations RI-AOC3-04 and RI-AOC3-12 to -15. The soil samples will be analyzed for PFAS, pH, TOC, and % Moisture Content. Samples exhibiting FEC will also be analyzed for the full TCL/TAL parameters and Cyanide, if applicable.
- Collection of surface and shallow soil samples from four (4) additional sampling locations, depicted as red circles on Figure 4C, located in the eastern portions of AOC-3 adjacent north, south, east and west of RI-AOC3-09. The rationale for this additional sampling is to further delineate shallow soil samples that slightly exceeded Protection of Groundwater and Commercial Use SCOs for SVOCs at previous sampling location RI-AOC3-09. The subject samples will be analyzed for TCL SVOCs only. Samples exhibiting FEC will also be analyzed for the remaining full TCL/TAL parameters and Cyanide, if applicable.

Subsurface soil and groundwater samples to be collected from proposed shallow boring/monitoring well RI-AOC2-09, located in the eastern portions of AOC-3 (**see Figure 4C**), will also be analyzed for the full TCL/TAL Parameters and Cyanide; as SVOCs in shallow soil slightly exceeded Protection of Groundwater and Commercial Use SCOs at this location during previous sampling. More specifically, the subsurface soil sample(s) will be analyzed for PFAS, pH, TOC, % Moisture Content, the full TCL/TAL parameters, and Cyanide. The groundwater sample will be analyzed for PFAS, pH, TOC, the full TCL/TAL parameters, and Cyanide.

• Convert surface/shallow soil sampling locations RI-AOC3-15, -17 and -18 (see Figure 4C) into shallow soil borings/monitoring wells to aid in the collection of

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subsurface soil and groundwater samples for laboratory analyses. The subsurface soil samples will be analyzed for PFAS, pH, TOC, and % Moisture Content. The groundwater samples will be analyzed for PFAS, pH, and TOC. Samples exhibiting FEC will also be analyzed for the TCL/TAL Parameters and Cyanide, if applicable.

- The installation of an upper bedrock monitoring well at the location identified as a green circle on **Figure 4C** within the southern portion of AOC-3 is proposed to assess groundwater quality related to PFAS exceeding Protection of Groundwater SCOs at several surface/shallow soil sampling locations and the corresponding inferred groundwater flow direction towards the south and/or southeast. The shallow overburden groundwater sample will be analyzed for PFAS, pH, and TOC. The sample will also be analyzed for the full TCL/TAL parameters and Cyanide, if applicable, if it exhibits FEC. The proposed bedrock monitoring well may be relocated or eliminated based on the hydrogeologic data and analytical results obtained from the initial shallow groundwater sampling program. Relocation or elimination of the proposed bedrock monitoring well will require consultation with and agreement from the NYSDEC Project Manager.
- Shallow borings RI-AOC3-01 to -14 and proposed shallow borings RI-AOC2-15, 17 and -18 will be constructed as TMPs.

As a note, and as discussed in Section 3.2.5 of the RI/FS Work Plan, shallow boring RI-AOC3-01 will only be converted into a TMP if the adjacent existing monitoring well ADK-MW-105, installed as part of the 2018 Site Characterization, is not functional and cannot be gauged and sampled.

AOC-4

- Exclude proposed shallow soil borings/monitoring wells RI-AOC4-02, -04, -06, -07, -09, and -10 from the RI/FS sampling program (see Figure 4D). These six (6) locations are being excluded because the PFAS PFOS and PFOA were detected below Unrestricted Use SCOs and at low concentrations in all 11 previous surface/shallow soil sampling locations (RI-AOC4-01 to RI-AOC4-11) collected within AOC-4.
- Subsurface soil and groundwater samples to be collected from the proposed five (5) remaining shallow soil borings/monitoring wells (RI-AOC4-01, -03, -05, -08, and -11), as depicted in **Figure 4D**, will be analyzed for the full TCL/TAL parameters and Cyanide. More specifically, the subsurface soil samples will be analyzed for PFAS, pH, TOC, % Moisture Content, the full TCL/TAL parameters,

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and Cyanide. The groundwater samples will be analyzed for PFAS, pH, TOC, the full TCL/TAL parameters, and Cyanide.

• Shallow borings RI-AOC4-01, -03, -05, -08, and -11 will be constructed as TMPs.

AOC-5 and AOC-6

• Shallow borings RI-AOC5-01 in AOC-5 (**Figure 4E**) and RI-AOC6-01 in AOC-6 (**Figure 4F**) will be constructed as TMPs.

AOC-7

• The collection of additional surface/shallow soil samples and surface water/sediment samples will be conducted to the north of AOC-7 where the UAE aircraft reportedly came to rest after its crash based on updated information provided by airport personnel.

Collection of surface and shallow soil samples will be obtained from seven (7) additional sampling locations, depicted as red circles on **Figure 4G**. The samples will be analyzed for PFAS, pH, TOC, and % Moisture Content. The surface/shallow soil sampling location enclosed in a square will be analyzed for PFAS, pH, TOC, % Moisture Content, the full TCL/TAL Parameters, and Cyanide. Remaining samples exhibiting FEC will also be analyzed for the full TCL/TAL Parameters and Cyanide, if applicable.

Collection of surface water and sediment samples will be collected from two (2) sampling locations, depicted as blue squares on **Figure 4G**. The surface water samples will be analyzed for PFAS, pH, TOC, and Hardness with the surface water sampling location enclosed in a circle also being analyzed for the full TCL/TAL parameters and Cyanide. The sediment samples will be analyzed for PFAS, pH, TOC, and % Moisture Content with the sediment sampling location enclosed in a circle also being analyzed for the full TCL/TAL parameters and Cyanide. The sediment sampling location enclosed in a circle also being analyzed for the full TCL/TAL parameters and Cyanide. Remaining samples exhibiting FEC will also be analyzed for the full TCL/TAL parameters and Cyanide, if applicable.

Both the analytical data obtained from the additional surface/shallow soil and surface water/sediment sampling to the north of AOC-7 and the data collected to date from surface/shallow soil sampling within the original boundaries of AOC-7 will be used (in consultation with the NYSDEC Project Manager) to determine the scope of remaining investigations (shallow/deep soil borings and shallow monitoring wells), if any. Any shallow overburden boring within ACO-7 or north of AOC-7 will be constructed as TMPs.

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• Subsurface soil and groundwater samples to be collected from proposed shallow soil borings/monitoring wells RI-AOC7-03 and RI-AOC7-04, located in the southeastern portions of AOC-7 (see Figure 4G), will also be analyzed for the full TCL/TAL parameters and Cyanide; as the VOC acetone slightly exceeded Protection of Groundwater SCOs in surface/shallow soil at these locations during previous sampling. More specifically, the subsurface soil samples will be analyzed for PFAS, pH, TOC, % Moisture Content, the full TCL/TAL parameters, and Cyanide. The groundwater samples will be analyzed for PFAS, pH, TOC, the full TCL/TAL parameters, and Cyanide. The groundwater samples will be analyzed for PFAS, pH, TOC, the full TCL/TAL parameters, and Cyanide. The above referenced shallow borings RI-AOC7-03 and RI-AOC7-04 will be converted into TMPs.

Areas Outside of the AOCs

- Collection of surface and shallow soil samples from one (1) additional sampling location, depicted as a red circle on **Figure 5**, situated adjacent to the northeast perimeter of AOC-2 will be obtained to further delineate surface/shallow soil samples that exceeded Protection of Groundwater SCOs for PFAS at previous surface/shallow soil sampling in AOC-2 near the staging of the UAE aircraft. The subject samples will be analyzed for PFAS, pH, TOC, and % Moisture Content. Samples exhibiting FEC will also be analyzed for the full TCL/TAL parameters and Cyanide, if applicable.
- Convert surface/shallow soil sampling location RI-ARA-15, located to the northeast of Runway 5-23 (see Figure 5), into a shallow soil boring/monitoring well to aid in the collection of subsurface soil and groundwater samples for laboratory analyses. The subsurface soil sample(s) will be analyzed for PFAS, pH, TOC, and % Moisture Content. The groundwater sample will be analyzed for PFAS, pH, and TOC. Samples exhibiting FEC will also be analyzed for the full TCL/TAL parameters and Cyanide, if applicable.
- Subsurface soil and groundwater samples to be collected from proposed shallow soil boring/TMP RI-ARA-01, located in the southern portion of the Site adjacent to Helms Mueller Road (see Figure 5), will also be analyzed for the full TCL/TAL parameters and Cyanide; as the VOC acetone slightly exceeded Protection of Groundwater SCOs in shallow soil at this location during previous sampling. More specifically, the subsurface soil samples will be analyzed for PFAS, pH, TOC, % Moisture Content, the full TCL/TAL parameters, and Cyanide. The shallow overburden groundwater sample will be analyzed for PFAS, pH, TOC, the full TCL/TAL parameters, and Cyanide.
- Shallow borings RI-ARA-01 to -14 and proposed shallow boring, identified as RI-ARA-15, will be converted into TMPs.

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This addendum summarizes the proposed modifications to the July 2022 RI/FS Work Plan. In summary, the proposed modifications include additional surface/shallow soil, surface water and sediment sampling; the addition and/or elimination of shallow soil borings/monitoring wells; the potential installation of an additional upper bedrock monitoring well; expansion of the analytical suite to include the full list of TCL/TAL parameters and Cyanide for select media samples; and, an iterative approach of initially converting proposed shallow overburden monitoring wells into TMPs rather than permanent monitoring wells. Upon NYSDEC approval, this Addendum-1 will be incorporated into the RI/FS Work Plan and a copy of this addendum will be submitted to the document repository. The RI/FS tasks detailed in this addendum, and remaining RI/FS tasks not included in this addendum, will be completed in accordance with the RI/FS Work Plan.

Please do not hesitate to contact the undersigned at <u>s.bieber@ctmale.com</u> should you have any questions.

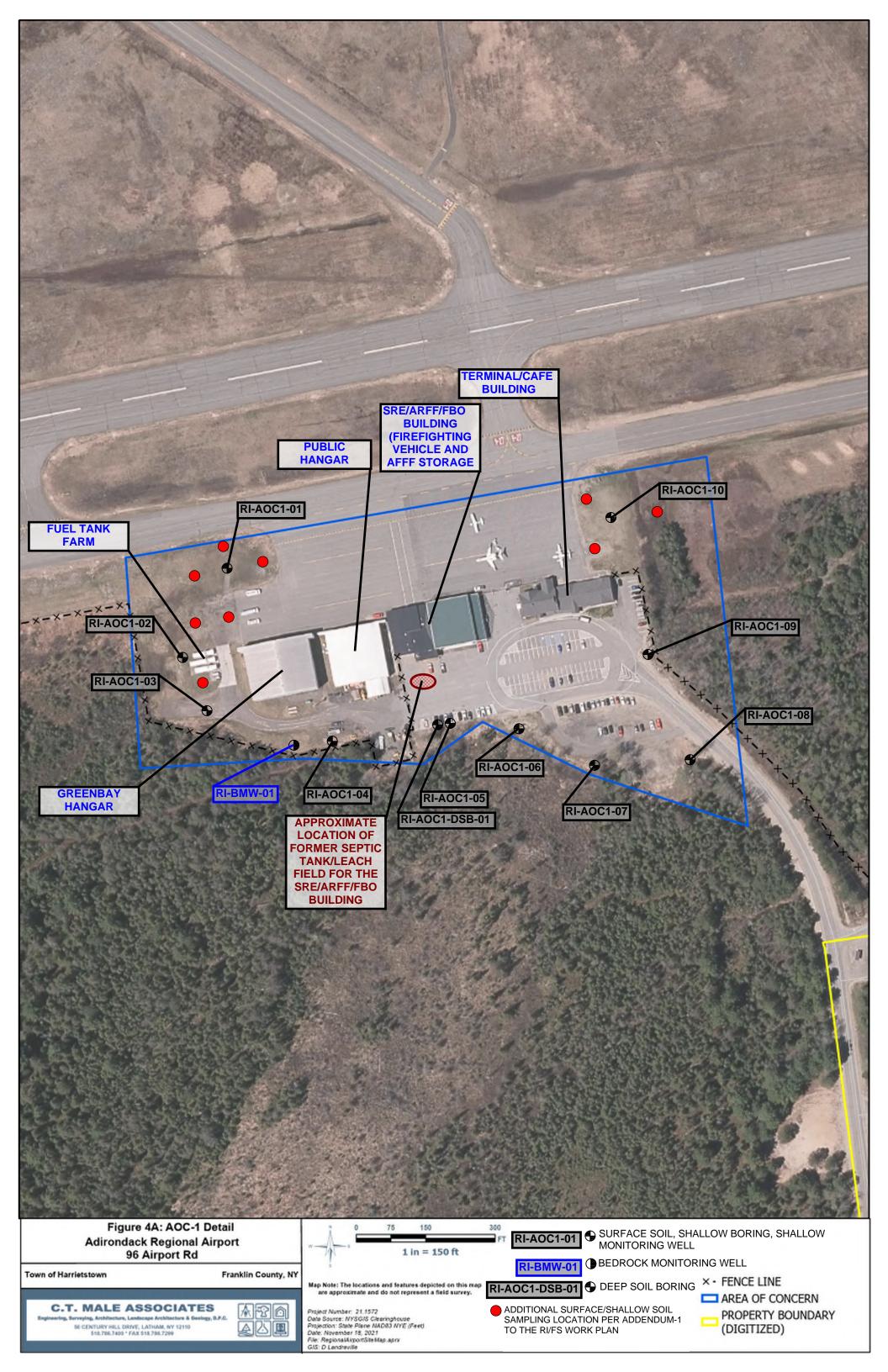
Respectfully submitted, C.T. MALE ASSOCIATES

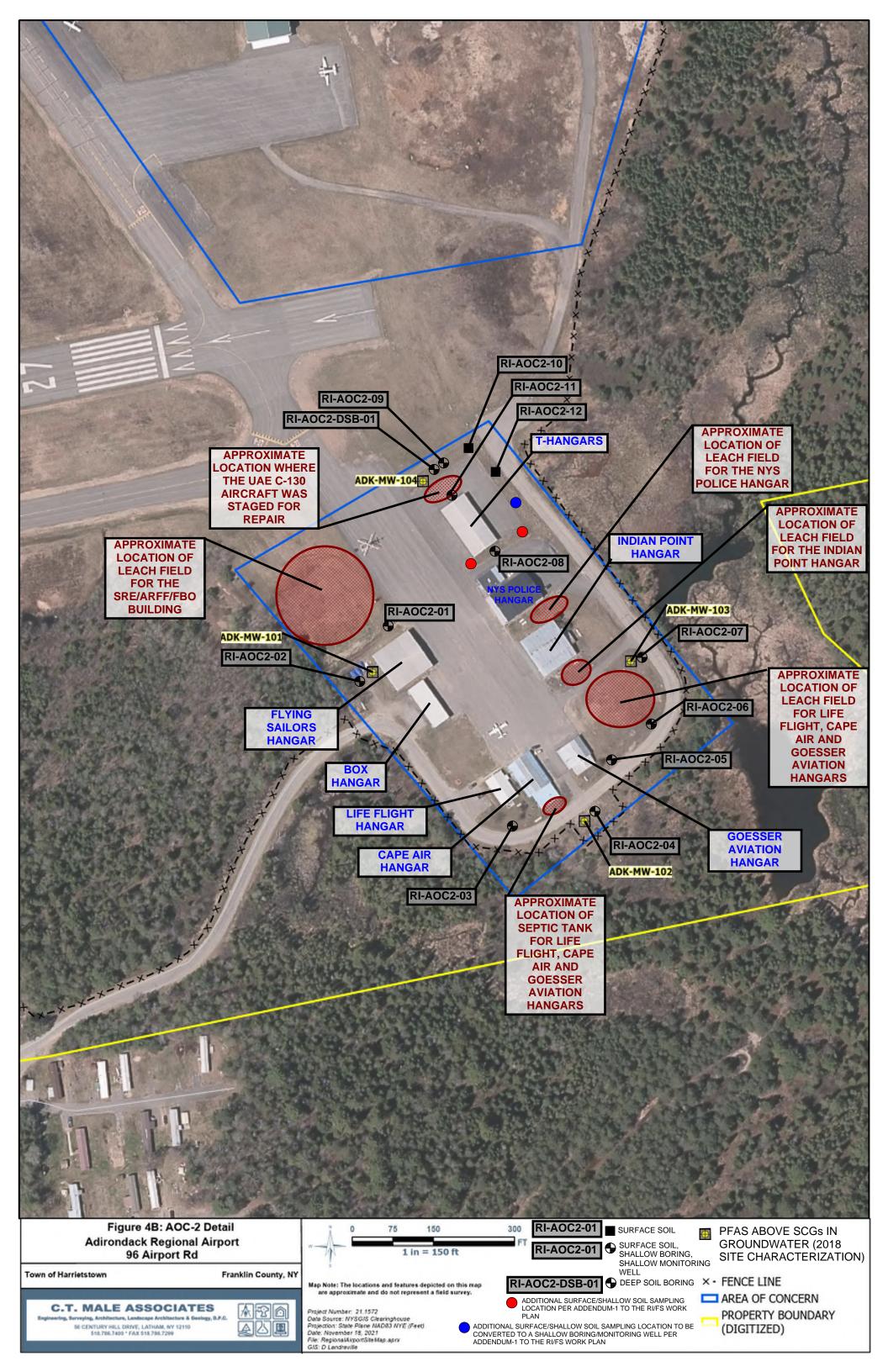
Stephen Bieber, CHMM Project Scientist

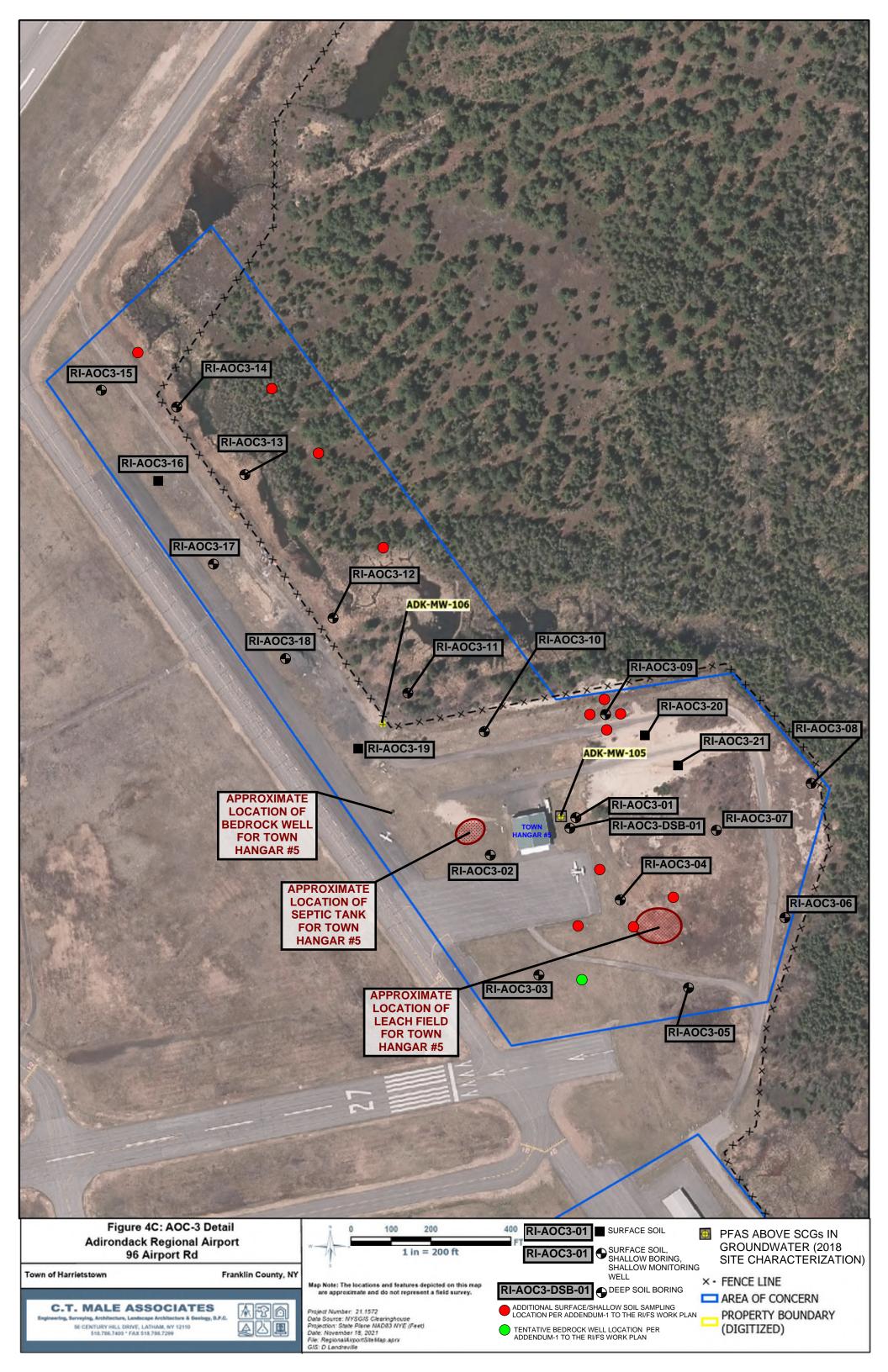
Attachments (Figures (Figures 4A, -4B, -4C, -4D, -4E, -4F, -4G, and -5) and Exhibits (Exhibits 1 and 2)

c: Jordanna Mallach, Town of Harrietstown Corey Hurwitch, Town of Harrietstown Harolyn Hood, NYSDOH Kieran McCarthy, NYSDEC Nicholas Rigano, Rigano LLC Kirk Moline, P.G., C.T. Male Associates Mark Williams, P.G., C.T. Male Associates

FIGURES



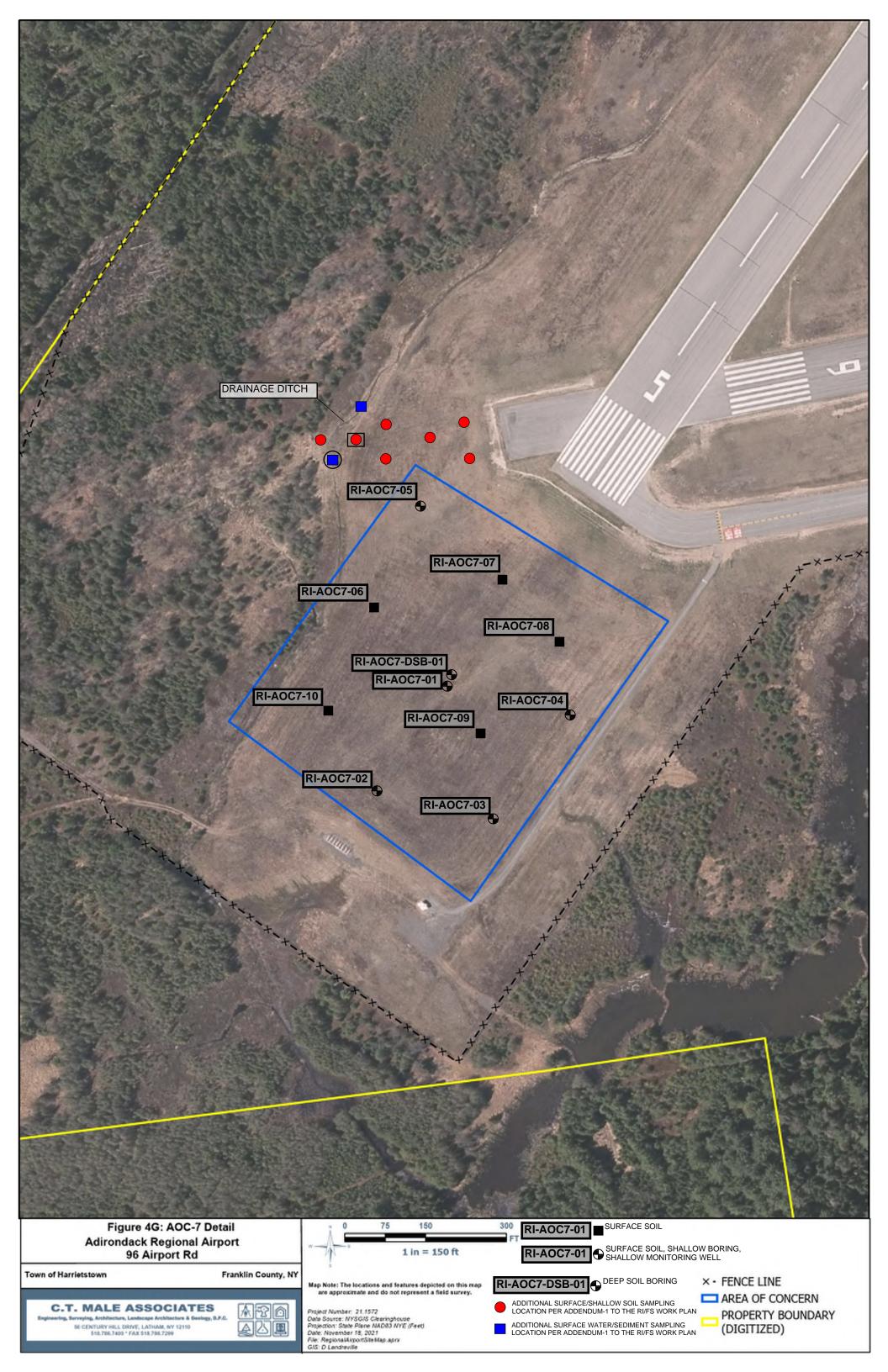












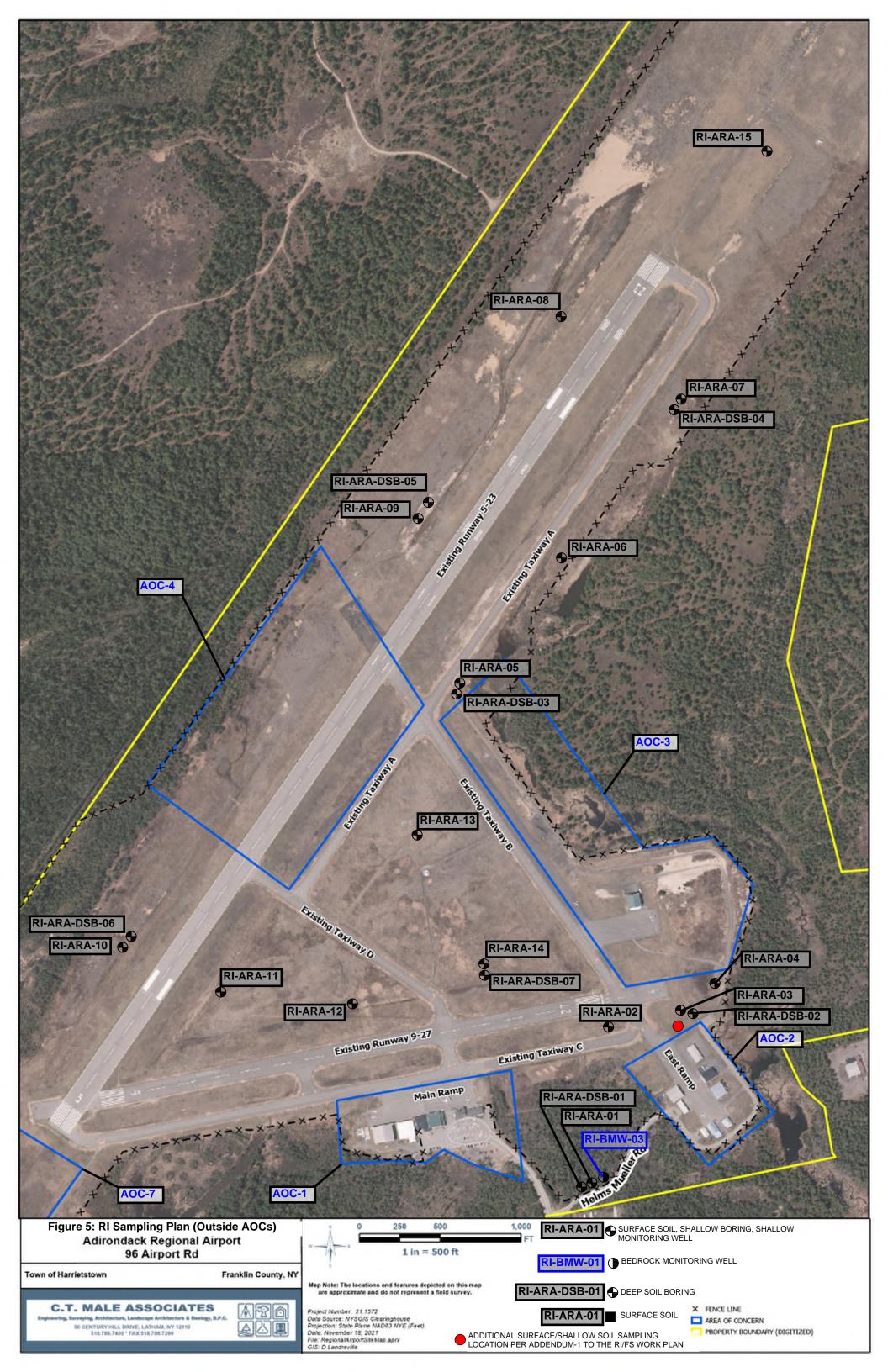
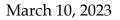


EXHIBIT 1

Technical Memorandum

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

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<u>*Via Email</u>

Nicole Hinze, Assistant Engineer (Environmental) New York State Department of Environmental Conservation Office of Environmental Quality, Region 5 1115 State Route 86, P.O. Box 296 Ray Brook, New York 12977 <u>nicole.hinze@dec.ny.gov</u>

RE: Technical Memorandum Adirondack Regional Airport Site (Site #517013) Town of Harrietstown, Franklin County NYSDEC Site No.: 517013

Dear Ms. Hinze:

Please find enclosed the Technical Memorandum for the preliminary assessment of the surface soil and shallow soil investigation conducted to date at the Adirondack Regional Airport Site (Site #517013) located in the Town of Harrietstown, Franklin County, New York.

The following highlights key points of the Memorandum and our opinions regarding modifications to the July 2022 RI/FS Work Plan. Any modifications to the RI/FS Work Plan will be memorialized in an Addendum to the RI/FS Work Plan that will be reviewed and approved by NYSDEC.

- Collection of 22 additional delineation surface/shallow soil samples from AOC-1, -2 and -3, and Areas Outside of the AOCs to further delineate existing surface/shallow soil sampling locations exhibiting PFOS and/or PFOA at concentrations exceeding Protection of Groundwater (POGW) Guidance Values. Each sample will be analyzed for PFAS, pH, TOC, and Percent Moisture.
- Advancement of five (5) additional soil borings/overburden monitoring wells in AOC-2 and -3 and installation of a bedrock monitoring well in AOC-3 to further evaluate existing surface/shallow soil sampling locations exhibiting PFOS and/or PFOA at concentrations exceeding POGW Guidance Values and the AOCs as potential PFAS source areas. Collection of subsurface soil and groundwater samples from the above for laboratory analyses for PFAS, pH, TOC, and Percent Moisture.



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- Elimination of eight (8) proposed soil borings/overburden monitoring wells in AOC-3 and -4 based on non-detections and/or minimal PFAS detections in existing surface/shallow soil sampling locations that correspond to these proposed locations.
- Collection of seven (7) surface/shallow soil samples, one (1) surface water sample and one (1) sediment sample in areas immediately north of AOC-7 to assess potential impacts in this area based on updated information regarding where the UAE aircraft came to rest after its crash in 1997. All samples will be analyzed for PFAS, pH, TOC, and Percent Moisture. Select samples will also be analyzed for the TCL/TAL Parameters.
- No further investigations of AOC-5 and -6 are recommended; these AOCs are to be removed as potential PFAS source areas.
- Several PFAS compounds were rejected at different frequencies in the Data Usability Summary Reports (DUSRs) for the analytical data due to severely low surrogate recoveries in the laboratory's internal quality control samples. Rejected compounds included NEtFOSAA, PFTA, NMeFOSSA, PFTrDA, PFPeA, PFHpA, 8:2FTS, PFDoA and FOSA, which were all not detected in the analytical results. There were no rejections of the PFAS compounds of concern PFOS, PFOA and PFHxS (AFFF marker compound). As such, it is our opinion that the analytical data is usable as there were no rejections of the PFAS compounds of concern, there are no Guidance Values associated with the rejected compounds, and the presence and/or absence of these compounds in the analytical results is not a precursor for decision making regarding PFAS impacts in surface/shallow soil. If requested, the DUSRs and analytical reports can be provided for review to you and Ms. Dana Barbarossa, Quality Assurance Officer at NYSDEC's Division of Environmental Remediation.
- NYSDEC has recently proposed lower cleanup objectives for PFOS and PFOA (and perhaps Guidance Values for other PFAS compounds) in soil that have not yet been officially promulgated. Existing and future soil analytical data will also be compared to the proposed cleanup objectives when they are finalized and officially promulgated.

Please do not hesitate to contact the undersigned at <u>s.bieber@ctmale.com</u> should you have any questions.

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Respectfully submitted, C.T. MALE ASSOCIATES

Stephen Bieber, CHMM Project Scientist

c: Jordanna Mallach, Town of Harrietstown Corey Hurwitch, Town of Harrietstown Harolyn Hood, NYSDOH Kieran McCarthy, NYSDEC Nicholas Rigano, Rigano LLC Kirk Moline, P.G., C.T. Male Associates

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

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Technical Memorandum

То:	Nicole Hinze, Assistant Engineer, New York State Department of
	Environmental Conservation Office of Environmental Quality, Region 5.
From:	C.T. Male Associates Engineering, Surveying, Architecture, Landscape
	Architecture & Geology, D.P.C.
Subject:	Preliminary Assessment of Surface Soil and Shallow Soil Sampling
-	Analytical Results
Date:	March 10, 2023
Project:	Adirondack Regional Airport Site (Site #517013), Town of Harrietstown,
-	Franklin County, New York

This document presents a preliminary assessment of the surface soil and shallow soil investigation conducted at the Adirondack Regional Airport Site (ARA), Site #517013, located in the Town of Harrietstown, Franklin County, New York. Surface soil and shallow soil samples were collected for laboratory analyses from seven (7) Areas of Concern (AOC) denoted as AOC-1 to AOC-7, and from areas outside of the AOCs. The samples were collected to assess the presence of per- and polyfluoroalkyl substances (PFAS) within this media. Select samples were also analyzed for the presence of Target Compound List (TCL) volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs), Target Analyte List (TAL) metals, and cyanide (TCL/TAL Parameters).

Surface soil and shallow soil samples were collected in August and September 2022 in general accordance with the New York State Department of Environmental Conservation (NYSDEC) approved July 2022 Remedial Investigation/Feasibility Study (RI/FS) Work Plan. The RI work was conducted in accordance with NYSDEC's November 2022 Part 375 PFAS sampling guidance. The analytical data has been independently validated by a third-party data validator and the results of the data validation are presented in Data Usability Summary Reports (DUSRs). Data validator qualifiers to the analytical data have been incorporated into the analytical tables. Data rejected by the validator is summarized in Attachment C, Summary of Rejected Data.

The surface soil samples collected for PFAS, pH and TOC analyses were generally collected from the 0 to 2-inch depth interval. The shallow soil samples collected for PFAS, pH and TOC analyses were generally collected from the 2 to 12-inch depth interval. The surface soil samples collected for TCL/TAL Parameters analyses were generally collected from the 0 to 2-inch depth interval except for that portion of the samples analyzed for

Technical Memorandum: Preliminary Assessment of Surface Soil and Shallow Soil Sampling Results March 10, 2023 Page - 2

TCL VOCs, which were collected from the 2 to 6-inch depth interval. The shallow soil samples collected for TCL/TAL Parameters analyses were generally collected from the 2 to 12-inch depth interval except for that portion of the samples analyzed for TCL VOCS, which were collected from the 6 to 12-inch depth interval. The samples were collected of soils immediately beneath the vegetative turf in vegetated areas of the Site and immediately beneath the gravel layer in gravel surfaced areas. Samples were not collected beneath the asphalt/concrete paved areas.

The soil analytical results were compared to the following Standards, Criteria and Guidance (SCGs):

- **PFOS and PFOA** Analytical results were compared to Unrestricted, Protection of Groundwater, Residential, Restricted Residential, Commercial and Industrial Guidance Values for Anticipated Site Use promulgated at *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs,* dated November 2022. SCGs for the remaining 19 additional PFAS compounds analyzed have not been promulgated.
- TCL/TAL Parameters Analytical results were compared to the Unrestricted and Restricted Soil Cleanup Objectives (SCOs) promulgated in Table 375-6.8(a) (Unrestricted Use SCOs) and Table 375-6.8(b) (Restricted Use SCOs) promulgated at 6 NYCRR Part 375 Environmental Remediation Programs, dated December 14, 2006.

Groundwater flow direction across the Site has not been defined and is unknown. Groundwater flow direction in the various Site hydrogeologic units will be characterized following completion of the monitoring well installations, well development, and surveying tasks and prior to the first planned groundwater sampling event. Currently, the first scheduled synoptic round of groundwater level measurements will be obtained in June, 2023 (weather depending). Additional depth to groundwater measurements will be obtained during other stages of the RI.

SUMMARY OF PRELIMINARY FINDINGS

The following tables summarize the analytical results for parameters that exceeded SCGs in surface soil and shallow soil.

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Parameters Exceeding SCGs in Surface Soil									
AOC	Parameter	Surface Soil Sample ID			Exceeds	s SCG			
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG	
1	PFOS	RI-AOC1-01	✓	✓					
1	PFOS	RI-AOC1-02	✓	✓	✓				
1	PFOS	RI-AOC1-03	✓	✓					
1	PFOS	RI-AOC1-05	✓						
1	PFOS	RI-AOC1-10	\checkmark	✓	✓				
1	4,4'-DDD	RI-AOC1-02	✓						
1	4,4' - DDE	RI-AOC1-02	✓						
1	4,4'-DDT	RI-AOC1-02	√						
2	PFOS	RI-AOC2-09	√	✓	√	√			
2	PFOS	RI-AOC2-10	√	✓	\checkmark				
2	Ind Pyrene	RI-AOC2-08	√		\checkmark				
2	4,4'-DDT	RI-AOC2-08	√						
3	PFOS	RI-AOC3-01	√						
3	PFOS	RI-AOC3-03	√						
3	PFOS	RI-AOC3-04	√	✓	\checkmark	✓			
3	PFOS	RI-AOC3-05	√						
3	PFOS	RI-AOC3-09	√						
3	PFOS	RI-AOC3-11	√						
3	PFOS	RI-AOC3-12	√	✓	\checkmark	√			
3	PFOS	RI-AOC3-13	√	✓	\checkmark	√			
3	PFOS	RI-AOC3-14	✓						
3	PFOS	RI-AOC3-15	√	✓	\checkmark				
3	PFOS	RI-AOC3-17	√	✓					
3	PFOS	RI-AOC3-18	✓						
3	PFOA	RI-AOC3-04	√	✓					
3	PFOA	RI-AOC3-13	√	✓	√				
4	Acetone	RI-AOC4-04	✓	✓					
4	Acetone	RI-AOC4-09	✓	✓					
4	Acetone	RI-AOC4-10	√	✓					
5	2-Butanon	RI-AOC5-01	√	✓					
5	Acetone	RI-AOC5-01	√	✓					
5	Toluene	RI-AOC5-01	√	✓					
7	PFOS	RI-AOC7-05	✓						
7	Acetone	RI-AOC7-03	✓	✓					
7	Acetone	RI-AOC7-04	✓	✓					
7	Acetone	RI-AOC7-07	√	✓					
ARA	PFOS	RI-ARA-03	✓	✓					
ARA	PFOS	RI-ARA-05	✓						
ARA	PFOS	RI-ARA-06	✓						
ARA	PFOS	RI-ARA-15	✓						

Parameters Exceeding SCGs in Surface Soil

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Notes:

UU-SCG denotes Unrestricted Use. GW-SCG denotes Protection of Groundwater Use. R-SCG denotes Residential Use. RR-SCG denotes Restricted Residential Use. C-SCG denotes Commercial Use. I-SCG denotes Industrial Use.

AOC	Parameter	Shallow Soil Sample ID	Exceeds SCG					
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
1	PFOS	RI-AOC1-01	\checkmark	✓				
1	PFOS	RI-AOC1-02	✓	✓	✓			
1	PFOS	RI-AOC1-03	✓					
1	PFOS	RI-AOC1-04	✓					
1	PFOS	RI-AOC1-05	✓					
1	PFOS	RI-AOC1-10	✓	✓	✓			
1	4,4' - DDT	RI-AOC1-02	✓					
2	PFOS	RI-AOC2-08	✓					
2	PFOS	RI-AOC2-09	\checkmark	✓	√	✓		
2	PFOS	RI-AOC2-10	√	✓				
2	PFOS	RI-AOC2-12	✓					
2	4,4'-DDT	RI-AOC2-08	✓					
3	PFOS	RI-AOC3-02	√	✓				
3	PFOS	RI-AOC3-04	√	✓	√	✓		
3	PFOS	RI-AOC3-09	√					
3	PFOS	RI-AOC3-10	✓					
3	PFOS	RI-AOC3-12	\checkmark	\checkmark	√	✓		
3	PFOS	RI-AOC3-13	\checkmark	\checkmark	√	✓		
3	PFOS	RI-AOC3-14	\checkmark	\checkmark				
3	PFOS	RI-AOC3-15	✓					
3	PFOS	RI-AOC3-17	\checkmark	\checkmark	√			
3	PFOS	RI-AOC3-18	✓					
3	PFOA	RI-AOC3-04	✓					
3	PFOA	RI-AOC3-12	✓					
3	PFOA	RI-AOC3-13	\checkmark	\checkmark				
3	Ben(a)Anth	RI-AOC3-09	\checkmark	\checkmark	\checkmark	\checkmark		
3	Benzo(a)Pyr	RI-AOC3-09	✓		\checkmark	\checkmark	\checkmark	✓
3	Benzo(b)Flr	RI-AOC3-09	√	\checkmark	✓	✓		
3	Chrysene	RI-AOC3-09	√	\checkmark	✓			
3	Ind Pyrene	RI-AOC3-09	✓		✓	✓		
4	Acetone	RI-AOC4-10	\checkmark	\checkmark				

Parameters Exceeding SCGs in Shallow Soil

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AOC	Parameter	Shallow Soil Sample ID	Exceeds SCG					
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
5	Acetone	RI-AOC5-01	✓	\checkmark				
ARA	PFOS	RI-ARA-05	✓	\checkmark				
ARA	PFOS	RI-ARA-15	✓					
ARA	Acetone	RI-ARA-01	✓	\checkmark				

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

C-SCG denotes Commercial Use.

I-SCG denotes Industrial Use.

The data in the tables above and other considerations as described in the pages that follow were evaluated to consider:

- If subsequent investigations of the AOCs and Areas Outside of the AOCs should be completed without modification to the 2022 RI/FS Work Plan (i.e., advancement of soil borings, installation of monitoring wells, collection of subsurface soil and groundwater samples for laboratory analyses),
- If modifications to the 2022 RI/FS Work Plan are appropriate,
- if additional investigations beyond the scope of the 2022 RI/FS Work Plan are appropriate, and/or
- if AOCs can be eliminated from future investigation.

The following presents our preliminary assessment and findings for the investigations conducted to date.

- AFFF has impacted the surface and shallow soil locally at the Site as demonstrated by the presence of AFFF related PFAS compounds PFOS, PFOA and PFHxS. PFOS and PFOA are at concentrations exceeding SCGs. There is currently no SCG for PFHxS.
- Additional surface/shallow soil sampling to further delineate existing surface/shallow soil sampling locations that exceeded Protection of Groundwater SCOs for PFAS. The additional sampling locations are proposed for AOCs-1, -2 and -3, and Areas Outside of the AOCs. The additional sampling locations are depicted on Figures 4, 6, 8 and 15 as red circles. The samples will be analyzed for PFAS, pH, Total Organic Carbon (TOC), and %Moisture.

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- Surface/shallow soil sampling locations RI-AOC2-08 and -11 and a proposed additional surface/shallow soil sampling location to the south of sampling location RI-AOC2-12 within AOC-2 will be converted into soil borings/overburden monitoring wells to aid in the collection of subsurface soil and overburden groundwater samples for laboratory analyses for PFAS, pH, TOC and %Moisture. These locations are in the vicinity of both the staged UAE aircraft and where analytical data from surface/shallow soil samples collected to date depict PFAS above SCGs (see Figure 6).
- In AOC3, three (3) sampling locations (RI-AOC3-15, -17, 18) designated as surface/shallow soil sampling locations in the RI/FS Work Plan will be converted into soil borings/overburden monitoring wells to aid in the collection of subsurface soil and overburden groundwater samples for laboratory analyses for PFAS, pH, TOC and %Moisture. A bedrock monitoring well is also proposed to be installed in the southern portions of AOC-3 to assess the presence of PFAS in bedrock groundwater (see Figure 8). PFAS was non-detect in surface/shallow soil samples collected at RI-AOC3-20 and -21 located in a land scarred area to the northeast of Town Hangar #5. As such, proposed soil borings/overburden monitoring wells in the RI/FS Work Plan will not be completed at these locations. Any subsurface soil/groundwater impacts would show up in nearby RI/FS Work Plan proposed soil borings/overburden monitoring wells RI-AOC3-09 and RI-AOC3-07.
- PFOS and PFOA were detected below Unrestricted Use SCOs and at low concentrations in all 11 surface/shallow soil sampling locations (RI-AOC4-01 to 11) within AOC-4. As such, the frequency of the RI/FS Work Plan proposed soil borings/overburden monitoring wells will be reduced while still providing overall coverage of AOC-4 by retaining soil borings/monitoring wells RI-AOC4-01, -03, -05, -08 and -11, and eliminating soil borings/monitoring wells RI-AOC3-02, -04, -06, -07, -09 and -10 from consideration.
- Further groundwater investigations in accordance with the 2022 RI/FS Work Plan are recommended for AOC-1, -2, -3, -4, and Areas Outside of the AOCs.
- Additional investigation of areas to the north of AOC-7 where the UAE aircraft came to rest after its crash based on recently received information from airport personnel. The information is corroborated by detections of PFOS and PFHxS in soil at sampling locations RI-AOC7-05 within AOC-7, and at RI-AOC2-08, -09 and -10 within AOC-2 where the UAE plane was staged outside for approximately six (6) months pending an international crash investigation. The additional investigation will include the collection of surface soil, shallow soil, surface water and sediment samples for laboratory analyses for PFAS, pH, TOC and %Moisture,

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with a representative subset of samples to also be analyzed for the TCL/TAL Parameters. Results of the additional samples indicated above will be used to determine if additional investigations (i.e., soil borings, monitoring wells, subsurface soil, and groundwater sampling) concurrent to the 2022 RI/FS Work Plan within AOC-7 and the area to the north of AOC-7 is warranted.

- No further investigation for the presence of PFAS is to be performed within AOC-5, per the 2022 RI/FS Work Plan, this AOC will be eliminated as a potential PFAS source area. No further investigation per the 2022 RI/FS Work Plan for the presence of PFAS be conducted within AOC-6, and that this area be eliminated as a potential source area for PFAS and the TCL/TAL parameters.
- While the SVOC benzo(a)pyrene exceeded its Commercial Use SCG in surface soil at sampling location RI-AOC3-09 in AOC-3, the levels were only slightly above standards. We propose that no further soil sampling be conducted at this time.
- While Acetone exceeded its Protection of Groundwater Use SCG in AOCs 4, 5, and 7, such levels only slightly exceeded standards. We propose that no further soil sampling be conducted at this time.
- While VOCs (2-butanone, acetone, and toluene) exceeded their Protection of Groundwater Use SCG in AOC 5, such levels only slightly exceeded standards. We propose that no further soil sampling be conducted at this time.

The following presents the results of the surface soil and shallow soil sampling. A Site Location Map and an Identification of AOCs drawing are presented as **Figures 1 and 2**, **respectively (Attachment A)**.

AOC-1

AOC-1 encompasses the area of the Main Ramp, Terminal, and Café Building, SRE/ARFF/FBO Building, and the Public and Greenbay Hangars of the airport property (see **Figure 2**). Land uses and activities within AOC-1 that may have impacted Site media include the reported past use and storage of aqueous film forming foam (AFFF).

Figure 3 provides the detail for the notes and legends for all figures included herein. **Figure 4** depicts sampling locations where PFOS and/or PFOA have exceeded current SCGs. **Figure 5** depicts sampling locations where TCL/TAL Parameters exceed SCGs. Ten surface soil and 10 shallow soil samples were collected from 10 sampling locations identified as RI-AOC1-01 to -10 on **Figure 4**. All of the samples were analyzed for PFAS, pH, and Total Organic Carbon (TOC). One (1) surface soil and one (1) shallow soil sample

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from sampling location RI-AOC1-02 were also analyzed for the full TCL/TAL Parameters. **Table 1A** presents the full analytical results for PFAS, pH, and TOC. **Table 1B** presents the analytical results summary (i.e., detected analytes only) for TCL/TAL Parameters.

PFOS

PFOS concentrations in surface soil and shallow soil range from non-detect to 11.7 micrograms per kilogram (μ g/kg) or parts per billion (ppb). PFOS was detected in 6 of 10 surface soil samples and 9 of 10 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC1-01 to -05 and -10, and shallow soil samples collected from RI-AOC1-01 to -05 and -10. Four (4) surface soil and shallow soil samples collected from RI-AOC1-01 to -05 and -10. Four (4) surface soil (RI-AOC1-01, -02, -03, and -10) and three (3) shallow soil (RI-AOC1-01, -02, and -10) sample results exceeded the Protection of Groundwater SCG value of 3.7 μ g/kg for PFOS.

PFOS was not detected in 4 of 10 surface soil samples (RI-AOC1-06 to -09) and 1 of 10 shallow soil samples analyzed (RI-AOC1-09). PFOS was not detected in both surface soil and shallow soil samples collected from RI-AOC1-09.

As shown on **Figure 4** and **Table 1A**, PFOS did not exceed its Commercial Use SCG in any sample, which is the use typically associated with a commercial airport. PFOS exceeded its Unrestricted, Protection of Groundwater and Residential Use SCGs in both surface and shallow soil samples collected at RI-AOC1-02 located west of the Fuel Tank Farm and RI-AOC1-10 located east of asphalt paved portions of the Main Ramp. PFOS exceeded its Unrestricted and Protection of Groundwater Use SCGs in both surface and shallow soil samples collected at RI-AOC1-01 located west of asphalt paved portions of the Main Ramp and in a surface soil sample collected from RI-AOC1-03 located south of an access road to the Fuel Tank Farm. PFOS exceeded its Unrestricted Use SCG in shallow soil samples collected from RI-AOC1-03 and -04 located south of an access road to the Fuel Tank Farm and both surface and shallow soil samples collected from RI-AOC1-05 located south of an asphalt paved area to the south of the SRE/ARFF/FBO Building and assumed area of a former septic tank/leach field.

<u>PFOA</u>

PFOA concentrations in surface and shallow soils ranged from non-detect to 0.398 μ g/kg. There were no surface or shallow soil samples that exceeded the Protection of Groundwater SCG value of 1.1 μ g/kg for PFOA. PFOA was detected in 3 of 10 surface soil samples and 5 of 10 shallow soil samples analyzed, which included surface soil

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samples collected from RI-AOC1-02 to -03 and -10 and shallow soil samples collected from RI-AOC1-01 to -03, -07, and -10. PFOA was detected in both surface and shallow soil samples collected from RI-AOC1-02, -03 and -10.

PFOA was not detected in 7 of 10 surface soil samples and 5 of 10 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC1-01 and -04 to -09 and shallow soil samples collected from RI-AOC1-04 to -06 and -08 to -09. PFOA was not detected in both surface soil and shallow soil samples collected from RI-AOC1-04 to -06 and -08 to -09.

As shown on **Figure 4** and **Table 1A**, PFOA did not exceed SCGs in any of the samples analyzed.

PFAS Other Than PFOS and PFOA

The remaining 19 PFAS analyzed were detected at concentrations that ranged from nondetect in \pm 75% of the compounds analyzed to 9.98 µg/kg for Perfluorododecanoic Acid (PFDoA) in the surface soil sample collected from RI-AOC1-01, located west of asphalt paved portions of the Main Ramp. PFHxS was detected in five (5) of six (6) surface soil samples and six (6) of eight (8) shallow soil samples where PFOS was detected supporting that AFFF is the likely source.

<u>pH and TOC</u>

The soil pH values were relatively neutral and ranged from 5.7 to 7.6 Standard Units (SUs). The TOC percentage in soil ranged from 0.219% to 3.86%.

TCL/TAL Parameters

One (1) surface soil sample and one (1) shallow soil sample were collected from sampling location RI-AOC1-02, located west of the Fuel Tank Farm.

As shown on **Figure 5** and **Table 1B**, none of the analyzed parameters exceeded Unrestricted Use SCGs with the exception of the pesticides 4,4'-DDD, 4,4'-DDE and 4,4'-DDT, which slightly exceeded their corresponding Unrestricted Use SCGs, but were below their Protection of Groundwater Use SCGs.

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Preliminary Findings (AOC-1)

The following tables summarize parameters that have exceeded SCGs in surface soil and shallow soil in AOC-1.

AOC	Parameter	Surface Soil Sample ID	Exceeds SCG					
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
1	PFOS	RI-AOC1-01	✓	✓				
1	PFOS	RI-AOC1-02	~	✓	✓			
1	PFOS	RI-AOC1-03	✓	✓				
1	PFOS	RI-AOC1-05	✓					
1	PFOS	RI-AOC1-10	✓	✓	√			
1	4,4'-DDD	RI-AOC1-02	✓					
1	4,4'-DDE	RI-AOC1-02	✓					
1	4,4'-DDT	RI-AOC1-02	✓					

Notes:

UU-SCG denotes Unrestricted Use. GW-SCG denotes Protection of Groundwater Use. R-SCG denotes Residential Use. RR-SCG denotes Restricted Residential Use. C-SCG denotes Commercial Use. I-SCG denotes Industrial Use.

AOC	Parameter	Shallow Soil Sample ID	Exceeds SCG						
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG	
1	PFOS	RI-AOC1-01	✓	✓					
1	PFOS	RI-AOC1-02	✓	✓	✓				
1	PFOS	RI-AOC1-03	✓						
1	PFOS	RI-AOC1-04	✓						
1	PFOS	RI-AOC1-05	\checkmark						
1	PFOS	RI-AOC1-10	✓	~	√				
1	4,4'-DDT	RI-AOC1-02	\checkmark						

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

C-SCG denotes Commercial Use.

I-SCG denotes Industrial Use.

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- PFOS exceedances of SCGs in surface soil and shallow soil are generally limited to the northeastern, northwestern, and southwestern portions of AOC-1. PFOS detections in shallow soils in the southeastern portion of AOC-1 were below SCGs.
- PFOA in surface soil and shallow soil did not exceed SCGs in any of the samples analyzed.
- Relatively neutral pH values and normal TOC percentages were identified.
- The results for one (1) surface soil sample and one (1) shallow soil sample collected west of the Fuel Tank Farm were below the Unrestricted Use SCGs for the full list of TCL/TAL parameters, with the exception of three (3) pesticides (4,4'-DDD, 4,4'-DDE and 4,4'-DDT) slightly exceeding their corresponding Unrestricted Use SCGs but were below their Protection of Groundwater Use SCGs.
- Past investigations of the Site indicate that groundwater was encountered at depths that ranged from two (2) to six (6) feet below grade in AOC-1. Four (4) sampling locations (RI-AOC1-01 to -03 and -10) have exceeded the PFOS Protection of Groundwater Use SCG.
- Based on the above and a yet to be established groundwater flow pattern, deviations to the 2022 NYSDEC-approved RI/FS Work Plan's remaining scope of work is not considered warranted.

AOC-2

AOC-2 encompasses the area of the East Ramp and the Flying Sailors, Box, Life Flight, Cape Air, Goesser Aviation, Indian Point, NYS Police and T Hangars (see **Figure 2**). Environmental concerns within AOC-2 include the exterior staging area north of the T Hangars for the United Arab Emirates (UAE) plane that crashed in 1997 pending an approximate six-month long international investigation. PFAS exceeding regulatory criteria in groundwater samples previously collected from three (3) shallow overburden monitoring wells and surface water collected from one (1) sampling location as part of the 2018 Site Characterization; PFAS exceeding regulatory criteria in potable water samples collected from a private supply well serving the Flying Sailors and Box Hangars; the septic leach field located adjacent to and north of the Flying Sailors Hangar which services the current SRE/ARFF/FBO Building (where AFFF is stored).

Eleven (11) surface soil and 11 shallow soil samples were collected from 12 sampling locations identified as RI-AOC2-01 to -12 depicted on **Figure 6**. Surface soil and shallow soil samples were not collected from sampling location RI-AOC2-11 due to the presence of aircraft load-bearing asphalt and the potential to damage the asphalt during sampling. Samples will be collected in a more controlled manner from this sampling location at a

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later date during advancement of soil borings with a drill rig. All of the subject samples were analyzed for PFAS, pH, and TOC. Four (4) surface soil and four (4) shallow soil samples collected from sampling locations RI-AOC2-08 to -10 and -12 were also analyzed for the TCL/TAL parameters. **Figure 6** depicts sampling locations where PFAS has exceeded SCGs. **Figure 7** depicts sampling locations where the TCL/TAL Parameters have exceeded SCGs. **Table 2A** presents the full analytical results for PFAS, pH, and TOC and **Table 2B** presents the analytical results summary (i.e., detected analytes only) for the TCL/TAL parameters and cyanide.

<u>PFOS</u>

PFOS concentrations in surface and shallow soils ranged from non-detect to 403 μ g/kg. PFOS was detected in 6 of 11 surface soil samples and 7 of 11 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC2-01, -06, -08, -09, - 10 and -12, and shallow soil samples collected from RI-AOC2-01, -02, -05, -08, -09, -10 and -12. PFOS was detected in both surface and shallow soil samples collected from RI-AOC2-01, and -12. Of and -12. Two (2) surface soil (RI-AOC2-09 and RI-AOC2-10) and two (2) shallow soil sample (RI-AOC2-09 and RI-AOC2-10) results exceeded the Protection of Groundwater SCG value of 3.7 μ g/kg for PFOS.

PFOS was not detected in 5 of 11 surface soil samples and 4 of 11 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC2-02 to -05 and -07 and shallow soil samples collected from RI-AOC2-03, -04, -06, and -07. PFOS was not detected in both surface soil and shallow soil samples collected from RI-AOC2-03, -04, and -07.

As shown on **Figure 6** and **Table 2A**, PFOS did not exceed its Commercial Use SCG in any sample. PFOS exceeded SCGs at 4 of 11 sampling locations limited to the northeastern portions of AOC-2 in the vicinity of the T-Hangars and where the crashed UAE aircraft was staged. PFOS exceeded its respective Unrestricted, Protection of Groundwater, Residential, and Restricted Residential Use SCGs in surface soil and shallow soil samples collected from RI-AOC2-09 located to the north of the T-Hangars where the crashed UAE aircraft was staged. PFOS exceeded its Unrestricted, Protection of Groundwater and Residential Use SCGs in a surface soil sample collected from RI-AOC2-10 in the vicinity of the staged UAE aircraft. PFOS exceeded its Unrestricted and Protection of Groundwater Use SCGs in a shallow soil sample collected from RI-AOC2-10 in the vicinity of the staged UAE aircraft. PFOS exceeded its Unrestricted use SCGs in shallow soil samples collected from RI-AOC2-08 and -12 located adjacent south of the T-Hangars and in the vicinity of the staged UAE aircraft, respectively.

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<u>PFOA</u>

PFOA concentrations in surface and shallow soils ranged from non-detect to $0.319 \,\mu g/kg$. There were no surface or shallow soil samples that exceeded the Protection of Groundwater SCG value of 1.1 $\mu g/kg$ for PFOA. PFOA was detected in 4 of 11 surface soil samples and 3 of 11 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC2-05, -06, -09 and -10, and shallow soil samples collected from RI-AOC2-05, -06, and -09.

PFOA was not detected in 7 of 11 surface soil samples and 8 of 11 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC2-01 to -04, -07 to -08, and -12 and shallow soil samples collected from RI-AOC2-01 to -04, -07 to -08, -10, and -12. PFOA was not detected in both surface and shallow soil samples collected from RI-AOC2-01 to -04, -07 to -08, and -12.

As shown on **Figure 6** and **Table 2A**, PFOA did not exceed SCGs in any of the samples analyzed.

PFAS Other Than PFOS and PFOA

The remaining 19 PFAS analyzed were detected at concentrations that ranged from nondetect in \pm 90% of the compounds analyzed to 34.5 µg/kg for Perfluorohexanesulfonic Acid (PFHxS) in the surface soil sample collected from RI-AOC2-09 located in the vicinity of the staged UAE aircraft. PFHxS was detected in three (3) of four (4) surface soil samples and three (3) of four (4) shallow soil samples collected in the vicinity of the staged UAE aircraft where PFOS was detected above SCGs supporting that AFFF is the likely source.

<u>pH and TOC</u>

The soil pH values were relatively neutral and ranged from 5.3 to 7.8 SUs. The TOC percentage in soil ranged from 0.102 % to 2.62 %.

TCL/TAL Parameters and Cyanide

One (1) surface soil sample and one (1) shallow soil sample each were collected from sampling locations RI-AOC2-08 to -10 and -12 located in northeastern portion of AOC-2 in the vicinity of the T-Hangars and the staged UAE aircraft.

As shown on **Figure 7** and **Table 2B**, none of the analyzed parameters exceeded Unrestricted Use SCGs with the exception of the SVOC indeno(1,2,3-cd)pyrene and the

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pesticide 4,4'-DDT. Both analytes were detected at sampling location RI-AOC2-08 located in a grassy area to the southeast of the T-Hangars. Indeno(1,2,3-cd)pyrene slightly exceeded Unrestricted, Residential, and Restricted Residential Use SCGs (but was below its respective Protection of Groundwater Use SCG) in surface soil. 4,4'-DDT slightly exceeded its Unrestricted Use SCG but was below its Protection of Groundwater Use SCG in both surface and shallow soil. The analytes did not exceed Commercial Use SCGs.

Preliminary Findings (AOC-2)

The following tables summarize parameters that have exceeded SCGs in surface soil and shallow soil in AOC-2.

AOC	Parameter	Surface Soil Sample ID	Exceeds SCG						
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG	
2	PFOS	RI-AOC2-09	√	✓	✓	✓			
2	PFOS	RI-AOC2-10	√	✓	✓				
2	Ind Pyrene	RI-AOC2-08	✓		✓				
2	4,4'-DDT	RI-AOC2-08	✓						

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

C-SCG denotes Commercial Use.

I-SCG denotes Industrial Use.

AOC	Parameter	Shallow Soil Sample ID	Exceeds SCG						
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG	
2	PFOS	RI-AOC2-08	✓						
2	PFOS	RI-AOC2-09	✓	✓	✓	✓			
2	PFOS	RI-AOC2-10	✓	✓					
2	PFOS	RI-AOC2-12	✓						
2	4,4'-DDT	RI-AOC2-08	\checkmark						

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

C-SCG denotes Commercial Use.

I-SCG denotes Industrial Use.

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- PFOS in surface soil and shallow soil exceedances of SCGs are generally confined to the northeastern portion of AOC-2 in the vicinity of the T-Hangars and staged UAE aircraft. Past investigation of the Site revealed PFOS and PFOA in groundwater and one surface water sample, collected from northern, southern, eastern, and western portions of AOC-2 during the 2018 Site Characterization, exceeded existing regulatory guidance criteria. In addition, previous potable water samples collected from the private supply well serving the Flying Sailor and Box Hangar identified PFOS and PFOA at concentrations exceeding regulatory criteria. Previous investigations depict the depth to groundwater to range from four (4) to nine (9) feet below grade and the groundwater flow direction is reported to be from the northwest towards the southeast.
- PFOA in surface soil and shallow soil did not exceed SCGs in any of the samples analyzed.
- The SVOC indeno(1,2,3-cd)pyrene and the pesticide 4,4'-DDT did not exceed Commercial Use SCGs, which is the use associated with the Site's use as a commercial airport where the constituents are not detected in groundwater. As such, the collection of additional surface and shallow soil delineation samples is not warranted at this time.
- Relatively neutral pH values and normal TOC percentages were identified.
- Based on the presence of PFOS and PFOA in groundwater throughout AOC-2, the relatively shallow groundwater depth, and the movement of PFOS/PFOA impacted groundwater through AOC-2, deviations to the remaining scope of work in the 2022 NYSDEC-approved RI/FS Work Plan is not warranted.

AOC-3

AOC-3 encompasses the area along the eastern side of Taxiway B where Town Hangar #5 is located. Environmental concerns within AOC-3 include the historic use of AFFF in this area and PFAS exceeding regulatory criteria in groundwater and surface water samples collected within this area as part of the 2018 Site Characterization.

Twenty-one (21) surface soil and 21 shallow soil samples were collected from 21 sampling locations identified as RI-AOC3-01 to -21 on **Figure 8**. All of the samples were analyzed for PFAS, pH, and TOC. Two (2) surface soil and two (2) shallow soil samples collected from sampling locations RI-AOC3-09, -12 and -20 were also analyzed for the TCL/TAL Parameters. **Figure 8** depicts sampling locations where PFAS has exceeded SCGs while **Figure 9** depicts sampling locations where the TCL/TAL Parameters have exceeded

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SCGs. **Table 3A** represents the full analytical results for PFAS, pH, and TOC. **Table 3B** provides a summary of analytical results for detected TCL/TAL Parameters.

<u>PFOS</u>

PFOS concentrations in surface and shallow soils ranged from non-detect to 392 μ g/kg. PFOS was detected in 18 of 21 surface soil samples and 18 of 21 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC3-01 to -06 and -08 to -19 and shallow soil samples collected from RI-AOC3-01 to -18. PFOS was detected in both surface soil and shallow soil samples collected from RI-AOC3-01 to -06 and -08 to -18. Five (5) surface soil (RI-AOC3-04, -12, -13, -15, and -17) and six (6) shallow soil sample (RI-AOC3-02, -04, -12, -13, -14, and -17) results exceeded the Protection of Groundwater SCG value of 3.7 μ g/kg for PFOS.

PFOS was not detected in 3 of 21 surface soil samples and 3 of 21 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC3-07, -20, and -21 and shallow soil samples collected from RI-AOC3-19, -20, and -21. PFOS was not detected in both surface soil and shallow soil samples collected from RI-AOC3-20 and -21.

As shown on Figure 8 and Table 3A, PFOS exceeded SCGs at 14 of 21 sampling locations located throughout AOC-3 with the exception being the southeastern portion of AOC-3 near the fence line (RI-AOC3-06 and -08) and land scarred area (RI-AOC3-07, -20, and -21), and a single location within the central portion of AOC-3 (RI-AOC3-19). PFOS did not exceed its Commercial Use SCG. PFOS exceeded its Unrestricted, Protection of Groundwater, Residential and Restricted Residential Use SCGs in surface soil and shallow soil samples collected from RI-AOC3-04, located in a grassy area to the east of a ramp serving Town Hangar #5, and from RI-AOC3-12 and -13, located in vegetated areas outside of the fence line in the central portion of AOC-3. PFOS exceeded its Unrestricted, Protection of Groundwater, and Residential Use SCGs in a surface soil sample collected from RI-AOC3-15 located in northwestern portions of AOC-3 and a shallow soil sample collected from RI-AOC3-17 located along the western perimeter of AOC-3. PFOS exceeded its Unrestricted and Protection of Groundwater Use SCGs in a surface soil sample collected from RI-AOC3-17 located along the western perimeter of AOC-3, a shallow soil sample collected from RI-AOC3-02 located to the north of a ramp serving Town Hangar #5, and a shallow soil sample collected from RI-AOC3-14 located in a vegetated area outside of the fence line in the northern portion of AOC-3. PFOS exceeded its Unrestricted Use SCG in surface soil and/or shallow soil samples collected from 9 of the 14 aforementioned sampling locations located throughout AOC-3.

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<u>PFOA</u>

PFOA concentrations in surface and shallow soils ranged from non-detect to 6.65 μ g/kg. PFOA was detected in 5 of 21 surface soil samples and 17 of 21 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC3-04 and -12 to -15 and shallow soil samples collected from RI-AOC3-01 to -08 and -10 to -18. PFOA was detected in both surface soil and shallow soil samples collected from RI-AOC3-04 and - 12 to -15. Two (2) surface soil (RI-AOC3-04 and RI-AOC3-13) and one (1) shallow soil sample (RI-AOC3-13) results exceeded the Protection of Groundwater SCG value of 1.1 μ g/kg for PFOA.

PFOA was not detected in 16 of 21 surface soil samples and 4 of 21 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC3-01 to -03, -05 to - 11, and -16 to -21 and shallow soil samples collected from AOC3-09 and -19 to -21. PFOS was not detected in both surface soil and shallow soil samples collected from RI-AOC3-09 and -19 to -21.

As shown on **Figure 8** and **Table 3A**, PFOA exceeded SCGs at 3 of 21 sampling locations. PFOA did not exceed its Commercial Use SCG. PFOA exceeded its Unrestricted, Protection of Groundwater, and Residential Use SCGs in a surface soil sample collected from RI-AOC3-13 which is located in a vegetated area in the central portion of AOC-3. PFOA exceeded its Unrestricted and Protection of Groundwater Use SCGs in a surface soil sample collected from RI-AOC3-04, located to the east of a ramp serving Town Hangar #5, and a shallow soil sample collected from RI-AOC3-04, located its Unrestricted Use SCG in a shallow soil sample collected from RI-AOC3-12, located in vegetated areas in central portions of AOC-3.

PFAS Other Than PFOS and PFOA

The remaining 19 PFAS analyzed were detected at concentrations that ranged from nondetect in \pm 77% of the compounds analyzed to 82.7 µg/kg for Perfluorohexanesulfonic Acid (PFHxS) in the surface soil sample collected from RI-AOC3-13, located in vegetated areas in approximate central portions of AOC-3. PFHxS was detected in 11 of 12 surface soil samples and 9 of 10 shallow soil samples where PFOS was detected above SCGs supporting that AFFF is the likely source.

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<u>pH and TOC</u>

The soil pH values ranged from 3.9 to 7.6 SUs. The TOC percentage in soil ranged from 0.065 % to 5.7 %.

TCL/TAL Parameters

Two (2) surface soil and two (2) shallow soil samples were collected from three (3) sampling locations. A surface soil sample was solely collected from RI-AOC3-12 located in a vegetated area in the central portion of AOC-3. A shallow soil sample was solely collected from RI-AOC3-09, located north of a land scarred area to the northeast of Town Hangar #5. Both a surface soil sample and a shallow soil sample were collected from RI-AOC3-20 which is located within a land scarred area to the northeast of Town Hangar #5.

As shown on **Figure 9** and **Table 3B**, none of the analyzed parameters exceeded Unrestricted Use SCGs with the exception of five (5) SVOCs in shallow soil sample RI-AOC3-09, located north of a land scarred area to the northeast of Town Hangar #5. Benzo(a)pyrene slightly exceeded its Unrestricted, Residential, Restricted Residential, Commercial, and Industrial Use SCGs, but was well below its Protection of Groundwater Use SCG. Benzo(a)anthracene and benzo(b)fluoranthene exceeded their Unrestricted, Protection of Groundwater, Residential, and Restricted Residential Use SCGs. Indeno(1,2,3-cd)pyrene exceeded its Unrestricted, Residential, and Restricted Residential Use SCGs, but was below its Protection of Groundwater, and Residential Use SCG. Chrysene exceeded its Unrestricted, Protection of Groundwater, and Residential Use SCGs.

Preliminary Findings (AOC-3)

AOC	Parameter	Surface Soil Sample ID			Exceeds	s SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
3	PFOS	RI-AOC3-01	✓					
3	PFOS	RI-AOC3-03	√					
3	PFOS	RI-AOC3-04	√	✓	\checkmark	√		
3	PFOS	RI-AOC3-05	✓					
3	PFOS	RI-AOC3-09	✓					
3	PFOS	RI-AOC3-11	✓					
3	PFOS	RI-AOC3-12	\checkmark	\checkmark	\checkmark	\checkmark		

The following tables summarize parameters that have exceeded SCGs in surface soil and shallow soil in AOC-3.

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AOC	Parameter	Surface Soil Sample ID			Exceeds	s SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
3	PFOS	RI-AOC3-13	✓	~	✓	✓		
3	PFOS	RI-AOC3-14	✓					
3	PFOS	RI-AOC3-15	✓	~	√			
3	PFOS	RI-AOC3-17	✓	~				
3	PFOS	RI-AOC3-18	✓					
3	PFOA	RI-AOC3-04	✓	\checkmark				
3	PFOA	RI-AOC3-13	✓	~	✓			

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

C-SCG denotes Commercial Use.

I-SCG denotes Industrial Use.

AOC	Parameter	Shallow Soil Sample ID			Exceeds	s SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
3	PFOS	RI-AOC3-02	\checkmark	✓				
3	PFOS	RI-AOC3-04	\checkmark	✓	\checkmark	✓		
3	PFOS	RI-AOC3-09	\checkmark					
3	PFOS	RI-AOC3-10	√					
3	PFOS	RI-AOC3-12	\checkmark	✓	\checkmark	✓		
3	PFOS	RI-AOC3-13	\checkmark	✓	\checkmark	✓		
3	PFOS	RI-AOC3-14	√	✓				
3	PFOS	RI-AOC3-15	\checkmark					
3	PFOS	RI-AOC3-17	\checkmark	✓	\checkmark			
3	PFOS	RI-AOC3-18	✓					
3	PFOA	RI-AOC3-04	✓					
3	PFOA	RI-AOC3-12	√					
3	PFOA	RI-AOC3-13	\checkmark	✓				
3	Ben(a)Anth	RI-AOC3-09	\checkmark	\checkmark	\checkmark	✓		
3	Benzo(a)Pyr	RI-AOC3-09	✓		\checkmark	✓	✓	✓
3	Benzo(b)Flr	RI-AOC3-09	\checkmark	\checkmark	\checkmark	✓		
3	Chrysene	RI-AOC3-09	\checkmark	\checkmark	\checkmark			
3	Ind Pyrene	RI-AOC3-09	✓		\checkmark	✓		

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

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C-SCG denotes Commercial Use. I-SCG denotes Industrial Use.

- A previous groundwater sample and surface water sample collected from the central portion of AOC-3 during the 2018 Site Characterization reported PFOS at concentrations exceeding regulatory criteria. Previous investigations report the depth to groundwater as ranging from four (4) to nine (9) feet below grade while the groundwater flow direction as being from the northwest towards the southeast.
- PFOS and PFOA did exceed the groundwater protection standard and have been detected in groundwater during the Site Characterization. These detections along with detections of PFHxS support that the source is AFFF.
- The SVOCs benzo(a)anthracene, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene and chrysene did not exceed Commercial Use SCGs, which is the use associated with the Site's use as a commercial airport where the constituents are not detected in groundwater. As such, the collection of additional surface and shallow soil delineation samples is not warranted at this time.
- The SVOC benzo(a)pyrene slightly exceeded its Commercial Use SCG in surface soil at sampling location RI-AOC3-09. We propose that no further soil sampling be conducted at this time.
- Relatively low to neutral pH values and normal TOC percentages were identified.
- Based on the presence of PFOS and PFOA in surface soil and shallow soil within AOC-3, the relatively shallow groundwater depth, and the movement of documented PFOS/PFOA impacted groundwater within AOC-3, deviations to the remaining scope of work in the 2022 NYSDEC approved RI/FS Work Plan is not warranted.

AOC-4

AOC-4 encompasses the area surrounding central portions of Runway 5-23 between Taxiways B and D (see **Figure 2**). Environmental concerns within AOC-4 include the apparent use of AFFF in relation to both a Beech 1900 aircraft crash in 1998 and a separate aircraft crash involving a Baron aircraft in 2007. In connection with the Airport's runway rehabilitation in 2021, sampling was conducted in the vicinity of the crashes and PFOS was detected above regulatory criteria.

Eleven (11) surface soil and 11 shallow soil samples were collected from 11 sampling locations identified as RI-AOC4-01 to -11 on **Figure 10**. All of the samples were analyzed for PFAS, pH, and TOC. Five (5) surface soil and five (5) shallow soil samples were also

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analyzed for the full list of TCL/TAL Parameters. **Figure 10** identifies sampling locations where select TCL/TAL parameters have exceeded SCGs. **Table 4A** provides a summary of the full analytical results for PFAS, pH, and TOC in surface soil and shallow soil collected in AOC-4. **Table 4B** depicts the analytical results for detected TCL/TAL Parameters.

<u>PFOS</u>

PFOS concentrations in surface and shallow soils ranged from non-detect to $0.308 \,\mu g/kg$. There were no surface or shallow soil samples that exceeded the Protection of Groundwater SCG value of $3.7 \,\mu g/kg$ for PFOS. PFOS was detected in 7 of 11 surface soil samples and none of the shallow soil samples analyzed, which included surface soil samples collected from RI-AOC4-01 to -03, -05 to -06, and -10 to -11.

PFOS was not detected in 4 of 11 surface soil samples and 11 of 11 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC4-04 and -07 to -09 and shallow soil samples collected from RI-AOC4-01 to -11. PFOS was not detected in both surface soil and shallow soil samples collected from RI-AOC4-04 and -07 to -09.

As shown on **Table 4A**, PFOS did not exceed SCGs in any of the samples analyzed.

<u>PFOA</u>

PFOA concentrations in surface and shallow soils ranged from non-detect to $0.155 \,\mu g/kg$. There were no surface or shallow soil samples that exceeded the Protection of Groundwater SCG value of $1.1 \,\mu g/kg$ for PFOA. PFOA was detected in 5 of 11 surface soil samples and 6 of 11 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC4-02 to -04, -08, and -11 and shallow soil samples collected from RI-AOC4-03 to -07, and -11. PFOA was detected in both surface soil and shallow soil samples collected from RI-AOC4-03, -04 and -11.

PFOA was not detected in 6 of 11 surface soil samples and 5 of 11 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC4-01, -05 to -07, and -09 to -10 and shallow soil samples collected from RI-AOC4-01 to -02 and-08 to -10. PFOA was not detected in both surface soil and shallow soil samples collected from RI-AOC4-01, -09 and -10.

As shown on **Table 4A**, PFOA did not exceed SCGs in any of the samples analyzed.

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PFAS Other Than PFOS and PFOA

The remaining 19 PFAS analyzed were detected at concentrations that ranged from nondetect in $\pm 84\%$ of the compounds analyzed to 0.933 µg/kg for N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA) detected in the shallow soil sample collected from RI-AOC4-03, located in a vegetated area between Runway 5-23 and Taxiway A in the vicinity of one (1) of the crashes.

<u>pH and TOC</u>

The soil pH values ranged from 4.4 to 6 SUs. The TOC percentage in soil ranged from 0.374 % to 2.76 %.

TCL/TAL Parameters

Five (5) surface soil and five (5) shallow soil samples were collected from five (5) sampling locations identified as RI-AOC4-02, -04, -07, and -09 to -10 located throughout AOC-4.

As shown on **Figure 10** and **Table 4B**, none of the analyzed parameters exceeded Unrestricted Use SCGs with the exception of the VOC acetone, , which exceeded its Unrestricted and Protection of Groundwater Use SCG in surface soil samples collected from RI-AOC4-04 and -09 and both surface and shallow soil samples collected from RI-AOC4-10. These sampling locations are located in grassy areas to the northwest of Runway 5-23.

Preliminary Findings (AOC-4)

The following tables summarize parameters that have exceeded SCGs in surface soil and shallow soil in AOC-4.

AOC	Parameter	Surface Soil Sample ID			Exceeds	s SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
4	Acetone	RI-AOC4-04	✓	✓				
4	Acetone	RI-AOC4-09	✓	\checkmark				
4	Acetone	RI-AOC4-10	✓	\checkmark				

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

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C-SCG denotes Commercial Use. I-SCG denotes Industrial Use.

AOC	Parameter	Shallow Soil Sample ID			Exceeds	SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
4	Acetone	RI-AOC4-10	\checkmark	✓				
NT .								

Notes:

UU-SCG denotes Unrestricted Use. GW-SCG denotes Protection of Groundwater Use. R-SCG denotes Residential Use. RR-SCG denotes Restricted Residential Use. C-SCG denotes Commercial Use. I-SCG denotes Industrial Use.

- PFOS and PFAS did not exceed their respective SCGs in surface soil and shallow soil, although they were sporadically detected in surface and shallow soil throughout AOC-4. As such, the collection of additional surface and shallow soil delineation samples is not warranted.
- None of the analyzed TCL/TAL Parameters exceeded Unrestricted Use SCGs with the exception of the VOC acetone. Acetone was detected slightly above Unrestricted and Protection of Groundwater SCGs at three (3) sampling locations located to the northwest of Runway 5-23. We propose that no further sampling be conducted.
- PFAS exceeded regulatory criteria in soil samples collected in support of the 2021 southerly runway rehabilitation. Based on the above, it is recommended that there be deviations at this time to the remaining investigations proposed in the 2022 NYSDEC-approved RI/FS Work Plan.

AOC-5

AOC-5 encompasses the area within vegetated northern portions of the Site (see **Figure 2**). Environmental concerns within AOC-5 include the potential use of AFFF in relation to the 2004 Piper aircraft crash within this area and the potential leakage of fluids from the crashed aircraft.

One (1) surface soil and one (1) shallow soil sample was collected from one (1) sampling location identified as RI-AOC5-01 on **Figure 11**. The samples were analyzed for PFAS, pH, TOC, and the full list of TCL/TAL Parameters. A figure depicting sampling locations is not included as PFAS did not exceed SCGs. **Figure 11** depicts the sampling locations where select TCL/TAL Parameters exceeded SCGs. **Table 5A** depicts the full analytical

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results for PFAS, pH, and TOC. **Table 5B** provides a summary of analytical results for detected TCL/TAL Parameters.

<u>PFOS</u>

As shown on **Table 5A**, PFOS was not detected in the surface and shallow soil samples.

<u>PFOA</u>

As shown on **Table 5A**, PFOA was not detected in the surface and shallow soil samples.

PFAS Other Than PFOS and PFOA

The remaining 19 PFAS analyzed were not detected in the surface soil and shallow soil samples.

<u>pH and TOC</u>

The soil pH values ranged from 4.5 to 4.8 SUs. The TOC percentage in soil ranged from 49.8% to 63%.

TCL/TAL Parameters

As shown on **Figure 11** and **Table 5B**, none of the analyzed parameters exceeded Unrestricted Use SCGs with the exception of the VOCs 2-butanone, acetone, and toluene. 2-butanone and toluene slightly exceeded the Unrestricted and Protection of Groundwater Use SCGs in the surface soil samples. Acetone slightly exceeded the Unrestricted and Protection of Groundwater Use SCGs in both the surface soil and shallow soil samples.

Preliminary Findings (AOC-5)

The following tables summarize parameters that have exceeded SCGs in surface soil and shallow soil in AOC-5.

AOC	Parameter	Surface Soil Sample ID			Exceeds	SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
5	2-Butanon	RI-AOC5-01	✓	✓				
5	Acetone	RI-AOC5-01	✓	✓				

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AOC	Parameter	Surface Soil Sample ID			Exceeds	s SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
5	Toluene	RI-AOC5-01	✓	✓				

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

C-SCG denotes Commercial Use.

I-SCG denotes Industrial Use.

AOC	Parameter	Shallow Soil Sample ID			Exceeds	SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
5	Acetone	RI-AOC5-01	✓	✓				

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

C-SCG denotes Commercial Use.

I-SCG denotes Industrial Use.

- PFAS (including PFOS and PFOA) were not detected in the surface soil and shallow soil samples.
- Three VOCs (2-butanone, acetone, and toluene) were detected at varying frequencies in surface and/or shallow soils at concentrations slightly exceeding Unrestricted and Protection of Groundwater Use SCGs. We propose no further sampling be conducted.
- Based on this information, it is recommended that no further investigation (per the 2022 RI/FS Work Plan) for the presence of PFAS be conducted within AOC-5 and that this area be eliminated as a potential source area for PFAS.

AOC-6

AOC-6 encompasses the area within offsite vegetated land to the north of the Site (see **Figure 2**). Environmental concerns within AOC-6 include the potential use of AFFF in relation to the 2007 Beech aircraft crash within this area and the potential leakage of fluids from the crashed aircraft.

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One (1) surface soil and one (1) shallow soil sample was collected from one (1) sampling location identified as RI-AOC6-01 on **Figure 12**. The samples were analyzed for PFAS, pH, TOC, and the TCL/TAL parameters. **Figure 12** depicts the sampling locations within AOC-5 only; there were no PFAS and TCL/TAL Parameters exceedances of SCGs. **Table 6A** presents the full analytical results for PFAS, pH, and TOC. **Table 6B** provides a summary of analytical results for detected TCL/TAL parameters.

PFOS

As shown on **Table 6A**, PFOS was not detected in the surface and shallow soil samples.

<u>PFOA</u>

As shown on **Table 6A**, PFOA was detected in the surface soil and shallow soil samples at concentrations that did not exceed SCGs. The concentrations ranged from 0.056 to 0.063 μ g/kg, which is below the Unrestricted Use SCG of 0.66 μ g/kg.

PFAS Other Than PFOS and PFOA

The remaining 19 PFAS analyzed were not detected in the surface and shallow soil samples with the exception of Perfluorobutanoic Acid (PFBA) which was detected in both the surface soil and shallow soil samples at a concentration range of 0.03 to 0.099 μ g/kg.

<u>pH and TOC</u>

The soil pH values ranged from 4.4 to 5 SUs. The TOC percentage in soil ranged from 1% to 2.14%.

TCL/TAL Parameters and Cyanide

As shown on **Table 6B**, none of the analyzed parameters exceeded SCGs.

Preliminary Findings (AOC-6)

- PFOS was not detected and PFOA was detected at concentrations well below SCGs in the surface soil and shallow soil samples.
- No TCL/TAL Parameters detected in the surface soil and shallow soil samples exceeded SCGs.

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• Based on this information, it is recommended that no further investigation (per the 2022 RI/FS Work Plan) for the presence of PFAS be conducted within AOC-6 and that this area be eliminated as a potential source area for PFAS and the TCL/TAL parameters.

AOC-7

AOC-7 encompasses the southwestern portion of the Site (see **Figure 2**). This is the approximate area where the UAE aircraft crashed off of Runway 5-23 after an inflight emergency in 1997. The aircraft may have leaked fluids to the ground and AFFF may have been applied to the aircraft as suggested by media reports that state that "Firefighters and fire trucks from throughout the area, including all trucks equipped with foam, were called to the scene."¹.

Ten surface soil and 10 shallow soil samples were collected from 10 sampling locations identified as RI-AOC7-01 to -10 on **Figure 13**. All of the samples were analyzed for PFAS, pH and TOC. Five (5) surface soil and five (5) shallow soil samples were also analyzed for the TCL/TAL Parameters. **Figure 13** shows sampling locations where PFAS has exceeded SCGs. **Figure 14** shows sampling locations where select TCL/TAL Parameters exceeded SCGs. **Table 7A** presents the full analytical results for PFAS, pH, and TOC in surface soil and/or shallow soil in AOC-7. **Table 7B** includes a summary of analytical results for detected TCL/TAL Parameters.

<u>PFOS</u>

PFOS concentrations in surface and shallow soils ranged from non-detect to $1.76 \,\mu g/kg$. There were no surface or shallow soil samples that exceeded the Protection of Groundwater SCG value of $3.7 \,\mu g/kg$ for PFOS. PFOS was detected in 4 of 10 surface soil samples and 1 of 10 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC7-02 and -04 to -06 and a shallow soil sample collected from RI-AOC7-10. PFOS was not detected in both surface soil and shallow soil samples at any of the sampling locations.

PFOS was not detected in 6 of 10 surface soil samples and 9 of 10 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC7-01, -03 and -07 to -10 and shallow soil samples collected from RI-AOC7-01 to -09. PFOS was not detected

¹ Newspaper article entitled Emergency Landing at Lake Clear published in the October 16, 1997 edition of the Adirondack Daily Enterprise.

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in both surface soil and shallow soil samples collected from RI-AOC7-01, -03 and -07 to - 09.

As shown on Figure 13 and Table 7A, PFOS exceeded its Unrestricted Use SCG in a single surface soil sample collected from RI-AOC7-05, located in the northern portion of AOC-7. PFOS did not exceed its Commercial Use SCG.

<u>PFOA</u>

PFOA concentrations in surface and shallow soils ranged from non-detect to 0.146 μ g/kg. There were no surface or shallow soil samples that exceeded the Protection of Groundwater SCG value of 1.1 μ g/kg for PFOA. PFOA was detected in 6 of 10 surface soil samples and 2 of 10 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC7-01 to -05 and -07 and shallow soil samples collected from RI-AOC7-04 and -06. PFOA was not detected in either surface soil or shallow soil samples collected from RI-AOC7-04.

PFOA was not detected in 4 of 10 surface soil samples and 8 of 10 shallow soil samples analyzed, which included surface soil samples collected from RI-AOC7-06 and -08 to -10 and shallow soil samples collected from RI-AOC7-01 to -03, -05, and -07 to -10. PFOA was not detected in both surface soil and shallow soil samples collected from RI-AOC7-08 to -10.

As shown on Table 7A PFOA did not exceed SCGs in any of the samples analyzed.

PFAS Other Than PFOS and PFOA

The remaining 19 PFAS analyzed were detected at concentrations that ranged from nondetect in $\pm 90\%$ of the compounds analyzed to 0.282 µg/kg for Perfluorodecanoic Acid (PFDA) detected in the surface soil sample collected from RI-AOC7-05, located in the northern portion of AOC-7. PFHxS (as well as PFOS) was detected at sampling location RI-AOC7-05 supporting that AFFF applied on the UAE crashed plane is the source.

<u>pH and TOC</u>

The soil pH values ranged from 4.9 to 5.7 SUs. The TOC percentage in soil ranged from 0.456% to 1.91%.

Technical Memorandum: Preliminary Assessment of Surface Soil and Shallow Soil Sampling Results March 10, 2023 Page - 29

TCL/TAL Parameters

Five (5) surface soil and five (5) shallow soil samples were collected from five (5) sampling locations identified as RI-AOC7-01, -03, -04, -07, and -10 located throughout AOC-7.

As shown on Figure 14 and Table 7B, none of the analyzed parameters exceeded Unrestricted Use SCGs with the exception of the VOC acetone, which exceeded its Unrestricted and Protection of Groundwater Use SCGs in surface soil samples collected from RI-AOC4-03, -04, and -07 located in northern, eastern, and southern portions of AOC-7, respectively.

Preliminary Findings (AOC-7)

The following tables summarize parameters that have exceeded SCGs in surface soil and shallow soil in AOC-7.

AOC	Parameter	Surface Soil Sample ID			Exceeds	s SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
7	PFOS	RI-AOC7-05	√					
7	Acetone	RI-AOC7-03	√	✓				
7	Acetone	RI-AOC7-04	✓	✓				
7	Acetone	RI-AOC7-07	✓	✓				

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

C-SCG denotes Commercial Use.

I-SCG denotes Industrial Use.

• Per additional information provided by airport personnel after the soil sampling scope of work was completed, it was determined that the UAE aircraft came to rest in an area located to the north of AOC-7, as depicted on **Figure 13A**. This is corroborated by the detection of PFOS and PFHxS at sampling location RI- AOC7-05, the northernmost sample within AOC-7, as well as PFOS/PFHxS detections at sampling location RI-AOC2-09 in AOC-2, where the aircraft was staged pending a lengthy international crash investigation. Based on this information, additional investigation is warranted to the north of AOC-7. The proposed additional investigations are detailed on **Figure 13A** and is proposed to include the collection of surface soil and shallow soil samples from seven (7) sampling locations and the collection of surface water and sediment samples from two (2) sampling locations located in an observed drainage ditch. All of the samples will be analyzed for

Technical Memorandum: Preliminary Assessment of Surface Soil and Shallow Soil Sampling Results March 10, 2023 Page - 30

PFAS, pH, and TOC. At least one (1) surface soil and one (1) shallow soil sample will also be analyzed for the full list of TCL/TAL Parameters. At least one (1) surface water and one (1) sediment sample will also be analyzed for the full list of TCL/TAL Parameters. Any samples exhibiting field evidence of contamination will also be analyzed for the TCL/TAL Parameters. The samples will be collected in accordance with the 2022 NYSDEC-approved RI/FS Work Plan. Results of the additional samples indicated above will be used to determine if additional investigations (i.e., soil borings, monitoring wells, subsurface soil, and groundwater sampling) concurrent to the 2022 RI/FS Work Plan within AOC-7 and the area to the north of AOC-7 is warranted.

AREAS OUTSIDE OF THE AOCs

Investigations were conducted outside of the AOCs to assess the overall environmental quality of surface soil and shallow soil in remaining portions of the Site. Fifteen (15) surface soil and 15 shallow soil samples were collected from 15 sampling locations identified as RI-ARA-01 to -15 on **Figure 15**. Each of the samples were analyzed for PFAS, pH, and TOC. Two (2) surface soil and two (2) shallow soil samples were also analyzed for the full list of TCL/TAL Parameters. **Figure 15** depicts sampling locations outside of the AOCs where select TCL/TAL Parameters exceeded SCGs. **Table 8A** presents the full analytical results for PFAS, pH, and TOC in surface soil and/or shallow soil outside the AOCs. **Table 8B** provides the analytical results summary for detected TCL/TAL Parameters.

<u>PFOS</u>

PFOS concentrations in surface and shallow soils ranged from non-detect to 7.56 μ g/kg. One (1) surface soil sample (RI-ARA-03) and one (1) shallow soil sample (RI-ARA-05) results exceeded the Protection of Groundwater SCG value of 3.7 μ g/kg for PFOS. PFOS was detected in 7 of 15 surface soil samples and 4 of 15 shallow soil samples, which included surface soil samples collected from RI-ARA-03, -05, -06, -11 to -13, and -15 and shallow soil samples collected from RI-ARA-02 to -03, -05, and -15. PFOS was detected in both surface soil and shallow soil samples collected from RI-ARA-03, -05, and -15.

PFOS was not detected in 8 of 15 surface soil samples and 11 of 15 shallow soil samples analyzed, which included surface soil samples collected from RI-ARA-01 to -02, -04, -07 to -10, and -14 and shallow soil samples collected from RI-ARA-01, -04, and -06 to -14.

Technical Memorandum: Preliminary Assessment of Surface Soil and Shallow Soil Sampling Results March 10, 2023 Page - 31

PFOS was not detected in both surface soil and shallow soil samples collected from RI-ARA-01, -04, -07 to -10, and -14.

As shown on **Figure 15** and **Table 8A**, PFOS exceeded its SCGs at 4 of the 15 sampling locations. PFOS did not exceed its Commercial Use SCG. PFOS exceeded its Unrestricted and Protection of Groundwater Use SCGs in a surface soil sample collected from RI-ARA-03, located between AOC-2 and AOC-3 and a shallow soil sample collected from RI-ARA-05, located north of AOC-3. PFOS exceeded its Unrestricted Use SCG in surface soil samples collected from RI-ARA-05 located north of AOC-3, and RI-ARA-06 located to the southeast of Taxiway A and surface and shallow soil samples collected from RI-ARA-15, located to the northeast of the northeastern end of Runway 5-23 and Taxiway A.

<u>PFOA</u>

PFOA concentrations in surface and shallow soils ranged from non-detect to $0.536 \,\mu g/kg$. There were no surface or shallow soil samples that exceeded the Protection of Groundwater SCG value of 1.1 $\mu g/kg$ for PFOA. PFOA was detected in 8 of 15 surface soil samples and 6 of 15 shallow soil samples analyzed, which included surface soil samples collected from RI-ARA-02, -03, -06, and -11 to -15 and shallow soil samples collected in both surface soil and shallow soil samples collected from RI-ARA-01, -07, -08, -12, -14, and -15. PFOA was detected in both surface soil and shallow soil samples collected from RI-ARA-12, -14, and -15.

PFOA was not detected in 7 of 15 surface soil samples and 9 of 15 shallow soil samples analyzed, which included surface soil samples collected from RI-ARA-01, -04 to -05, and -7 to -10 and shallow soil samples collected from RI-ARA-02 to -06, -09 to -11, and -13. PFOA was not detected in both surface soil and shallow soil samples collected from RI-ARA-04, -05, -09, and -10.

As shown on **Table 8A**, PFOA did not exceed SCGs in any of the samples analyzed.

PFAS Other Than PFOS and PFOA

The remaining 19 PFAS analyzed were detected at concentrations that ranged from nondetect in $\pm 86\%$ of the compounds analyzed to 1.56 µg/kg for PFHxS detected in the surface soil sample collected from RI-ARA-05, located to the north of AOC-3.

<u>pH and TOC</u>

The soil pH values ranged from 4.5 to 6.2 SUs. The TOC percentage in soil ranged from 0.134% to 5.07%.

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TCL/TAL Parameters

Two (2) surface soil and two (2) shallow soil samples were collected from two (2) sampling locations identified as RI-ARA-01 and -14. The sampling locations are situated in the vicinity of Runway 9-27 and Taxiway B (RI-ARA-14) and in the southern portion of the Site north of Helms Mueller Road (RI-ARA-01).

As shown on **Figure 16** and **Table 8B**, none of the analyzed parameters exceeded Unrestricted Use SCGs with the exception of the VOC acetone, which exceeded its Unrestricted and Protection of Groundwater Use SCG in a shallow soil sample collected from RI-ARA-01.

Preliminary Findings (Areas Outside of the AOCs)

The following tables summarize parameters that have exceeded SCGs in surface soil and shallow soil in areas outside of the AOCs.

AOC	Parameter	Surface Soil Sample ID			Exceeds	s SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
ARA	PFOS	RI-ARA-03	✓	✓				
ARA	PFOS	RI-ARA-05	√					
ARA	PFOS	RI-ARA-06	✓					
ARA	PFOS	RI-ARA-15	✓					

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

RR-SCG denotes Restricted Residential Use.

C-SCG denotes Commercial Use.

I-SCG denotes Industrial Use.

AOC	Parameter	Shallow Soil Sample ID			Exceeds	SCG		
			UU-SCG	GW-SCG	R-SCG	RR-SCG	C-SCG	I-SCG
ARA	PFOS	RI-ARA-05	✓	✓				
ARA	PFOS	RI-ARA-15	✓					
ARA	Acetone	RI-ARA-01	\checkmark	✓				

Notes:

UU-SCG denotes Unrestricted Use.

GW-SCG denotes Protection of Groundwater Use.

R-SCG denotes Residential Use.

Technical Memorandum: Preliminary Assessment of Surface Soil and Shallow Soil Sampling Results March 10, 2023 Page - 33

RR-SCG denotes Restricted Residential Use. C-SCG denotes Commercial Use. I-SCG denotes Industrial Use.

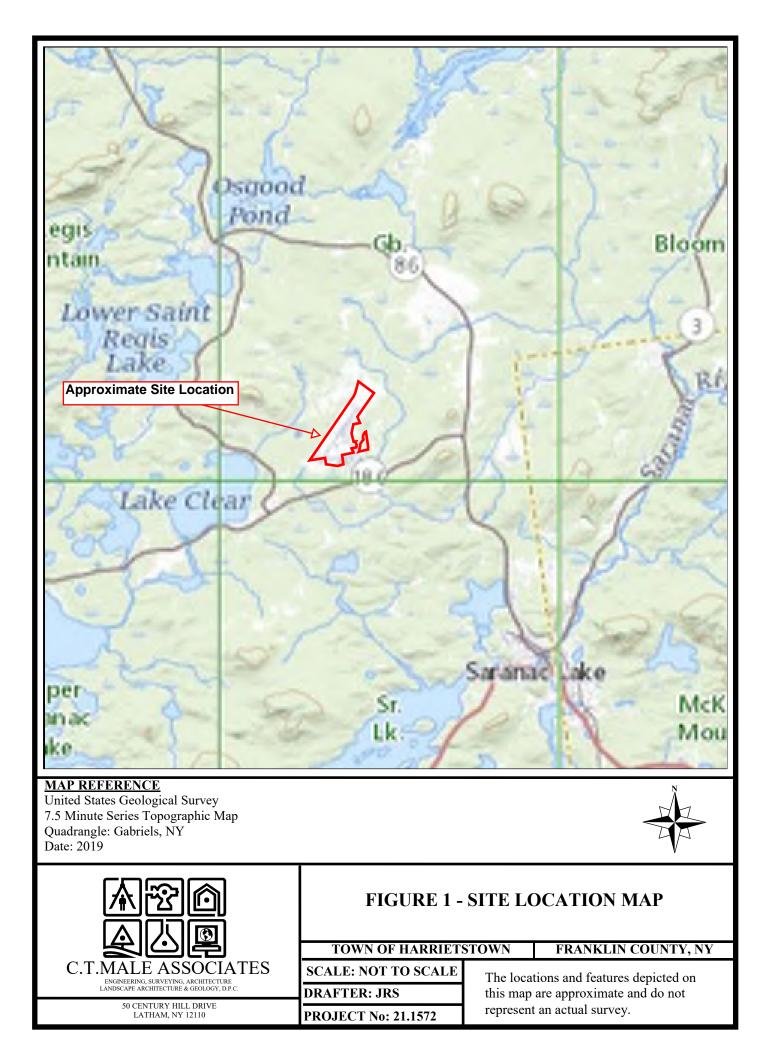
- PFOS has exceeded its Protection of Groundwater SCG at sampling locations RI-ARA-03 and -05. PFOS and PFOA detections below SCGs were encountered in several surface and shallow soil samples.
- The remaining Other PFAS in surface soil and shallow soil analyzed were mostly non-detect, though PFHxS was detected in certain samples where PFOS was detected.
- Based on the above and the fact that both the depth to groundwater and groundwater flow direction are unknown, it is recommended that there be no deviations at this time to the remaining investigations proposed in the 2022 NYSDEC-approved RI/FS Work Plan, with the exception of sampling location RI-ARA-15 which was identified in the RI/FS Work Plan as only a surface soil and shallow soil sampling location. Due to PFOS exceeding Unrestricted Use SCGs in both surface and shallow soil at this location, it is recommended that a soil boring be advanced to aid in the collection of a subsurface soil sample for laboratory analyses for PFAS, pH, and TOC and for installation of a shallow overburden monitoring well to aid in the collection and analyses of the media samples will be completed in accordance with the RI/FS Work Plan.
- Acetone slightly exceeded Unrestricted and Protection of Groundwater Use SCGs in the shallow soil sample collected from RI-ARA-01. We propose that no further sampling be conducted.

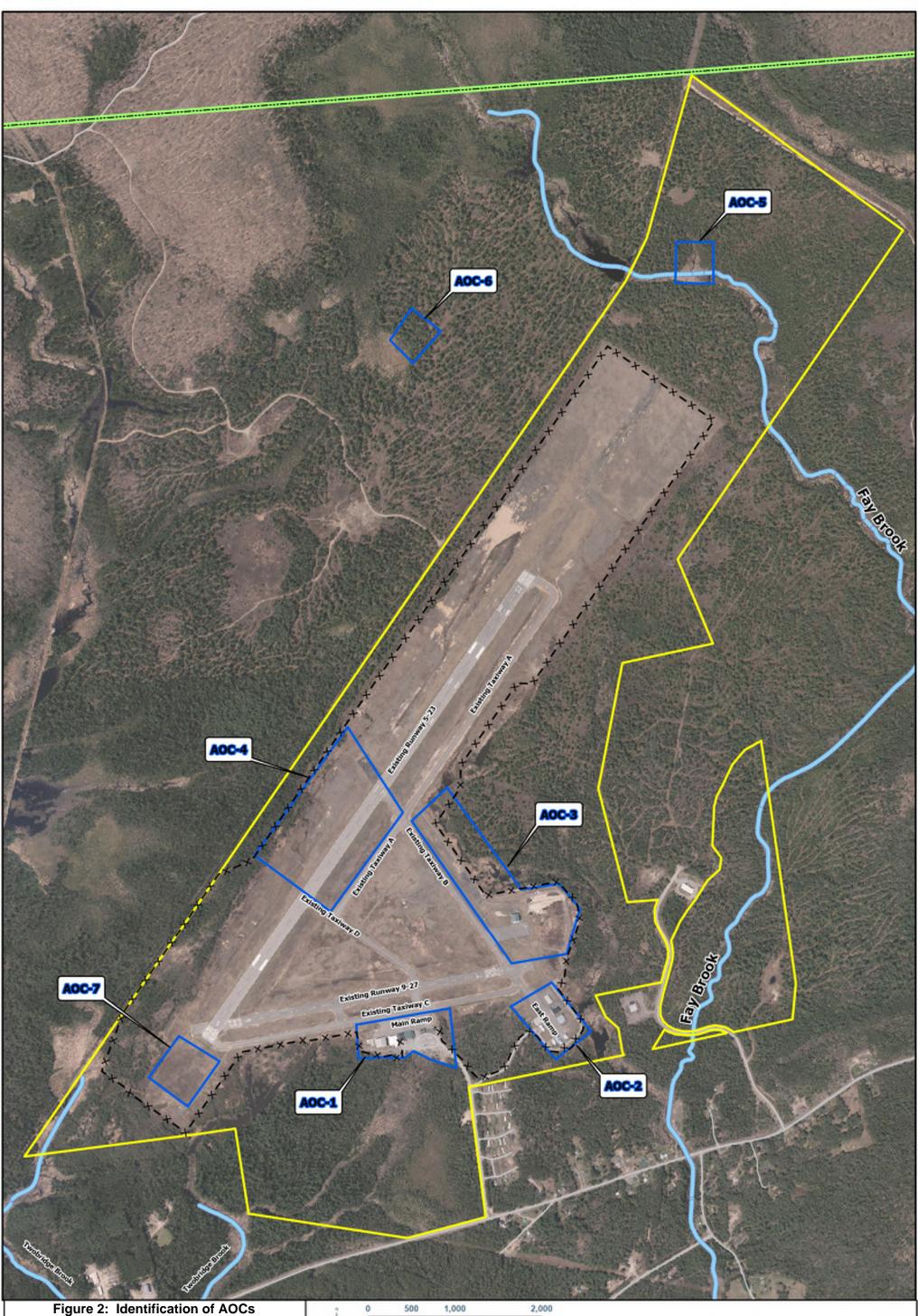
ATTACHMENTS

Attachment A:	Figures
Attachment B :	Tables
Attachment C :	Data Rejections Summary

ATTACHMENT A

FIGURES





Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY



Map Note: The locations and features depicted on this map are approximate and do not represent a field survey. Project Number: 21.1572 Data Source: NYSGNS Clearingbouxe Projection: State Plane INAD83 NYE (Feet) Date: November 18, 2021 File: RegionalAisportStellap.aprr GIS: D Landreville

1 in = 1,000 ft

FT

× • FENCE LINE
AREA OF CONCERN
PROPERTY BOUNDARY
(DIGITIZED)

DETAILED MAP NOTES

* Analytical result exceeds NYSDEC Part 375 soil cleanup objectives and/or guidance values for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives and/or guidance values for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives and/or guidance values for unrestricted use, protection of groundwater, residential use and restricted residential use.

***^ Analytical result exceeds NYSDEC Part 375 soil cleanup objectives and/or guidance values for unrestricted use, residential use and restricted residential use, but not the protection of groundwater.

**** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives and/or guidance values for unrestricted use, residential use, restricted residential use and commercial use, but not the protection of groundwater.

Bolded analytical result exceeds listed standard and/or guidance value.

(1) Guidance Values for Anticipated Site Use (Unrestricted) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(2) Guidance Values for Anticipated Site Use (Protection of Groundwater) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(4) Guidance Values for Anticipated Site Use (Restricted Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(5) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(7) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(8) SCOs for Protection of Groundwater promulgated at 6 NYCRR Part 375.

(9) SCOs for Residential Use Sites promulgated at 6 NYCRR Part 375.

(10) SCOs for Restricted-Residential Use Sites promulgated at 6 NYCRR Part 375.

(11) SCOs for Commercial Use Sites promulgated at 6 NYCRR Part 375.

(12) SCOs for Industrial Use Sites promulgated at 6 NYCRR Part 375.

(13) The sample was collected from the 0 to 2-inch depth interval except for the TCL VOC sample which was collected from the 2 to 6-inch depth interval.

(14) The sample was collected from the 2 to 12-inch depth interval except for the TCL VOC sample which was collected from the 6 to 12-inch depth interval.

U = Analytical result is not detected at the reported detection limit for the sample.

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).

P - The RPD between the results for the two columns exceeds the method-specified criteria.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

R = Rejected Value.

NR = Not Reported by the analytical laboratory.

C.T.MALE ASSOCIATES	FIGURE 3 – DETAILED MAP NOTES ADIRONDACK REGIONAL AIRPORT SITE										
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ENGINEERING, SURVEYING, ARCHITECTURE LANDSCAPE ARCHITECTURE & GEOLOGY, D.P.C.	SCALE: NONE	The locations and features depicted on									
	DRAFTER: SHB	this map are approximate and do not									
50 CENTURY HILL DRIVE LATHAM, NY 12110	PROJECT No: 21.1572		nt an actual survey.								

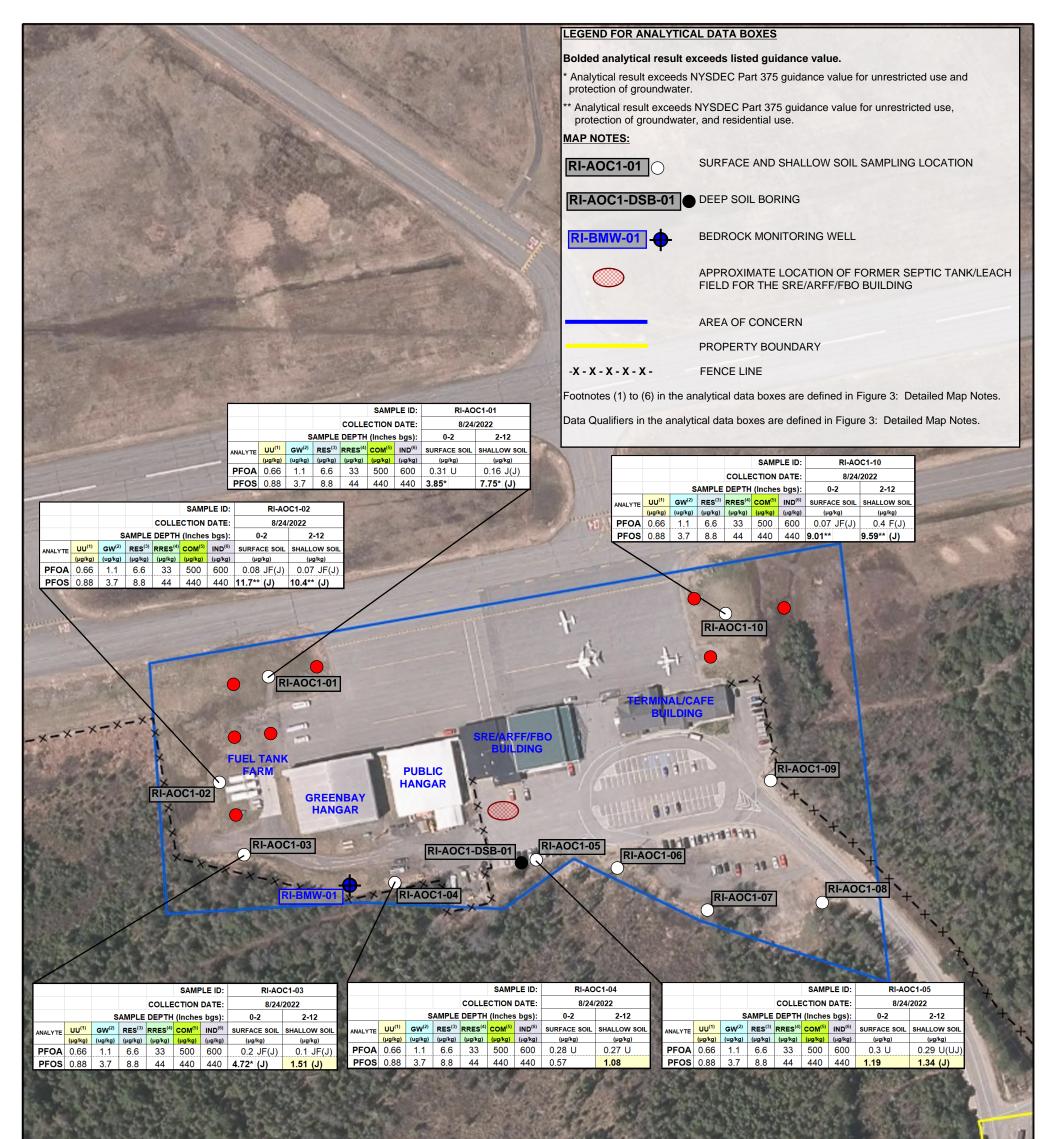




FIG. 4: PFAS ABOVE SCGs IN SURFACE & SHALLOW SOIL (AOC-1)

Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

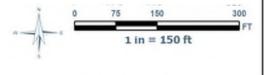
Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.



50 CENTURY HILL DRIVE, LATHAM, NY 12110 518,786,7400 * FAX 518,786,7299



Project Number: 21.1572 Data Source: NYSG/S Clearinghouse Projection: State Place MAD83 NYE (Feet) Date: November 18, 2021 File: Regional/kportSiteMap.aprx GIS: D Landreville



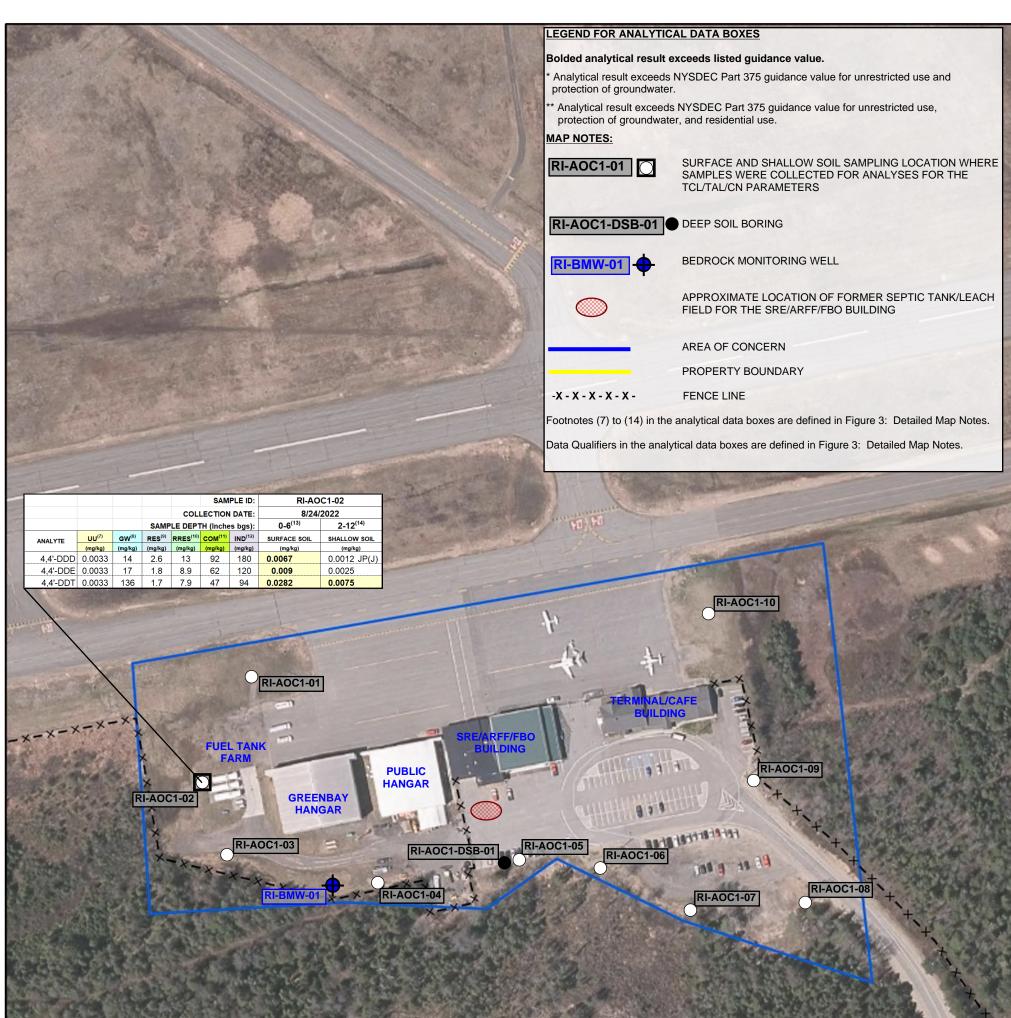




FIG. 5: TCL/TAL ABOVE SCGs IN SURFACE & SHALLOW SOIL (AOC-1)

Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

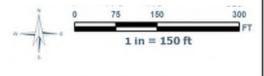
Franklin County, NY

Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.





Project Number: 21,1572 Data Source: NYSGIS Clearinghouse Projection: State Plane MADBJ NYE (Feet) Date: November 18, 2021 File: Regional/kportSiteMap.aprx 2010; D.1 conduction GIS: D Landreville



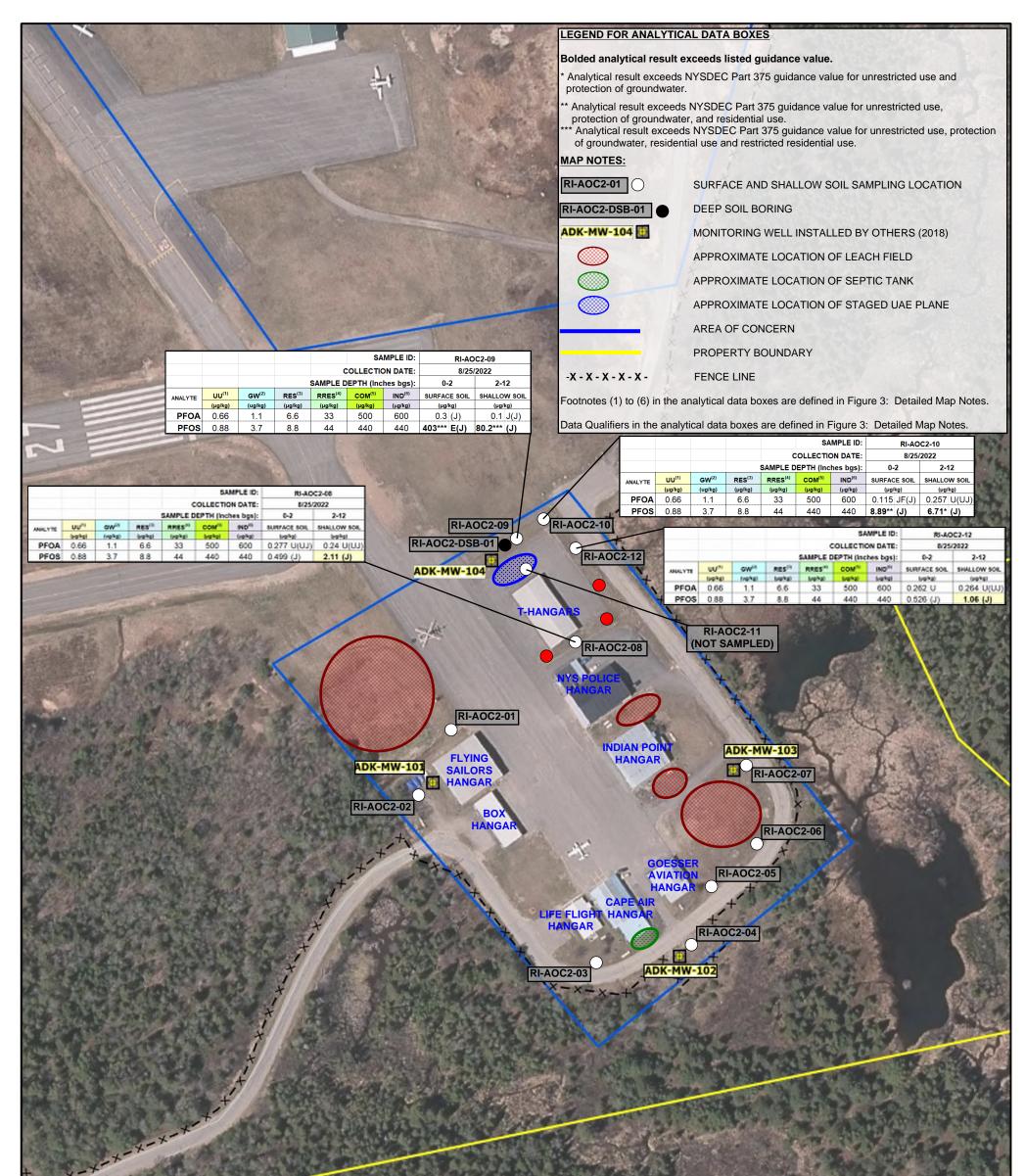




FIG. 6: PFAS ABOVE SCGs IN SURFACE & SHALLOW SOIL (AOC-2) Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

C.T. MALE ASSOCIATES 120 ng, Architecture, Landacape Architecture & Ge egy, 0.1 50 CENTURY HELL DRIVE, LATHAM, NY 12110 518,786,7400 * FAX 518,786,7299

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Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.

Project Number: 21.1572 Data Source: NYSGIS Clearinghouse Projection: State Plane MADBJ NYE (Feet) Date: November 18, 2021 File: Regional/AportSiteMap.aprx GIS: D Landheville



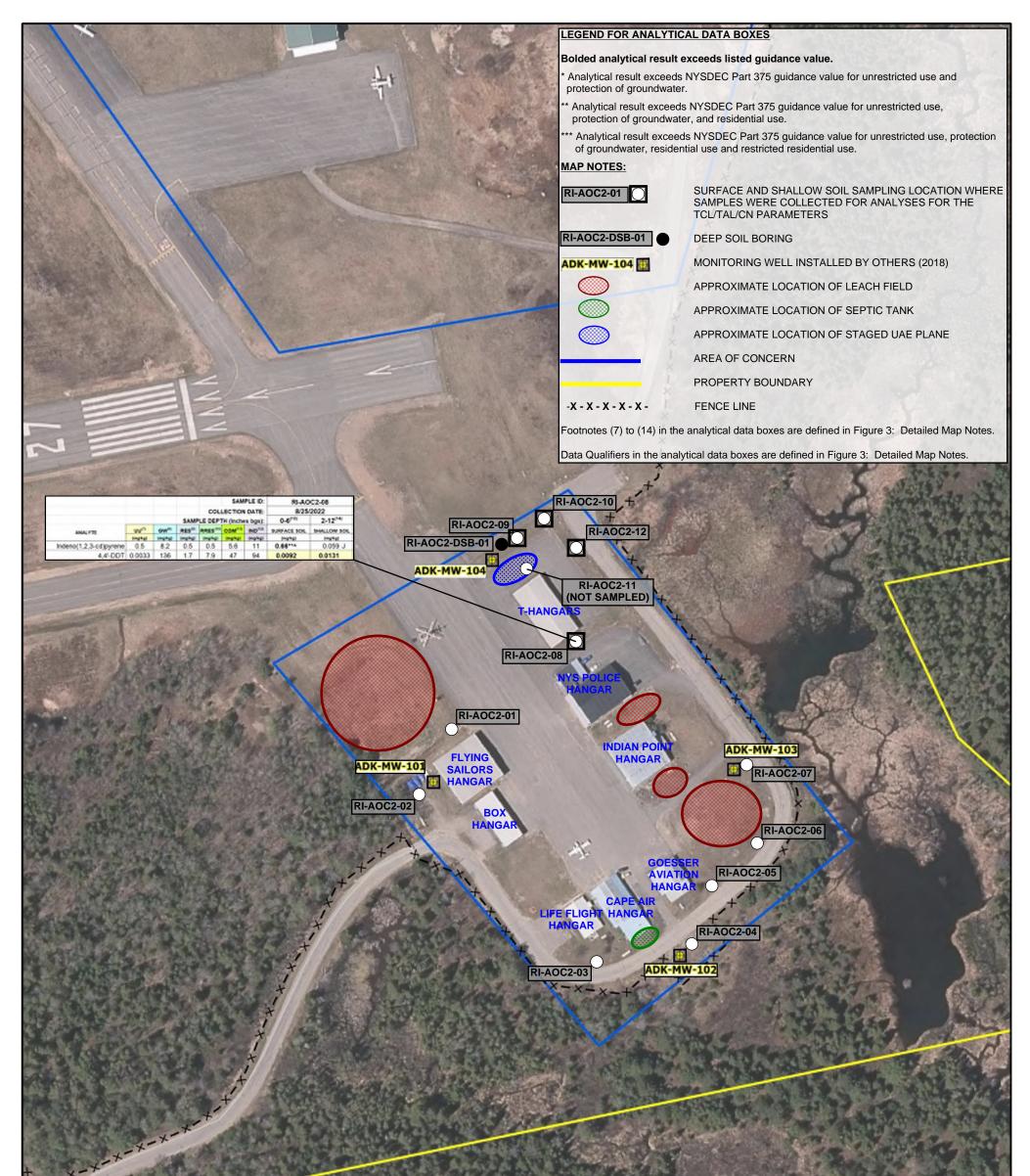




FIG. 7: TCL/TAL ABOVE SCGs IN SURFACE & SHALLOW SOIL (AOC-2) Adirondack Regional Airport 96 Airport Rd

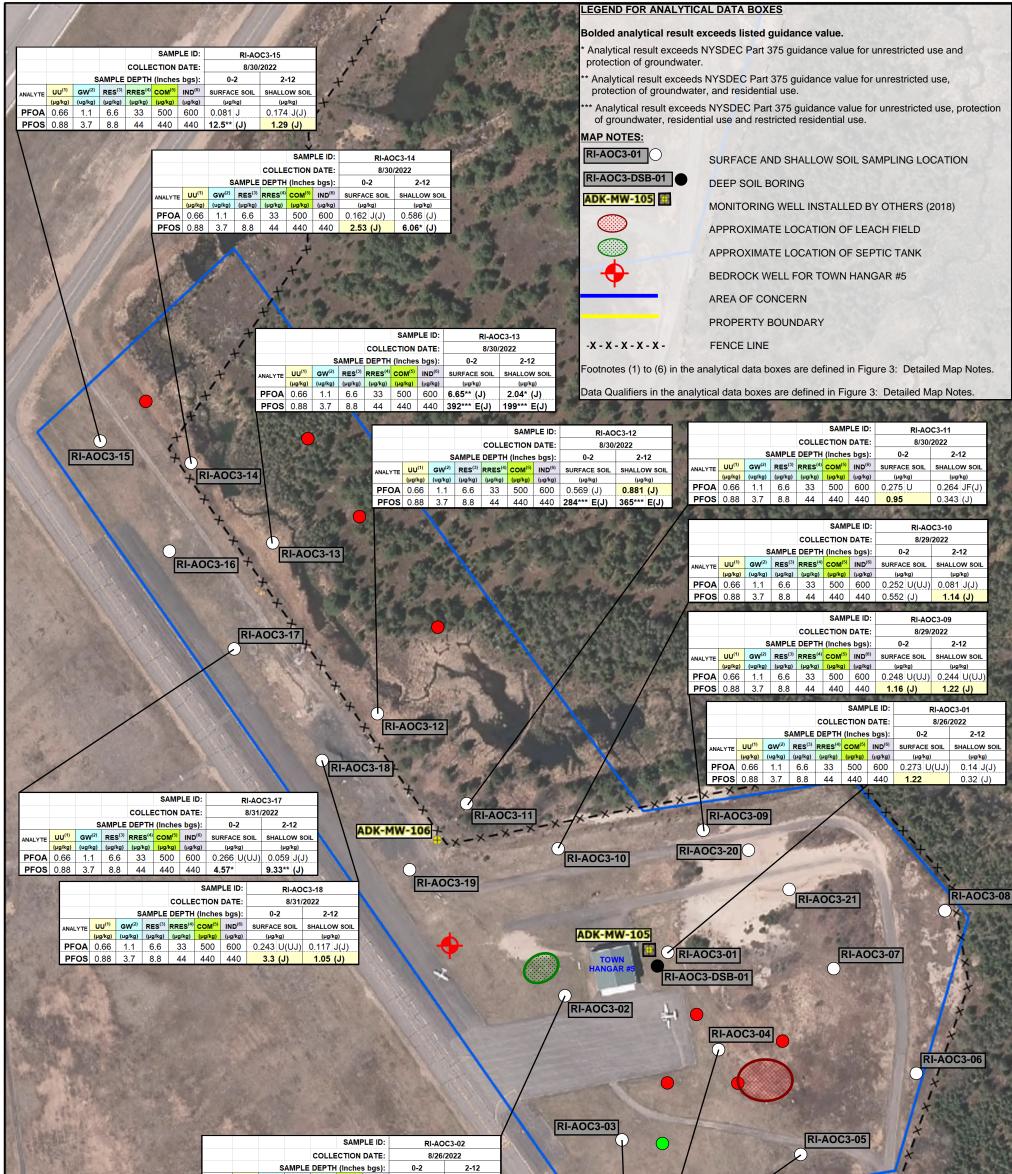
Town of Harrietstown

Franklin County, NY

C.T. MALE ASSOCIATES sector, forwayley, Architecture, Landacape Architecture & Geology, B.P.G. So CENTURY HELL DRIVE, LATHAM, NY 12110 S151/161.7600 * FAX S167/01/2200 Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.

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FIG. 8: PFAS ABOVE SCGs IN SURFACE & SH			(AUC-	·)																					
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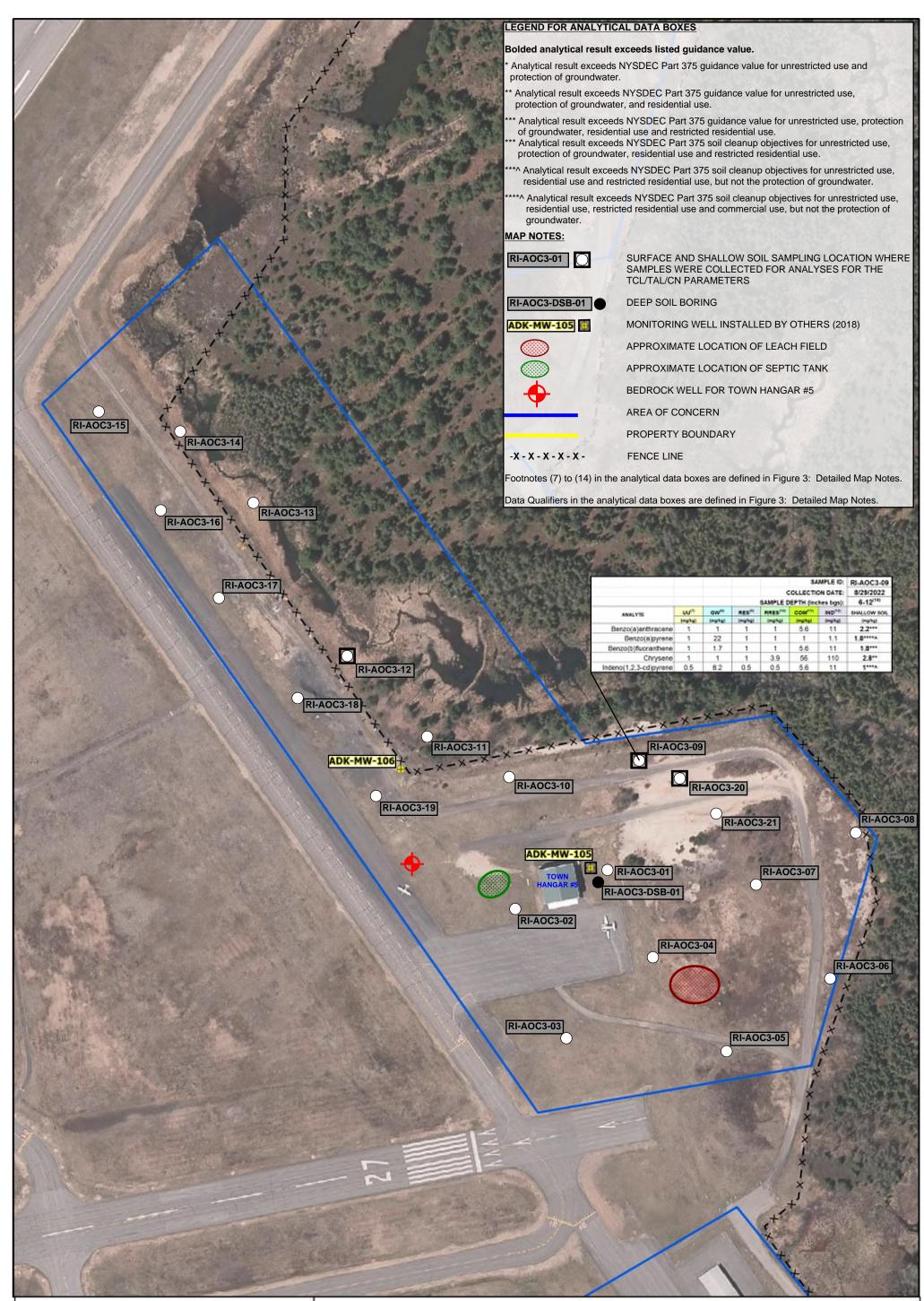


FIG. 9: TCL/TAL ABOVE SCGs IN SURFACE & SHALLOW SOIL (AOC-3)

Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

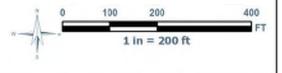
Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.



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Project Number: 21.1572 Data Source: NYSG/S Clearinghouse Projection: State Plane MADIO NYE (Feet) Data: November 18, 2021 File: Regional/kportSiteMap.aprx GIS: D Landreville



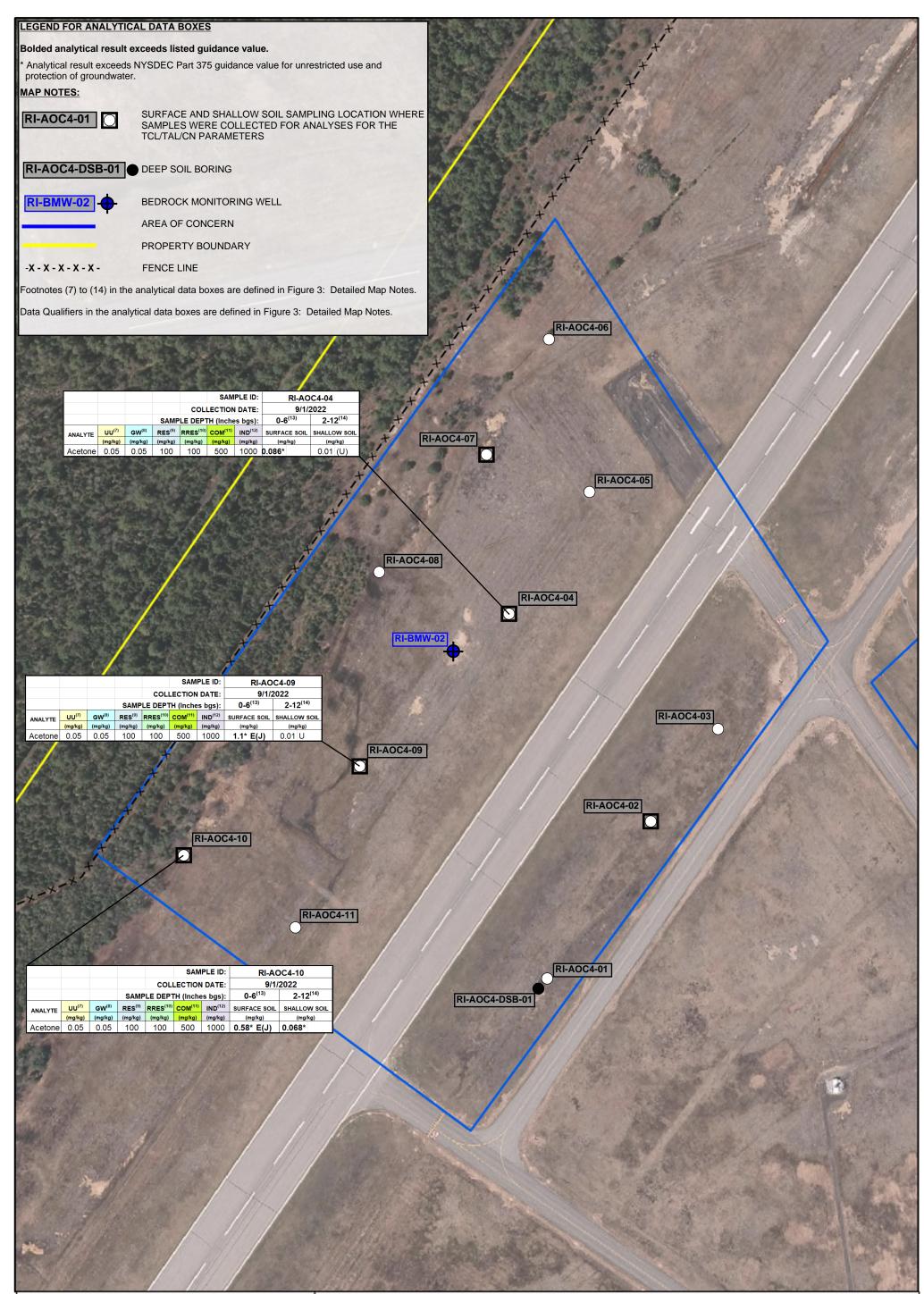


FIG. 10: TCL/TAL ABOVE SCGs IN SURFACE & SHALLOW SOIL (AOC-4)

Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

C.T. MALE ASSOCIATES spineering, forwaying, Architecture, Landscape Architecture & Geology, 0.F.G. So CENTURY HILL, DRIVEL, LATINAM, NY 12110 S10, 710, 7400 ° FAX 518, 756, 7209 Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.

Project Number: 21.1572 Date Source: NYSGRS Clearinghouse Projection: State Plane MADR3 NYE (Feet) Date: November 18, 2021 File: RegionalArportStatMap.aprx GIS: D Landreville





FIG. 11: TCL/TAL ABOVE SCGs IN SURFACE & SHALLOW SOIL (AOC-5)

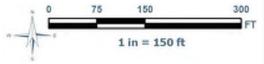
Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

C.T. MALE ASSOCIATES aplenering, Surveylag, Architecture, Landscape Architecture & Geology, D.P.C. 50 CENTURY HELL DRIVE, LATHAM, NY 12110 518,786,7400 ° FAX 518,786,7299 Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.

Project Number: 21,1572 Date Source: NYSG/S Clearinghouse Projection: State Place MADIA NYE (Feet) Date: November 16, 2021 File: RegionalApportStellags.aprx GIS: D Landreville





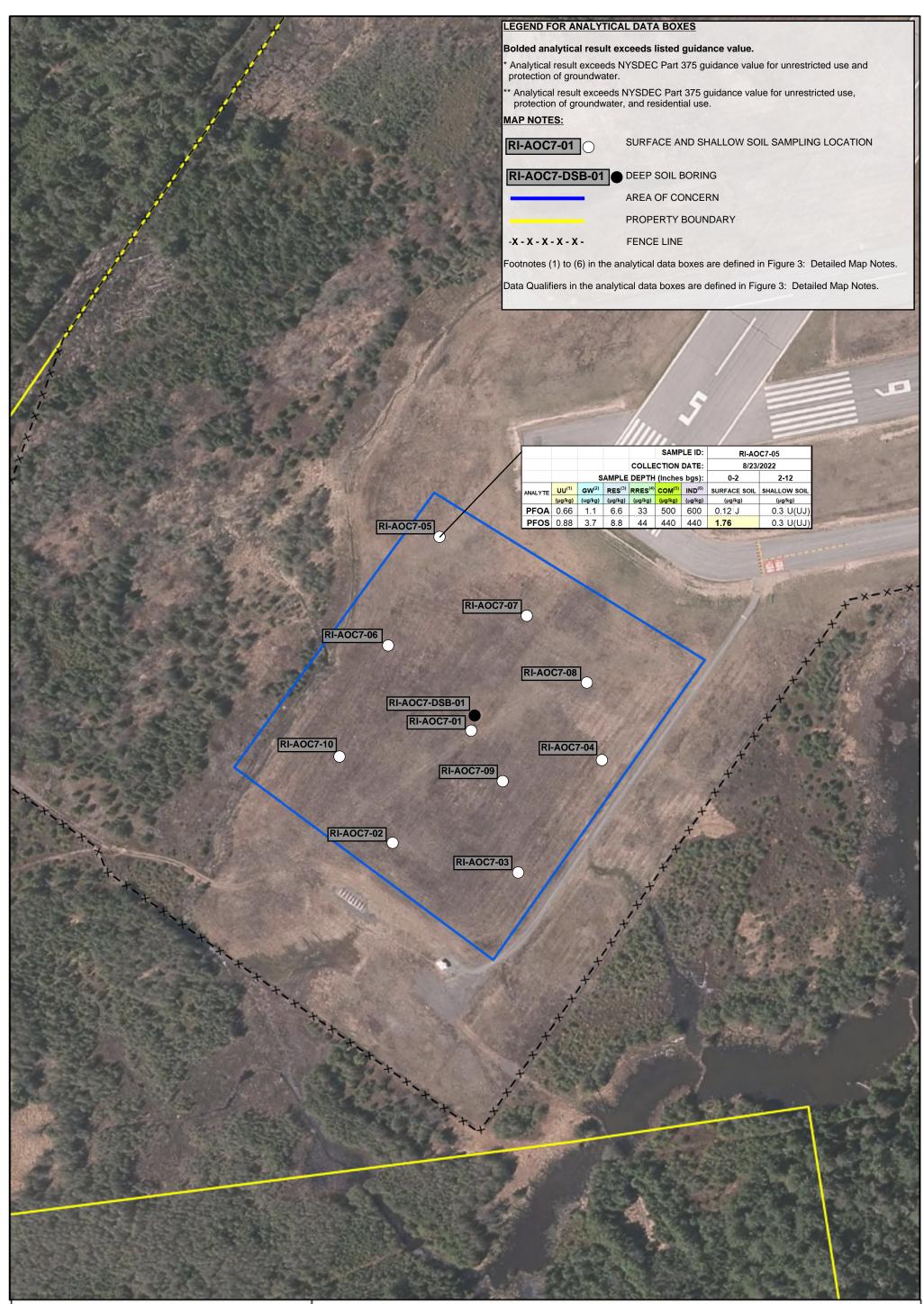


FIG. 13: PFAS ABOVE SCGs IN SURFACE AND SHALLOW SOIL (AOC-7)

Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.





Project Number: 21.1572 Date Source: INYSGIS Cleaninghouse Projection: State Plane MADIO INYE (Feet) Date: November 18, 2021 Date: November 18, 2021 Date: Source Statistics April GIS: D Landheville



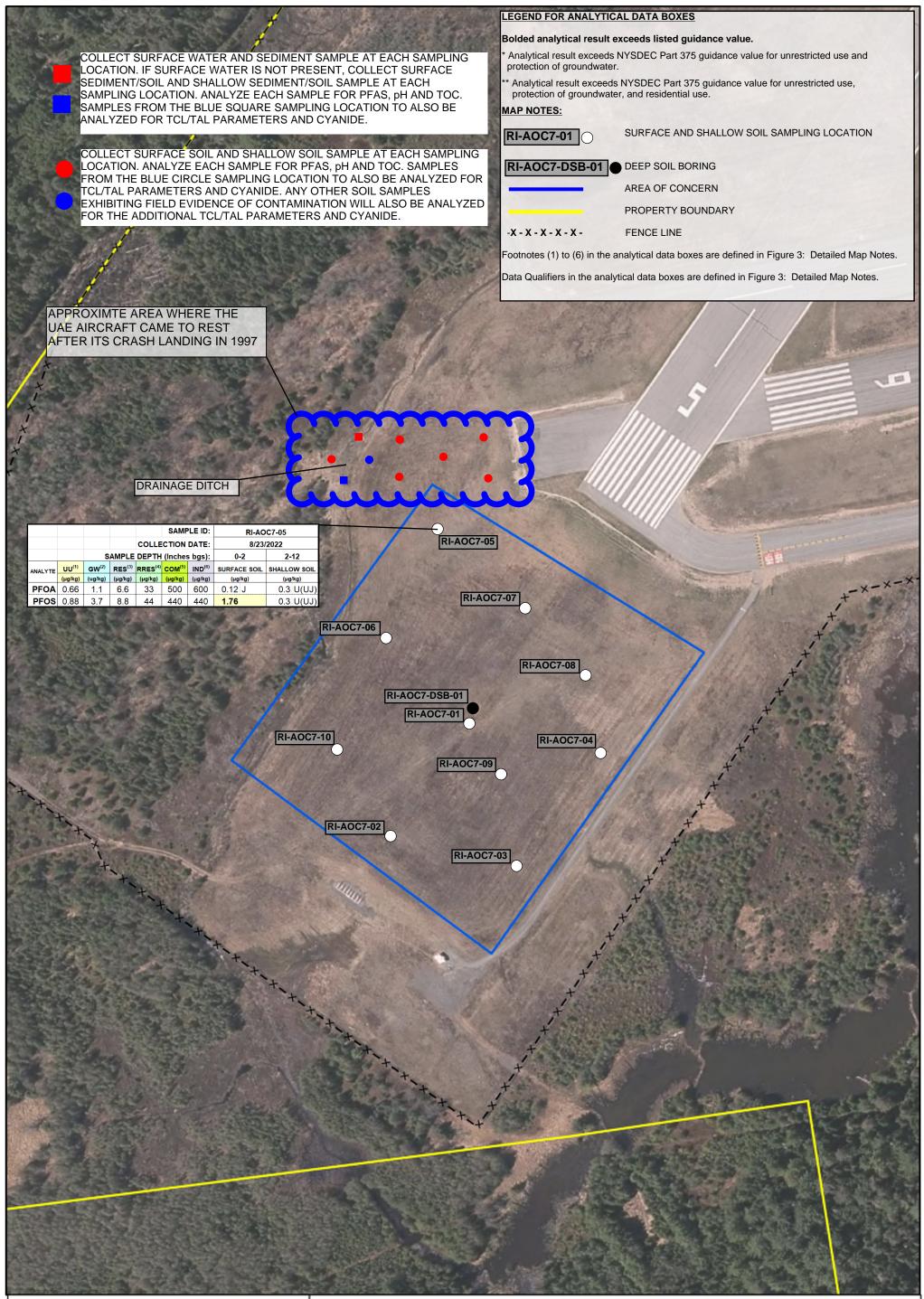


FIG. 13A: ADDITIONAL INVESTIGATIONS (AOC-7)

Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

C.T. MALE ASSOCIATES 120 ng, Architecture, Landscape Architecture & Ge A 回心

50 CENTURY HILL DRIVE, LATHAM, NY 12110 518.786.7400 * FAX 518.786.7299

Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.

Project Number: 21.1572 Data Source: NYSGIS Clearinghouse Projection: State Plane MADB3 NYTE (Feet) Date: November 18, 2021 File: Regional/AleportSiteMap.aprx GIS: D Landreville



LEGEND FOR ANALYTICAL DATA BOXES Bolded analytical result exceeds listed guidance value. Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use and protection of groundwater. MAP NOTES: SURFACE AND SHALLOW SOIL SAMPLING LOCATION WHERE RI-AOC7-01 SAMPLES WERE COLLECTED FOR ANALYSES FOR THE TCL/TAL/CN PARAMETERS RI-AOC7-DSB-01 DEEP SOIL BORING AREA OF CONCERN PROPERTY BOUNDARY FENCE LINE -X - X - X - X - X -Footnotes (7) to (14) in the analytical data boxes are defined in Figure 3: Detailed Map Notes. Data Qualifiers in the analytical data boxes are defined in Figure 3: Detailed Map Notes. 1= RI-AOC7-05 SAMPLE ID: **RI-AOC7-07** 8/23/2022 COLLECTION DATE: **2-1**2⁽¹⁴⁾ **0-6**⁽¹³⁾ SAMPLE DEPTH (Inches bgs): UU⁽⁷⁾ GW⁽⁸⁾ RI-AOC7-07 RES⁽⁹⁾ RRES⁽¹⁰⁾ COM⁽¹¹⁾ IND⁽¹²⁾ SURFACE SOIL SHALLOW SOIL ANALYTE Acetone 0.05 (mg/kg) (mg/kg) (mg/kg) <mark>(mg/kg)</mark> (mg/kg) (mg/kg) 0.015 (U) 100 100 500 1000 Ø 0.05 0.2* RI-AOC7-06 RI-AOC7-08 RI-AOC7-DSB-01 RI-AOC7-01 RI-AOC7-10 RI-AOC7-04 () (\cdot) RI-AOC7-09 SAMPLE ID: **RI-AOC7-04** RI-AOC7-02 COLLECTION DATE: 8/23/2022 2-12⁽¹⁴⁾ SAMPLE DEPTH (Inches bgs): **0-6**⁽¹³⁾ RI-AOC7-03 UU⁽⁷⁾ GW⁽⁸⁾ RES⁽⁹⁾ RRES⁽¹⁰⁾ COM⁽¹¹⁾ IND⁽¹²⁾ (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) 0.05 0.05 100 100 500 1000 ANALYTE SURFACE SOIL SHALLOW SOIL (mg/kg) (mg/kg) \mathbb{R} Acetone 0.05 0.072* 0.027 (U) 1 SAMPLE ID: RI-AOC7-03 COLLECTION DATE: 8/23/2022 SAMPLE DEPTH (Inches bgs): **0-6**⁽¹³⁾ 2-12⁽¹⁴⁾ UU⁽⁷⁾ GW⁽⁸⁾ RES⁽⁹⁾ RRES⁽¹⁰⁾ COM⁽¹¹⁾ IND⁽¹²⁾ SURFACE SOIL SHALLOW SOIL ANALYTE (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) 0.05 0.05 100 100 500 1000 (mg/kg) (mg/kg) Acetone 0.13* 0.011 U



FIG. 14: TCL/TAL ABOVE SCGs IN SURFACE & SHALLOW SOIL (AOC-7)

Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.





Project Number: 21,1572 Data Source: NYSGIS Clearinghouse Projection: State Plane MADB3 NYE (Feet) Date: November 16, 2021 File: Regional/kportSiteMap.aprx 2010; D.L.comburdle. GIS: D Landheville



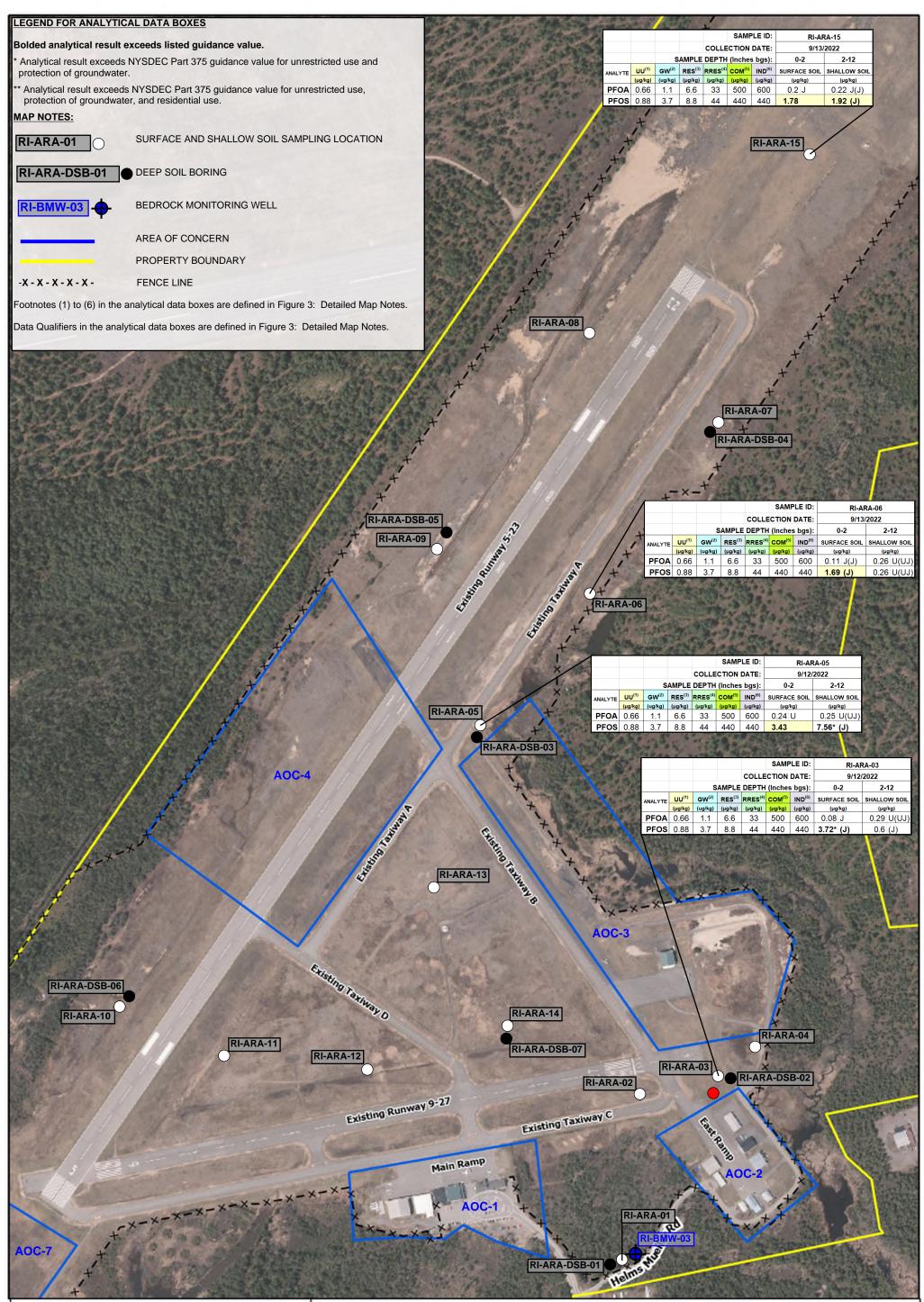


FIG. 15: PFAS ABOVE SCGs IN SURFACE & SHALLOW SOIL (ARA)

Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.



50 CENTURY HILL DRIVE, LATHAM, NY 12110 518.786.7400 * FAX 518.786.7299

Project Number: 21.1572 Data Source: NYSGIS Clearinghouse Projection: State Plane MADBJ NYE (Feet) Date: November 16, 2021 File: Regional/KportSiteMap.aprx CIC: OL resolution GIS: D Landheville



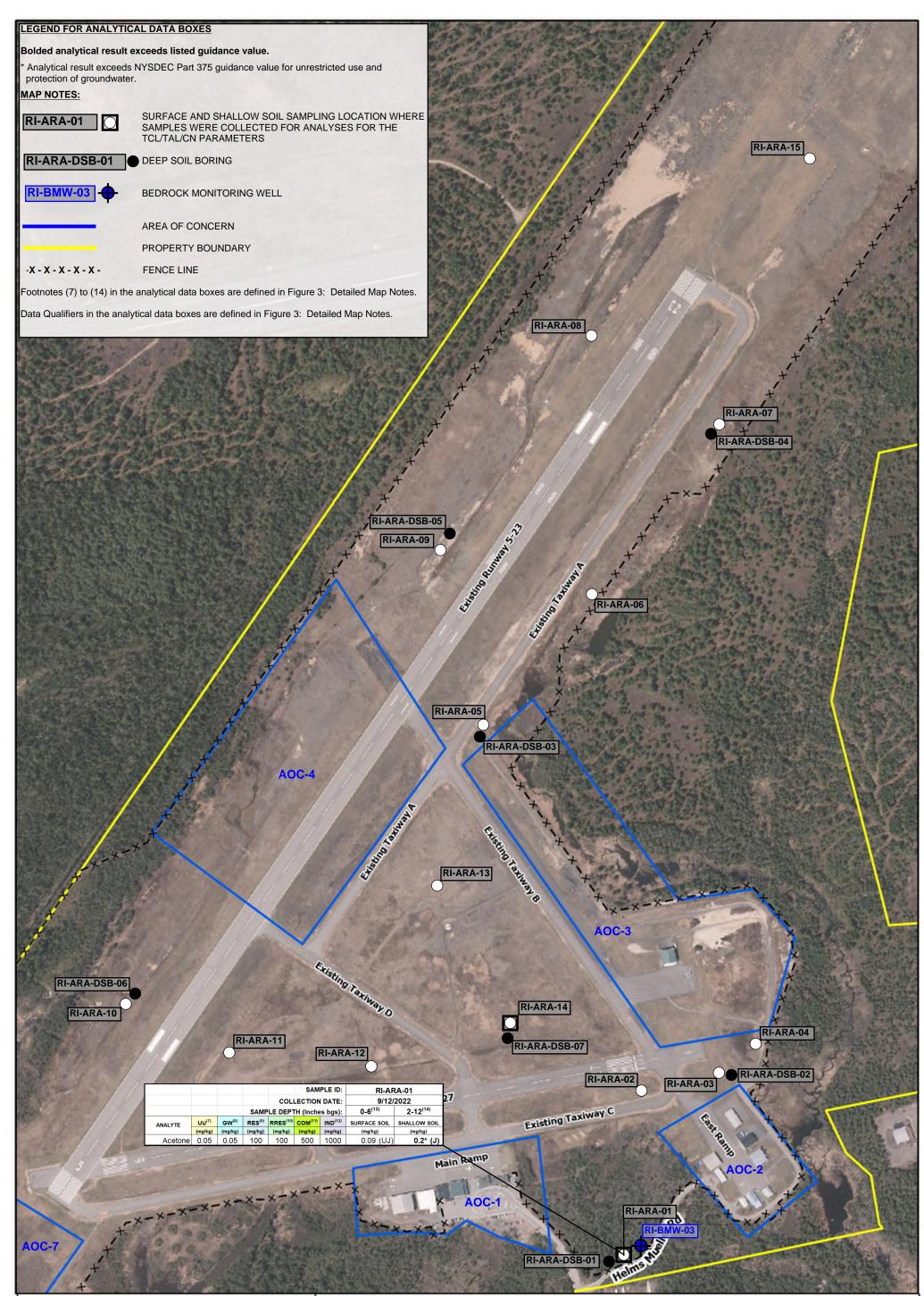


FIG. 16: TCL/TAL ABOVE SCGs IN SURFACE & SHALLOW SOIL (ARA)

Adirondack Regional Airport 96 Airport Rd

Town of Harrietstown

Franklin County, NY

Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.





Project Number: 21.1572 Date Source: INYSGIS Cleaninghouse Projection: State Plane MADIO INYE (Feet) Date: November 18, 2021 Date: November 18, 2021 Date: Source Statistics Statistics GIS: D Landheville



C.T. MALE ASSOCIATES

ATTACHMENT B

TABLES

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC1-01-0.0-0.17	FD01-220824 (RI-AOC1-01-0.0-0.17)	RI-AOC1-01-0.17-1.0	RI-AOC1-02-0.0-0.5	RI-AOC1-02-0.17-1.0	RI-AOC1-03-0.0-0.17	RI-AOC1-03-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022
					SAMPLE DEPTH	l (Inches bgs):	0-2	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾							
ANALTIE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)							
ERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION													
Perfluorobutanoic Acid (PFBA)							0.126 J	0.105 J	0.168 J	0.28 J(J)	0.114 J(J)	0.17 J	0.967 U
Perfluoropentanoic Acid (PFPeA)							0.332 J	0.298 J	0.342 J(J)	0.53 J(J)	0.168 J(J)	0.215 J	0.967 U
Perfluorobutanesulfonic Acid (PFBS)							0.311 U(UJ)	0.305 U	0.054 J(J)	0.25 J(J)	0.074 J(J)	0.446 U(UJ)	0.484 U(U
Perfluorohexanoic Acid (PFHxA)							0.128 J	0.112 JF(J)	0.258 J(J)	0.323 J(J)	0.102 JF(J)	0.096 J	0.967 U
Perfluoroheptanoic Acid (PFHpA)							0.112 JF(J)	0.118 JF(J)	0.217 J(J)	0.154 J(J)	0.062 JF(J)	0.089 JF(J)	0.484 U
Perfluorohexanesulfonic Acid (PFHxS)							0.419	0.393	1.37 (J)	3.61 (J)	1.69 (J)	0.33 J	0.293 J
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.311 U	0.305 U	0.158 J(J)	0.075 JF(J)	0.069 JF(J)	0.196 JF(J)	0.1 JF(J
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.621 U	0.842 F(U)	0.624 U	0.57 U	1.67 (U)	0.893 U	0.967 U
Perfluoroheptanesulfonic Acid (PFHpS)	0						0.621 U	0.61 U	0.624 U	0.28 J	0.151 J	0.893 U	0.967 U
Perfluorononanoic Acid (PFNA)							0.311 U	0.305 U	0.199 JF(J)	0.285 U(UJ)	0.263 U(UJ)	0.199 J	0.484 U
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	3.85*	3.81*	7.75* (J)	11.7** (J)	10.4** (J)	4.72* (J)	1.51 (J)
Perfluorodecanoic Acid (PFDA)							0.527	0.68	2.15 (J)	0.154 JF(J)	0.147 J	0.731 F(J)	0.268 J
1H.1H.2H.2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.621 U	0.61 U	0.624 U	0.57 U	0.525 U(UJ)	0.893 U	0.967 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.621 U	0.61 U(UJ)	0.624 U(UJ)	1.66 U(UR)	0.525 U(UJ)	0.893 U(UJ)	0.967 U(U
Perfluoroundecanoic Acid (PFUnA)							0.517 JF(J)	0.402 J	2.32	0.17 JF(J)	0.092 J(J)	0.115 JF(J)	0.967 U
Perfluorodecanesulfonic Acid (PFDS)							0.621 U	0.61 U	0.624 U	0.57 U	0.525 U	0.893 U	0.967 U
Perfluorooctanesulfonamide (FOSA)							0.621 U	0.61 U	0.624 U	0.57 U	0.525 U	0.893 U	0.967 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.621 U(UJ)	0.61 U(UJ)	0.624 U(UJ)	0.57 U(UJ)	1.94 U(UJ)	0.893 U(R)	0.967 U(U
Perfluorododecanoic Acid (PFDoA)							2	1.94	9.98 (J)	0.586 F(J)	0.357 J(J)	0.165 J(J)	0.967 U
Perfluorotridecanoic Acid (PFTrDA)							0.414 JF(J)	0.61 U	0.982 J	1.66 U	0.525 U	0.893 U(UJ)	0.967 U
Perfluorotetradecanoic Acid (PFTA)							0.843 F(J)	0.822 F(J)	2.69 F(J)	1.66 JF(J)	0.525 U(UJ)	0.893 U(R)	0.967 U
PFOA/PFOS, Total							3.85	3.81	7.91 J	11.8 J	10.5 J	4.92 J	1.61 J
GENERAL CHEMISTRY													
Solids, Total							75.2	75.2	75.6	79.7	88.1	50	49.7
рН (Н)							6.3	6.2	6.1	6.4	7.1	6.7	5.8
FOTAL ORGANIC CARBON													
Total Organic Carbon							3.31	3.63	1.4	2.08	1.61	2.18	3.86

(1) Guidance Values for Anticipated Site Use (Unrestricted) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (2) Guidance Values for Anticipated Site Use (Protection of Groundwater) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (4) Guidance Values for Anticipated Site Use (Restricted Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (5) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (7) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

Bolded analytical result exceeds listed guidance value.

* Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, and residential use.

--- = No guidance value.

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

R = Rejected Value.

NR = Not Reported by the analytical laboratory.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2245831, dated October 2, 2022.

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC1-04-0.0-0.17	RI-AOC1-04-0.17-1.0	RI-AOC1-05-0.0-0.17	RI-AOC1-05-0.17-1.0	RI-AOC1-06-0.0-0.17	RI-AOC1-06-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022
					SAMPLE DEPTI	l (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SAI	IPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
ANALITE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION												
Perfluorobutanoic Acid (PFBA)							0.568 U	0.533 U	0.589 U	0.041 J(J)	0.509 U	0.492 U
Perfluoropentanoic Acid (PFPeA)							0.568 U	0.533 U	0.589 U	0.067 J(J)	0.509 U	0.492 U
Perfluorobutanesulfonic Acid (PFBS)							0.284 U	0.267 U	0.295 U	0.287 U(UJ)	0.255 U(UJ)	0.246 U
Perfluorohexanoic Acid (PFHxA)							0.568 U	0.533 U	0.589 U	0.061 JF(J)	0.509 U(UJ)	0.492 U
Perfluoroheptanoic Acid (PFHpA)							0.284 U	0.267 U	0.295 U	0.287 U(UJ)	0.255 U	0.246 U
Perfluorohexanesulfonic Acid (PFHxS)							0.139 J	0.164 J	0.295 U	0.191 J(J)	0.255 U	0.246 U
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.284 U	0.267 U	0.295 U	0.287 U(UJ)	0.255 U	0.246 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.347 J(U)	0.533 U	0.589 U	2.1 (U)	0.815 (U)	0.492 U
Perfluoroheptanesulfonic Acid (PFHpS)	0						0.568 U	0.533 U	0.589 U	0.574 U	0.509 Ú	0.492 U
Perfluorononanoic Acid (PFNA)							0.284 U	0.267 U	0.295 U	0.287 U(UJ)	0.255 U	0.246 U
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.57	1.08	1.19	1.34 (J)	0.255 U(UJ)	0.189 J
Perfluorodecanoic Acid (PFDA)							0.284 U	0.267 U	0.295 U	0.287 U	0.255 U	0.246 U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.568 U	0.533 U	0.589 U	0.574 U	0.509 U	0.492 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.568 U	0.533 U	0.589 U	0.574 U(UJ)	0.509 U	0.492 U
Perfluoroundecanoic Acid (PFUnA)							0.07 JF(J)	0.533 U	0.589 U	0.122 JF(J)	0.509 U	0.492 U
Perfluorodecanesulfonic Acid (PFDS)							0.904 F(J)	0.533 U	0.589 U	0.574 U	0.509 U	0.492 U
Perfluorooctanesulfonamide (FOSA)							0.568 U	0.533 U	0.589 U	0.574 U	0.509 U	0.492 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.568 U	0.533 U	0.589 U	0.574 U(UJ)	0.509 U	0.492 U
Perfluorododecanoic Acid (PFDoA)							0.319 JF(J)	0.533 U	0.589 U	0.574 U(UJ)	0.509 U	0.219 JF(J)
Perfluorotridecanoic Acid (PFTrDA)							0.568 U	0.533 U	0.589 U	0.574 U	0.509 U	0.492 U
Perfluorotetradecanoic Acid (PFTA)							0.223 JF(J)	0.533 U	0.589 U	0.574 U(R)	0.509 U	0.06 J
PFOA/PFOS, Total							0.57	1.08	1.19	1.34	ND	0.189 J
GENERAL CHEMISTRY												
Solids, Total							83.3	86.6	80.6	80.4	90.5	91.6
pH (H)							6.1	7	7.3	7.2	7.6	7.4
TOTAL ORGANIC CARBON												
Total Organic Carbon							0.788	0.327	3.2	0.948	0.219	1.02

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC1-07-0.0-0.17	RI-AOC1-07-0.17-1.0	RI-AOC1-08-0.0-0.17	RI-AOC1-08-0.17-1.0	RI-AOC1-09-0.0-0.17	RI-AOC1-09-0.17-1.0	RI-AOC1-10-0.0-0.17	RI-AOC1-10-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL							
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾								
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)								
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION	-		-	-		-		•	-					•
Perfluorobutanoic Acid (PFBA)							0.033 J	0.045 J	0.518 U	0.05 J	0.504 U	0.033 J	0.044 J	0.041 J
Perfluoropentanoic Acid (PFPeA)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.115 J	0.075 J
Perfluorobutanesulfonic Acid (PFBS)							0.314 U	0.241 U	0.259 U	0.283 U	0.252 U(UJ)	0.257 U	0.068 J	0.293 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.107 JF(J)	0.092 J(J)
Perfluoroheptanoic Acid (PFHpA)							0.314 U	0.241 U	0.259 U	0.283 U	0.252 U	0.257 U	0.08 J	0.077 J
Perfluorohexanesulfonic Acid (PFHxS)							0.314 U	0.241 U	0.259 U	0.283 U	0.252 U	0.257 U	1.17	2.06
Perfluorooctanoic Acid (PEOA)	0.66	1.1	6.6	33	500	600	0.314 U	0.042 JF(J)	0.259 U	0.283 U	0.252 U	0.257 U	0.069 JF(J)	0.398 F(J)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.69 (U)	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.532 U	0.586 U
Perfluoroheptanesulfonic Acid (PFHpS)	0						0.629 Ù	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.532 U	0.586 U
Perfluorononanoic Acid (PFNA)							0.314 U	0.241 U	0.259 U	0.283 U	0.252 U	0.257 U	0.266 U	1.12
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.314 U	0.184 J	0.259 U	0.452	0.252 U	0.257 U	9.01**	9.59** (J)
Perfluorodecanoic Acid (PFDA)							0.314 U	0.241 U	0.259 U	0.1 JF(J)	0.252 U	0.109 JF(J)	0.537 (J)	2.88
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.532 U	0.586 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.532 U	0.586 U(UJ)
Perfluoroundecanoic Acid (PFUnA)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.064 JF(J)	0.23 JF	0.136 JF(J)
Perfluorodecanesulfonic Acid (PFDS))						0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.532 U	0.423 JF(J)
Perfluorooctanesulfonamide (FOSA)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.532 U	0.586 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.532 U(UJ)	0.586 U(UJ)
Perfluorododecanoic Acid (PFDoA)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.774	0.274 JF(J)
Perfluorotridecanoic Acid (PFTrDA)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.532 U	0.586 U
Perfluorotetradecanoic Acid (PFTA)							0.629 U	0.483 U	0.518 U	0.566 U	0.504 U	0.514 U	0.662 F(J)	0.586 U
PFOA/PFOS, Total							ND	0.226 J	0.259 U	0.452	0.252 U	0.257 U	9.08 J	9.99
GENERAL CHEMISTRY	1	1		-	1					====				
Solids, Total							74.3	95.7	86.4	79.6	91.8	90	84.3	79.7
рН (Н))						7.1	7.2	6.9	7.3	7.1	7.4	5.7	7.1
TOTAL ORGANIC CARBON				-										
Total Organic Carbon							2.96	3.78	1.61	1.44	0.879	0.892	1.41	1.36

PRELIMINARY ANALYTI	CAL RESU	LTS				SAMPLE ID:	RI-AOC1-02-0.0-0.5	RI-AOC1-02-0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COLL	ECTION DATE:	8/24/2022	8/24/2022
					SAMPLE DEPT		0-6 ⁽¹³⁾	6-12 ⁽¹⁴⁾
	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	MPLE MATRIX: NY-RESI ⁽¹²⁾	SOIL	SOIL
ANALYTE								
OLATILE ORGANIC COMPOUN	(mg/kg)	(mg/kg) 35	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)		
Acetone	0.05	0.05	100	100	500	1,000	0.02 (U)	0.0095 J(U)
Total VOCs							0.02 -	0.0095 -
SEMIVOLATILE ORGANIC COMI	OUNDS by G	C/MS		•				
Acenaphthylene	100	107	100	100	500	1,000	0.15 J	0.065 J
Anthracene	100	1,000	100	100	500	1,000	0.072 J	0.11 U
Benzaldehyde							0.11 J	0.063 J
Benzo(a)anthracene	1	1	1	1	6	11	0.17	0.059 J
Benzo(a)pyrene	1	22	1	1	1	1	0.23	0.066 J
Benzo(b)fluoranthene	1	2	1	1	6	11	0.29	0.07 J
Benzo(ghi)perylene	100	1,000	100	100	500	1,000	0.2	0.051 J
Benzo(k)fluoranthene	1	2	1	4	56	110	0.082 J	0.11 U
Carbazole							0.021 J	0.18 U
Chrysene	1	1	1	4	56	110	0.2	0.065 J
Dibenzo(a,h)anthracene	0	1,000	0	0	1	1	0.034 J	0.11 U
Fluoranthene	100	1,000	100	100	500 6	1,000	0.25	0.067 J
Indeno(1,2,3-cd)pyrene	1	8	1	1	-	11		0.051 J
Naphthalene	12 100	12 1,000	100 100	100 100	500 500	1,000 1,000	0.026 J 0.082 J	0.18 U 0.11 U
Phenanthrene Pyrene	100	1,000	100	100	500	1,000	0.082 J	0.11 U 0.093 J
Total SVOCs	100	1,000	100	100	500	1,000	2.417 -	0.65 -
	S BY GC						2.417 -	0.03 -
4.4'-DDD	0.0033	14	2.6	13	92	180	0.0067	0.00119 JP(
4,4'-DDE	0.0033			8.9		120	0.00897	0.00254
		17	1.8		62			
	0.0033	136	1.7	7.9	47	94	0.0282	0.00747
POLYCHLORINATED BIPHENYL	S BY GC (NON	e Detected Ab	ove the Labo	ratory's Metho	Da Detection Li	imits)		
OTAL METALS							2920	3060
Arsenic	13	16	16	16	16	16	0.52 J	1.1
Barium	350	820	350	400	400	10,000	8.7	21.1
Bandin	7	47	14	72	590	2,700	0.163 J	0.256 J
Calcium						2,700	1220 (J)	7590 (J)
Chromium	30		36	180	1,500	6,800	3.67 (J)	7.79 (J)
Cobalt							1.32 J	3.91
Copper	50	1,720	270	270	270	10,000	2.44	7.57
Iron							5870	9130
		450	400	400	1,000	3,900	4.48 J	2.96 J
	63				,	0,000		1960 (J)
Lead	63						670 (J)	
				2,000			670 (J) 55 (J)	40.8
Lead Magnesium			 2,000 140		 10,000 310	 10,000 10,000	670 (J) 55 (J) 0.547 J	()
Lead Magnesium Manganese	 1,600	 2,000	2,000	2,000	10,000	10,000	55 (J)	40.8
Lead Magnesium Manganese Nickel	 1,600 30	 2,000 130	2,000 140	2,000 310	10,000 310	10,000 10,000	55 (J) 0.547 J	40.8 3.44 1380 (J) 77.4 J(U
Lead Magnesium Manganese Nickel Potassium	 1,600 30 	 2,000 130 	2,000 140 	2,000 310 	10,000 310 	10,000 10,000 	55 (J) 0.547 J 112 J(U) 41.1 J(U) 6.65	40.8 3.44 1380 (J) 77.4 J(U 17.5
Lead Magnesium Manganese Nickel Potassium Sodium Vanadium Zinc	 1,600 30 	 2,000 130 	2,000 140 	2,000 310 	10,000 310 	10,000 10,000 	55 (J) 0.547 J 112 J(U) 41.1 J(U)	40.8 3.44 1380 (J) 77.4 J(U
Lead Magnesium Manganese Nickel Potassium Sodium Vanadium Zinc SENERAL CHEMISTRY	 1,600 30 109	 2,000 130 2,480	2,000 140 	2,000 310 	10,000 310 	10,000 10,000 10,000	55 (J) 0.547 J 112 J(U) 41.1 J(U) 6.65 16.5	40.8 3.44 1380 (J) 77.4 J(U 17.5 13.5
Lead Magnesium Manganese Nickel Potassium Sodium Vanadium Zinc GENERAL CHEMISTRY pH (H)	 1,600 30 109 	2,000 130 2,480	2,000 140 2,200	2,000 310 10,000	10,000 310 10,000	10,000 10,000 10,000	55 (J) 0.547 J 112 J(U) 41.1 J(U) 6.65 16.5 6.4	40.8 3.44 1380 (J) 77.4 J(U 17.5 13.5 7.1
Lead Magnesium Manganese Nickel Potassium Sodium Vanadium Zinc SENERAL CHEMISTRY pH_(H) Solids, Total	 1,600 30 109	 2,000 130 2,480	2,000 140 2,200	2,000 310 10,000	10,000 310 10,000	10,000 10,000 10,000	55 (J) 0.547 J 112 J(U) 41.1 J(U) 6.65 16.5	40.8 3.44 1380 (J) 77.4 J(U) 17.5 13.5
Lead Magnesium Manganese Nickel Potassium Sodium Vanadium Zinc GENERAL CHEMISTRY pH (H)	 1,600 30 109 	2,000 130 2,480	2,000 140 2,200	2,000 310 10,000	10,000 310 10,000	10,000 10,000 10,000	55 (J) 0.547 J 112 J(U) 41.1 J(U) 6.65 16.5 6.4	40.8 3.44 1380 (J) 77.4 J(U) 17.5 13.5 7.1

(7) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(8) SCOs for Protection of Groundwater promulgated at 6 NYCRR Part 375.

(9) SCOs for Residential Use Sites promulgated at 6 NYCRR Part 375.

(10) SCOs for Restricted-Residential Use Sites promulgated at 6 NYCRR Part 375.

(11) SCOs for Commercial Use Sites promulgated at 6 NYCRR Part 375.
 (12) SCOs for Industrial Use Sites promulgated at 6 NYCRR Part 375.

(13) The sample was collected from the 0 to 2-inch depth interval except for the TCL VOC sample which was collected from the 2 to 6-inch depth interval.

(14) The sample was collected from the 2 to 12-inch depth interval except for the TCL VOC sample which was collected from the 6 to 12-inch depth interval.

Bolded analytical result exceeds listed standard.

U = Analytical result is not detected at the reported detection limit for the sample.

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).

P - The RPD between the results for the two columns exceeds the method-specified criteria.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2246124, dated October 11, 2022.

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ELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC2-01_0.0-0.17	FD01-220825 (RI-AOC2-01_0.0-0.17)	RI-AOC2-01_0.17-1.0	RI-AOC2-02_0.0-0.17	RI-AOC2-02_0.17-
ALYTICAL DATA HAS BEEN VALIDATED					COL	LECTION DATE:	8/25/2022	8/25/2022	8/25/2022	8/25/2022	
					SAMPLE DEP	H (Inches bas):	0-2	0-2	2-12	0-2	2-12
						MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾					
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)					
RFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION											
Perfluorobutanoic Acid (PFBA)							0.577 U(UJ)	0.057 J(J)	0.565 U(UJ)	0.073 J(J)	0.533
Perfluoropentanoic Acid (PFPeA)							0.577 U(UJ)	0.532 U(UJ)	0.565 U(UJ)	0.585 U(UJ)	0.533 (
Perfluorobutanesulfonic Acid (PFBS)							0.288 U	0.266 U	0.282 U(UJ)	0.292 U	0.266 ไ
Perfluorohexanoic Acid (PFHxA)							0.577 U(UJ)	0.532 U(UJ)	0.565 U(UJ)	0.585 U(UJ)	0.533 l
Perfluoroheptanoic Acid (PFHpA)							0.288 U(UJ)	0.266 U(UJ)	0.282 U(UJ)	0.292 U(UJ)	0.266 l
Perfluorohexanesulfonic Acid (PFHxS)							0.288 U	0.266 U	0.282 U(UJ)	0.292 U	0.266 l
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.288 U(UJ)	0.266 U(UJ)	0.282 U(UJ)	0.292 U(UJ)	0.266
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.577 U	0.532 U	0.565 U	0.585 U	0.533
Perfluoroheptanesulfonic Acid (PFHpS)							0.577 U	0.532 U	0.565 U	0.585 U	0.533 l
Perfluorononanoic Acid (PFNA)							0.288 U	0.266 U(UJ)	0.282 U(UJ)	0.292 U	0.266 L
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.671	0.767	0.175 J(J)	0.292 U	0.159 J
Perfluorodecanoic Acid (PFDA)							0.288 U	0.266 U(UJ)	0.282 U(UJ)	0.292 U	0.266 l
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.577 U	0.532 U	0.565 U	0.585 U	0.533 l
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.577 U	0.532 U(UJ)	0.565 U(R)	0.585 U	2.18 l
Perfluoroundecanoic Acid (PFUnA)							0.066 J	0.098 JF(J)	0.565 U(UJ)	0.067 J	0.533 l
Perfluorodecanesulfonic Acid (PFDS)							0.577 U	0.532 U	0.565 U	0.585 U	0.533 l
Perfluorooctanesulfonamide (FOSA)							0.577 U	0.532 U	0.565 U	0.585 U	0.533 l
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.577 U(UJ)	0.532 U(UJ)	0.565 U(R)	0.585 U	2.18 l
Perfluorododecanoic Acid (PFDoA)							0.577 U	0.532 U	0.565 U(UJ)	0.585 U	0.533 l
Perfluorotridecanoic Acid (PFTrDA)							0.577 U	0.532 U	0.565 U(UJ)	0.585 U	2.18 l
Perfluorotetradecanoic Acid (PFTA)							0.577 U	0.532 U	0.565 U(R)	0.585 U(UJ)	2.18 l
PFOA/PFOS, Total							0.671	0.767	0.175 J	0.292 U	0.159
IERAL CHEMISTRY											
Solids, Total							79.7	81.9	84.1	80.8	85.7
pH (H)							6.2	6.1	6.4	6.4	6.3
AL ORGANIC CARBON											
Total Organic Carbon (as a %)							2.12	1.69	0.102	2.61	2.62

(3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022). (3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
(4) Guidance Values for Anticipated Site Use (Restricted Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
(5) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
(6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
(7) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
(8) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
(9) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
(9) Bolded analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use and protection of groundwater.
** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, residential use.
*** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, residential use.

--- = No guidance value.

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated values. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL). E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of guantifier ion response to gualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

RELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC2-03_0.0-0.17	RI-AOC2-03_0.17-1.0	RI-AOC2-04_0.0-0.17	RI-AOC2-04_0.17-1.0	RI-AOC2-05_0.0-0.17	RI-AOC2-05_0.17-1.
NALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/25/2022	8/25/2022	8/25/2022	8/25/2022	8/25/2022	8/25/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)						
ERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION												
Perfluorobutanoic Acid (PFBA)							0.027 J(J)	0.037 J(J)	0.488 U(UJ)	0.523 U	0.276 J	0.337 J
Perfluoropentanoic Acid (PFPeA)							0.582 U(UJ)	0.561 U(UJ)	0.488 U(UJ)	0.523 U	0.289 J(J)	0.735
Perfluorobutanesulfonic Acid (PFBS)							0.291 U(UJ)	0.28 U(UJ)		0.261 U	0.289 U(UJ)	0.283 U
Perfluorohexanoic Acid (PFHxA)							0.582 U(UJ)	0.561 U(UJ)		0.523 U	0.128 J(J)	0.351 J
Perfluoroheptanoic Acid (PFHpA)							0.291 U(UJ)	0.28 U(UJ)		0.261 U	0.112 J(J)	0.38
Perfluorohexanesulfonic Acid (PFHxS)							0.291 U	0.28 U(UJ)	0.244 U(UJ)	0.261 U	0.289 U	0.283 U
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.291 U(UJ)	0.28 U(UJ)	0.244 U(UJ)	0.261 U	0.165 J	0.284 F(
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.582 U	0.561 U	0.488 U	0.523 U	0.578 U	0.315 J
Perfluoroheptanesulfonic Acid (PFHpS)							0.582 U	0.561 U	0.488 U	0.523 U	0.578 U	0.567 U
Perfluorononanoic Acid (PFNA)							0.291 U(UJ)	0.28 U(UJ)	0.244 U(UJ)	0.261 U	0.169 J	0.25 J
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.291 U	0.28 U(UJ)	0.244 U(UJ)	0.261 U	0.289 U	0.188 J
Perfluorodecanoic Acid (PFDA)							0.291 U(UJ)	0.28 U(UJ)	0.244 U(UJ)	0.261 U	0.162 J	0.512 F(
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.582 U	0.561 U	0.488 U	0.523 U	0.578 U	0.421 J
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.582 U(UJ)	0.561 U(R)	0.488 U	0.523 U	0.578 U(UJ)	0.567 U
Perfluoroundecanoic Acid (PFUnA)							0.582 U	0.561 U(UJ)	0.488 U	0.523 U	0.202 J	0.662
Perfluorodecanesulfonic Acid (PFDS)							0.582 U	0.561 U	0.488 U	0.523 U	0.578 U	0.567 U
Perfluorooctanesulfonamide (FOSA)							0.582 U	0.561 U	0.488 U	0.523 U	0.578 U	0.567 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.582 U(UJ)	0.561 U(R)	0.488 U	0.523 U	0.578 U	0.567 U
Perfluorododecanoic Acid (PFDoA)							0.582 U	0.561 U(UJ)		0.523 U	0.578 U	0.567 U
Perfluorotridecanoic Acid (PFTrDA)							0.582 U	0.561 U	0.488 U	0.523 U	0.578 U	0.567 U
Perfluorotetradecanoic Acid (PFTA)							0.582 U(UJ)	0.561 U(R)	0.488 U(UJ)	0.523 U	0.578 U	0.567 U
PFOA/PFOS, Total							0.291 U	0.28 U	0.244 U	0.261 U	0.165 J	0.472 J
ENERAL CHEMISTRY												
Solids, Total							79.2	82.9	94.4	92.4	80.9	84
pH (H)							5.9	5.4	7	7	6	7
OTAL ORGANIC CARBON		•	•	•	•					•		
Total Organic Carbon (as a %)							1.34	0.806	0.491	1.21	1.67	1.36

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC2-06_0.0-0.17	RI-AOC2-06_0.17-1.0	RI-AOC2-07_0.0-0.17	RI-AOC2-07_0.17-1.0	RI-AOC2-08_0.0-0.	5 RI-AOC2-08_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLI	ECTION DATE:	8/25/2022	8/25/2022	8/25/2022	8/25/2022	8/25/2022	8/25/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE		NY-RESGW ⁽²⁾	-	NY-RESRR ⁽⁴⁾		NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)						
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION		-	-		-							
Perfluorobutanoic Acid (PFBA)							0.21 J(J)	0.555 U(UJ)		0.5 U(UJ)	0.043 J(J)	
Perfluoropentanoic Acid (PFPeA)							0.177 J(J)	0.555 U(UJ)	0.507 U(UJ)	0.5 U(UJ)	0.553 U(U	
Perfluorobutanesulfonic Acid (PFBS)							0.273 U	0.277 U(UJ)	0.253 U(UJ)	0.25 U(UJ)	0.277 U(U	
Perfluorohexanoic Acid (PFHxA)							0.116 J(J)	0.555 U(UJ)	0.507 U(UJ)	0.5 U(UJ)	0.553 U(U	
Perfluoroheptanoic Acid (PFHpA)							0.209 J(J)	0.277 U(UJ)	0.253 U(UJ)	0.25 U(UJ)	0.277 U(U	
Perfluorohexanesulfonic Acid (PFHxS)							0.273 U	0.277 U(UJ)	0.253 U(UJ)	0.25 U(UJ)	0.075 J(J)	0.068 J(J)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.319 (J)	0.122 J(J)	0.253 U(UJ)	0.25 U(UJ)	0.277 U(U	J) 0.24 U(UJ
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.547 Ú	0.555 U	0.507 U	0.5 U	0.553 U	0.48 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.547 U	0.555 U	0.507 U	0.5 U	0.553 U	0.48 U
Perfluorononanoic Acid (PFNA)							0.42 (J)	0.196 J(J)	0.253 U(UJ)	0.25 U(UJ)	0.277 U(U	J) 0.24 U(UJ
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.352 (J)	0.277 U(UJ)	0.253 U(UJ)	0.25 U(UJ)	0.499 (J)	2.11 (J)
Perfluorodecanoic Acid (PFDA)							0.165 J(J)	0.277 U(UJ)	0.253 U(UJ)	0.25 U(UJ)	0.499 (J) 0.099 JF(J) 0.24 Ù(ÚJ
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.547 U	0.555 U	0.507 U	0.5 U(UJ)	0.553 U	0.48 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.547 U(UJ)	0.555 U(R)	0.507 U(UJ)	1.93 U(UJ)	0.553 U(U	J) 0.48 U(R)
Perfluoroundecanoic Acid (PFUnA)							0.223 JF(J)	0.555 U(UJ)	0.507 U	0.5 U(UJ)	0.553 U(U	J) 0.48 U(UJ
Perfluorodecanesulfonic Acid (PFDS)							0.547 U	0.555 U	0.507 U	0.5 U	0.553 U	0.48 U
Perfluorooctanesulfonamide (FOSA)							0.547 U	0.555 U	0.507 U	0.5 U	0.553 U	0.48 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.547 U(UJ)	0.555 U(R)	0.507 U(UJ)	1.93 U(UJ)	1.9 U(U	
Perfluorododecanoic Acid (PFDoA)							0.547 U(UJ)	0.555 U(UJ)	0.507 U(UJ)	0.5 U(UJ)	0.553 U(U	
Perfluorotridecanoic Acid (PFTrDA)							0.547 U	0.555 U	0.507 U	1.93 U(UJ)	1.9 U(U	
Perfluorotetradecanoic Acid (PFTA)							0.547 U(UJ)	2.07 U(UJ)	0.507 U(UJ)	1.93 U(UJ)	1.9 U(U	
PFOA/PFOS, Total							0.671	0.122 J	0.253 U	0.25 U	0.499	2.11
GENERAL CHEMISTRY												
Solids, Total							82.2	82.7	87.7	88.4	86.9	92.3
pH (H)							5.3	5.9	7.6	7.3	6.2	6.6
TOTAL ORGANIC CARBON		•	•	•	•			•	•			
Total Organic Carbon (as a %)							2.44	0.384	0.655	0.22	1.06	0.853

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC2-09_0.0-0.5	RI-AOC2-09_0.17-1.0	RI-AOC2-10_0.0-0.5	RI-AOC2-10_0.17-1.0	RI-AOC2-12_0.0-0.5	FD02-220825 (RI-AOC2-12_0.0-0.5)	RI-AOC2-12_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/25/2022	8/25/2022	8/25/2022	8/25/2022	8/25/2022	8/25/2022	8/25/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾							
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)							
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION													
Perfluorobutanoic Acid (PFBA)							0.534 J(J)	0.206 J(J)	0.034 J(J)	0.514 U(UJ)	0.492 U(UJ)	0.524 U	0.027 J(J)
Perfluoropentanoic Acid (PFPeA)							0.537 J(J)	0.26 J(J)	0.548 U(UJ)	0.514 U(UJ)	0.492 U(UJ)	0.524 U	0.529 U(UJ
Perfluorobutanesulfonic Acid (PFBS)							1.01	0.227 J(J)	0.274 U(UJ)	0.257 U(UJ)	0.246 U(UJ)	0.262 U	0.264 U(U.
Perfluorohexanoic Acid (PFHxA)							1.24 (J)	0.594 (J)	0.548 U(UJ)	0.514 U(UJ)	0.492 U(UJ)	0.524 U	0.529 U(UJ
Perfluoroheptanoic Acid (PFHpA)							0.188 J(J)	0.086 J(J)	0.274 U(UJ)	0.257 U(UJ)	0.246 U(UJ)	0.262 U	0.264 U(UJ
Perfluorohexanesulfonic Acid (PFHxS)							34.5	8.85 (J)	0.365 (J)	0.204 J(J)	0.246 U(UJ)	0.262 U	0.264 U(U
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.3 (J)	0.1 J(J)	0.115 JF(J)	0.257 U(UJ)	0.246 U(UJ)	0.262 U	0.264 U(UJ
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.571 Ù	0.512 U	0.548 U	0.514 U	0.492 U	0.524 U	0.529 U
Perfluoroheptanesulfonic Acid (PFHpS)							3.32	0.442 J	0.548 U	0.514 U	0.492 U	0.524 U	0.529 U
Perfluorononanoic Acid (PFNA)							0.285 U(UJ)	0.256 U(UJ)	0.274 U(UJ)	0.257 U(UJ)	0.246 U(UJ)	0.262 U	0.264 U(UJ
Perfluorooctanesulfonic Acid (PFOS) Perfluorodecanoic Acid (PFDA)	0.88	3.7	8.8	44	440	440	403*** E(J)	80.2*** (J)	8.89** (J)	6.71* (J)	0.526 (J)	0.372	1.06 (J)
Perfluorodecanoic Acid (PFDA)							0.095 J(J)	0.256 U(UJ)	0.082 J(J)	0.257 U(UJ)	0.246 U(UJ)	0.262 U	0.264 U(UJ
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.571 U	0.512 U	0.548 U	0.514 U	0.492 U	0.524 U	0.529 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.571 U(UJ)	1.93 U(UJ)	2.13 U(UJ)	2.16 U(R)	0.492 U(UJ)	0.524 U	1.83 U(U.
Perfluoroundecanoic Acid (PFUnA)							0.063 JF(J)	0.512 U(UJ)	0.548 U(UJ)	0.514 U(UJ)	0.492 U(UJ)	0.524 U	0.529 U(U
Perfluorodecanesulfonic Acid (PFDS)							0.382 J	0.512 U	0.548 U	0.514 U	0.492 U	0.524 U	0.529 U
Perfluorooctanesulfonamide (FOSA)							0.571 U	0.512 U	0.548 U	0.514 U	0.492 U	0.524 U	0.529 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							2.16 JF(UJ)	1.93 U(UJ)	0.548 U	2.16 U(R)	0.492 U(UJ)	0.524 U(UJ)	1.83 U(UJ
Perfluorododecanoic Acid (PFDoA)							0.571 U(UJ)	0.512 U(UJ)	0.548 U	0.514 U(UJ)	0.492 U(UJ)	0.524 U	0.529 U(UJ
Perfluorotridecanoic Acid (PFTrDA)							2.16 U(UJ)	1.93 U(UJ)	0.548 U	0.514 U	0.492 U	0.524 U	1.83 U(UJ
Perfluorotetradecanoic Acid (PFTA)							2.16 U(UJ)	1.93 U(UJ)	0.548 U	0.514 U	0.492 U(UJ)	0.524 U	1.83 U(UJ
PFOA/PFOS, Total							403	80.3 J	9.01 J	6.71	0.526	0.372	1.06
GENERAL CHEMISTRY													
Solids, Total							83.2	85.6	84.6	88.2	92.3	92.4	90.2
рН (Н)							5.7	6	5.6	5.8	7.6	7.8	7.7
TOTAL ORGANIC CARBON													
Total Organic Carbon (as a %)							2.35	0.78	0.96	0.516	0.492	0.57	0.577

PRELIMINARY ANALYTI ANALYTICAL DATA HAS		-				SAMPLE ID:	RI-AOC2-08_0.0-0.5	RI-AOC2-08_0.17-1.0	RI-AOC2-09_0.0-0.5	RI-AOC2-09_0.17-1.0
ANALT IICAL DATA HAS	DEEN VA	LIDATED			COLL	ECTION DATE:	8/25/2022	8/25/2022	8/25/2022	8/25/2022
					SAMPLE DEPT	TH (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾				
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)				
Volatile Organics by EPA 5035										
2-Butanone		0.12	100	100	500	1000	0.014 U	0.011 U	0.0029 J(U)	0.012 U
Acetone Semivolatile Organics by GC/MS	0.05	0.05	100	100	500	1000	0.014 U	0.011 U	0.052 (U)	0.012 U
Acenaphthylene	100	107	100	100	500	1000	0.12 J	0.1 J	0.16 U	0.15 U
Anthracene	100	1000	100	100	500	1000	0.1 Z J	0.1 J	0.10 U	0.13 U
Benzaldehyde							0.06 J	0.064 J	0.12 0	0.25 U
Benzo(a)anthracene	1	1	1	1	5.6	11	0.62	0.073 J	0.12 U	0.12 U
Benzo(a)pyrene	1	22	1	1	1	1.1	0.72	0.071 J	0.16 U	0.15 U
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	1	0.088 J	0.12 U	0.12 U
Benzo(ghi)perylene	100	1000	100	100	500	1000	0.6	0.061 J	0.16 U	0.15 U
Benzo(k)fluoranthene	0.8	1.7	1	3.9	56	110	0.37	0.032 J	0.12 U	0.12 U
Carbazole							0.16 J	0.18 U	0.19 U	0.19 U
Chrysene	1	1	1	3.9	56	110	0.92	0.1	0.12 U	0.12 U
Dibenzo(a,h)anthracene	0.33	1000	0.33	0.33	0.56	1.1	0.11	0.1 U	0.12 U	0.12 U
Fluoranthene	100	1000	100	100	500	1000	1.9	0.15	0.12 U	0.12 U
Fluorene	30	386	100	100	500	1000	0.048 J	0.18 U	0.19 U	0.19 U
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	0.66**^	0.059 J	0.16 U	0.15 U
Phenanthrene	100	1000	100	100	500	1000	0.82	0.079 J	0.12 U	0.12 U
Pyrene	100	1000	100	100	500	1000	1.6	0.19	0.025 J	0.12 U
Organochlorine Pesticides by GC	0.0000	47	1.0	0.0	00	100	0.00044	0.0040	0.004.04	0.00404.11
4,4'-DDE		17	1.8	8.9	62	120	0.00244	0.0019	0.00181 U	0.00184 U
4,4'-DDT	0.0033	136	1.7	7.9	47	94	0.0092	0.0131	0.00181 U	0.00184 U
Chlordane							0.0291 IP(J)	0.187 P(J)	0.0151 U	0.0154 U
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	0.00635 IP(J)	0.0214 IP(J)	0.00226 U	0.0023 U
Endosulfan I	2.4	102	4.8	24	200	920	0.00227	0.00554	0.00181 U	0.00184 U
Endosulfan II Endosulfan sulfate	2.4 2.4	102 1000	4.8 4.8	24 24	200 200	920 920	0.00981 0.00384 IP(J)	0.0136 0.0201	0.00181 U 0.000754 U	0.00184 U 0.000768 U
Heptachlor	0.042	0.38	0.42	24	15	29	0.00384 IP(J) 0.00089 U	0.0201	0.000754 U 0.000905 U	0.000768 U 0.000922 U
Heptachlor epoxide				2.1			0.00334 U	0.00221 JIP(J)	0.00339 U	0.00346 U
trans-Chlordane							0.0053	0.0327	0.00226 U	0.00340 U
Polychlorinated Biphenyls by GC (No			v's Method Det	tection Limits)			0.0000	0.0021	0.00220 0	0.0020 0
Total Metals			<i>j</i> ••							
Aluminum, Total							2120	2140	3090	2400
Arsenic, Total	13	16	16	16	16	16	0.59 J	0.756 J	0.842 J	0.67 J
Barium, Total	350	820	350	400	400	10000	7.52	6.23	8.94	6.58
Beryllium, Total		47	14	72	590	2700	0.082 J	0.076 J	0.056 J	0.081 J
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.318 J	0.328 J	0.393 J	0.226 J
Calcium, Total							881	718	709	679
Chromium, Total	30		36	180	1500	6800	5.39	5.07	7.26	5.2
Cobalt, Total							1.44 J	1.46 J	0.936 J	1.26 J
Copper, Total Iron, Total	50	1720	270	270	270	10000	1.69 6560	0.857 7760	0.936 8760	0.552 J 6490
Lead, Total	63	 450	400	400	1000	 3900	5.46	3.62 J	4.49 J	2.8 J
Magnesium, Total		450	400	400			450	384	254	362
Magnesium, Total Manganese, Total	1600	2000	2000	2000	10000	10000	61.2	55.1	17.5	19.3
Nickel, Total	30	130	140	310	310	10000	1.94 J	1.89 J	1.19 J	1.64 J
Potassium, Total							100 J	78.2 J	51.3 J	82.6 J
	1							18.6 J	18 J	20.4 J
							Z3.3 J	10.0 J	10 J	ZU.4 J
Sodium, Total Vanadium, Total							23.5 J 9.19	9.79	11.6	9.17

PRELIMINARY ANALYTI						SAMPLE ID:	RI-AOC2-08_0.0-0.5	RI-AOC2-08_0.17-1.0	RI-AOC2-09_0.0-0.5	RI-AOC2-09_0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COL	LECTION DATE:	8/25/2022	8/25/2022	8/25/2022	8/25/2022
					SAMPLE DEP	TH (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
				MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL		
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾				
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)				
General Chemistry										
рН (Н)							6.2	6.6	5.7	6
Solids, Total							86.9	92.3	83.2	85.6
Total Organic Carbon								-		-
Total Organic Carbon							1.06	0.853	2.35	0.78

Notes:

(7) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(8) SCOs for Protection of Groundwater promulgated at 6 NYCRR Part 375.

(9) SCOs for Residential Use Sites promulgated at 6 NYCRR Part 375.

(10) SCOs for Restricted-Residential Use Sites promulgated at 6 NYCRR Part 375.

(11) SCOs for Commercial Use Sites promulgated at 6 NYCRR Part 375.

(12) SCOs for Industrial Use Sites promulgated at 6 NYCRR Part 375.

(13) The sample was collected from the 0 to 2-inch depth interval except for the TCL VOC sample which was collected from the 2 to 6-inch depth interval.

(14) The sample was collected from the 2 to 12-inch depth interval except for the TCL VOC sample which was collected from the 6 to 12-inch depth interval.

* Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, and residential use.

**^ Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, residential use and restricted residential use, but not the protection of groundwater.

*** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, residential use and restricted residential use. Bolded analytical result exceeds listed standard.

--- = No soil cleanup objective (SCO).

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2246461, dated October 11, 2022.

						SAMPLE ID:	RI-AOC2-10_0.0-0.5	RI-AOC2-10_0.17-1.0	RI-AOC2-12_0.0-0.5	FD02-220825 (RI-AOC2-12_0.0-0.5)	RI-AOC2-12_0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COL	LECTION DATE:	8/25/2022	8/25/2022	8/25/2022	8/25/2022	8/25/2022
					SAMPLE DEP	TH (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
					SA	AMPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾					
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)					
Volatile Organics by EPA 5035	0.40	0.40	100	400	500	4000	0.044.11	0.040.11	0.04.11	0.04.11	0.0000.11
2-Butanone	0.12	0.12	100	100	500	1000	0.011 U	0.012 U	0.01 U	0.01 U	0.0098 U
Acetone Semivolatile Organics by GC/MS	0.05	0.05	100	100	500	1000	0.011 U	0.012 U	0.0048 J(U)	0.01 U	0.0098 U
Acenaphthylene	100	107	100	100	500	1000	0.16 U	0.15 U	0.14 U	0.14 U	0.14 U
Anthracene	100	1000	100	100	500	1000	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Benzaldehyde							0.12 J	0.065 J	0.23 U	0.23 U	0.24 U
Benzo(a)anthracene	1	1	1	1	5.6	11	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Benzo(a)pyrene	1	22	1	1	1	1.1	0.16 U	0.15 U	0.14 U	0.14 U	0.14 U
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Benzo(ghi)perylene	100	1000	100	100	500	1000	0.16 U	0.15 U	0.14 U	0.14 U	0.14 U
Benzo(k)fluoranthene	0.8	1.7	1	3.9	56	110	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Carbazole Chrysene	 1	 1	<u></u> 1	3.9	 56	 110	0.2 U 0.12 U	0.18 U 0.11 U	0.18 U 0.1 U	0.18 U 0.11 U	0.18 U 0.11 U
Dibenzo(a,h)anthracene	0.33	1000	0.33	0.33	0.56	1.1	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Fluoranthene	100	1000	100	100	500	1000	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Fluorene	30	386	100	100	500	1000	0.2 U	0.18 U	0.18 U	0.18 U	0.18 U
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	0.16 U	0.15 U	0.14 U	0.14 U	0.14 U
Phenanthrene	100	1000	100	100	500	1000	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Pyrene	100	1000	100	100	500	1000	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Organochlorine Pesticides by GC											
4,4'-DDE	0.0033	17	1.8	8.9	62	120	0.00182 U	0.00175 U	0.00167 U	0.00166 U	0.0017 U
4,4'-DDT	0.0033	136	1.7	7.9	47	94	0.00182 U	0.00175 U	0.00167 U	0.00166 U	0.0017 U
Chlordane							0.0152 U	0.0146 U	0.0139 U	0.0138 U	0.0142 U
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	0.00228 U	0.00218 U	0.00209 U	0.00208 U	0.00213 U
Endosulfan I	2.4	102	4.8	24	200	920	0.00182 U	0.00175 U	0.00167 U	0.00166 U	0.0017 U
Endosulfan II	2.4	102	4.8	24	200	920	0.00182 U	0.00175 U	0.00167 U	0.00166 U	0.0017 U
Endosulfan sulfate	2.4	1000	4.8	24	200	920	0.00076 U	0.000729 U	0.000697 U	0.000692 U	0.00071 U
Heptachlor	0.042	0.38	0.42	2.1	15	29	0.000912 U	0.000874 U	0.000836 U	0.00083 U	0.000852 U
Heptachlor epoxide trans-Chlordane							0.00342 U 0.00228 U	0.00328 U 0.00218 U	0.00314 U 0.00209 U	0.00311 U 0.00208 U	0.00319 U 0.00213 U
Polychlorinated Biphenyls by GC (Nor							0.00220 0	0.00216-0	0.00209 0	0.00206 0	0.00213 0
Total Metals	Te Delected Abt		y s Method De								
Aluminum, Total							2250	1580	2060	2370	3270
Arsenic, Total	13	16	16	16	16	16	0.455 J	0.26 J	0.661 J	0.39 J	0.696 J
Barium, Total	350	820	350	400	400	10000	7.03	4.18	11.1	16	13.7
Beryllium, Total	7.2	47	14	72	590	2700	0.064 J	0.069 J	0.189 J	0.174 J	0.203 J
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.2 J	0.139 J	0.249 J	0.473 J	0.876 U
Calcium, Total							440	312	5210	4480	3270 (J)
Chromium, Total Cobalt. Total	30		36	180	1500	6800	3.48	2.31	<u>6.68</u> 3.74	8.62 4.32	14.4 (J)
Copper, Total	 50	 1720	270	270	270	10000	1.2 J 0.546 J	1.04 J 0.286 J	4.8	4.32 5.32	3.6 9.09
Iron, Total							6890	4740	6830 (J)	12100 (J)	10000
Lead, Total	63	450	400	400	1000	3900	1.66 J	0.868 J	2.21 J	1.92 J	3.28 J
Magnesium, Total							302	246	1950	2420	2060 (J)
Manganese, Total	1600	2000	2000	2000	10000	10000	19.8	23.9	56.1	87.2	62.1
Nickel, Total	30	130	140	310	310	10000	1.27 J	0.964 J	5.5	6.11	7.68
Potassium, Total							80.1 J	53.9 J	556	792	788 (J)
Sodium, Total							16.9 J	15.8 J	132 J	89 J	114 J
Vanadium, Total							9.13	6.02	7.11 (J)	12.7 (J)	11.6
Zinc, Total	109	2480	2200	10000	10000	10000	7.43	3.97 J	22.6	29.3	30

		LTS				SAMPLE ID:	RI-AOC2-10_0.0-0.5	RI-AOC2-10_0.17-1.0	RI-AOC2-12_0.0-0.5	FD02-220825 (RI-AOC2-12_0.0-0.5)	RI-AOC2-12_0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COLI	LECTION DATE:	8/25/2022	8/25/2022	8/25/2022	8/25/2022	8/25/2022
					SAMPLE DEPT	ΓH (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾					
ANALITE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)					
General Chemistry											
pH (H)							5.6	5.8	7.6	7.8	7.7
Solids, Total							84.6	88.2	92.3	92.4	90.2
Total Organic Carbon											
Total Organic Carbon							0.96	0.516	0.492	0.57	0.577

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC3-01_0.0-0.17	RI-AOC3-01_0.17-1.0	RI-AOC3-02_0.0-0.17	RI-AOC3-02_0.17-1.0	RI-AOC3-03_0.0-0.17	RI-AOC3-03_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/26/2022	8/26/2022	8/26/2022	8/26/2022	8/26/2022	8/26/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
Perfluorinated Alkyl Acids by Isotope Dilution												
Perfluorobutanoic Acid (PFBA)							0.167 J(J)	0.047 J(J)	0.545 U(UJ)	0.111 J(J)	0.038 J(J)	0.522 U(UJ)
Perfluoropentanoic Acid (PFPeA)							0.546 U(R)	0.578 U(UJ)	0.545 U(UJ)	0.13 J(J)	0.555 U(UJ)	0.522 U(UJ)
Perfluorobutanesulfonic Acid (PFBS)							0.273 U	0.289 U(UJ)	0.273 U	0.251 U(UJ)	0.278 U	0.261 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.546 U(R)	0.578 U(UJ)	0.545 U(UJ)	0.075 J(J)	0.555 U(UJ)	0.522 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.273 U(R)	0.289 U(UJ)	0.273 U(UJ)	0.251 U(UJ)	0.278 U(UJ)	0.261 U(UJ)
Perfluorohexanesulfonic Acid (PFHxS)							0.071 J	0.183 J(J)	0.273 U	0.116 J(J)	0.278 U	0.261 U(UJ)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.273 U(UJ)	0.14 J(J)	0.273 U(UJ)	0.046 J(J)	0.278 U(UJ)	0.261 U(UJ)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.546 U	0.578 U	0.545 U	0.503 U	0.555 U	0.522 U(UJ)
Perfluoroheptanesulfonic Acid (PFHpS)							0.546 U	0.578 U	0.545 U	0.503 U	0.555 U	0.522 U
Perfluorononanoic Acid (PFNA)							0.273 U(UJ)	0.289 U(UJ)	0.273 U(UJ)	0.251 U(UJ)	0.278 U(UJ)	0.261 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	1.22	0.32 (J)	0.407	3.75* (J)	1.14	0.622 (J)
Perfluorodecanoic Acid (PFDA)							0.273 U(UJ)	0.289 U(UJ)	0.273 U(UJ)	0.251 U(UJ)	0.278 U(UJ)	0.261 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.546 U	0.578 U	0.545 U	0.503 U	0.555 U	0.522 U(UJ)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.546 U(UJ)	0.578 U(UJ)	0.545 U(UJ)	0.503 U(UJ)	0.555 U(UJ)	0.522 U(R)
Perfluoroundecanoic Acid (PFUnA)							0.058 JF(J)	0.578 U(UJ)	0.056 J(J)	0.503 U(UJ)	0.555 U	0.522 U(UJ)
Perfluorodecanesulfonic Acid (PFDS)							0.546 U	0.578 U	0.545 U	0.503 U	0.555 U	0.522 U
Perfluorooctanesulfonamide (FOSA)							0.546 U	0.578 U	0.545 U	0.503 U	0.555 U	0.522 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.144 J(J)	0.578 U(UJ)	0.545 U(UJ)	0.503 U(UJ)	0.555 U(UJ)	2.03 U(R)
Perfluorododecanoic Acid (PFDoA)							0.546 U(UJ)	0.578 U(UJ)	0.545 U(UJ)	0.503 U(UJ)	0.555 U	0.522 U(UJ)
Perfluorotridecanoic Acid (PFTrDA)							0.546 U	0.578 U	0.545 U	0.503 U	0.555 U	2.03 U(UJ)
Perfluorotetradecanoic Acid (PFTA)							0.546 U	0.578 U(UJ)	0.545 U	0.503 U(UJ)	0.555 U	2.03 U(R)
PFOA/PFOS, Total							1.22	0.46 J	0.407	3.75 J	1.14	0.622
General Chemistry												
Solids, Total							85.1	75.5	84.7	88.4	86.6	88.8
рН (Н)							5.5	5	6.2	6.2	6.3	6.2
Fotal Organic Carbon												
Total Organic Carbon							2.46	2.51	1.28	1.31	1.16	0.413

Notes:

(1) Guidance Values for Anticipated Site Use (Unrestricted) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (2) Guidance Values for Anticipated Site Use (Protection of Groundwater) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (4) Guidance Values for Anticipated Site Use (Restricted Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (5) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (6) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (7) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (8) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (9) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (N

* Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, residential use and restricted residential use.

**** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, residential use, restricted residential use and commercial use.

***** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, residential use, restricted residential use, commercial use and industrial use.

--- = No guidance value.

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

R = Rejected Value.

NR = Not Reported by the analytical laboratory.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2245831, dated October 2, 2022.

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC3-04 0.0-0.17	RI-AOC3-04_0.17-1.0	RI-AOC3-05 0.0-0.17	RI-AOC3-05 0.17-1.0	RI-AOC3-06_0.0-0.17	RI-AOC3-06 0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/26/2022	8/26/2022	8/26/2022	8/26/2022	8/29/2022	8/29/2022
					SAMPLE DEPT	-	0-2	2-12	0-2	2-12	0-2	2-12
						MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴	-	NY-RESI ⁽⁶⁾	3012	3012	3012	3012	3012	3012
ANALYTE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
Perfluorinated Alkyl Acids by Isotope Dilution	(87,64)	(ug/tg/	(#9/19/	(µg/kg/	(P9/19/	(8,4,64)						
Perfluorobutanoic Acid (PFBA)							2.67 (J)	1.9 (J)	0.178 J(J)	0.095 J(J)	0.137 J	0.236 J(J)
Perfluoropentanoic Acid (PFPeA)							6.97 (J)	4.01 (J)	0.095 J(J)	0.072 J(J)	0.059 J	0.108 J(J)
Perfluorobutanesulfonic Acid (PFBS)							4.94	1.76 (J)	0.308 U	0.263 U(UJ)	0.291 U	0.289 U
Perfluorohexanoic Acid (PFHxA)							5.92 (J)	3.03 (J)	0.615 U(UJ)	0.06 JF(J)	0.582 U	0.114 J(J)
Perfluoroheptanoic Acid (PFHpA)							0.986 (J)	1.01 (J)	0.308 U(UJ)	0.263 U(UJ)	0.064 J	0.132 J(J)
Perfluorohexanesulfonic Acid (PFHxS)							31.8	9.62 (J)	0.136 J	0.376 (J)	0.291 U	0.199 J(J)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	1.04* F(J)	0.918 F(J)	0.308 U(UJ)	0.079 JF(J)	0.291 U	0.218 J(J)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.804 (J)	1.01	0.615 U	0.526 U	0.582 U	0.578 U
Perfluoroheptanesulfonic Acid (PFHpS)							3.22	1.28	0.615 U	0.526 U	0.582 U	0.578 U
Perfluorononanoic Acid (PFNA)							1.45 (J)	0.546	0.308 U(UJ)	0.263 U(UJ)	0.291 U	0.139 J(J)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	285*** E(J)	116*** E(J)	1.85	0.324 (J)	0.465	0.512 (J)
Perfluorodecanoic Acid (PFDA)							0.212 JF(J)	0.24 U(UJ)	0.308 U(UJ)	0.263 U(UJ)	0.113 J	0.289 Ù(U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.482 U	0.479 U	0.615 U	0.526 U	0.582 U	0.578 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.482 U(UJ)	0.479 U(R)	0.615 U(UJ)	NR -	0.582 U	0.578 U(U
Perfluoroundecanoic Acid (PFUnA)							0.146 J(J)	0.479 U(UJ)	0.085 JF(J)	0.526 U(UJ)	0.18 J	0.071 J
Perfluorodecanesulfonic Acid (PFDS)							0.236 J	0.479 U	0.615 U	0.526 U	0.582 U	0.578 U
Perfluorooctanesulfonamide (FOSA)							0.306 JF(J)	0.479 U	0.615 U	0.526 U	0.582 U	0.578 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.482 U(UJ)	0.479 U(R)	0.615 U(UJ)	NR -	0.582 U	0.578 U(U
Perfluorododecanoic Acid (PFDoA)							0.482 U(UJ)	0.479 U(UJ)	0.615 U	0.526 U(UJ)	0.151 J	0.578 U
Perfluorotridecanoic Acid (PFTrDA)							0.482 U	0.479 U	0.615 U	0.526 U	0.582 U	0.578 U
Perfluorotetradecanoic Acid (PFTA)							0.482 U	0.479 U	0.615 U	0.526 U(R)	0.07 J	0.578 U(U
PFOA/PFOS, Total							331.04	100.918	1.85	0.403 J	0.465	0.73 J
General Chemistry												
Solids, Total							92.1	90.9	79.7	85.7	75.8	81.6
pH (H)							4.8	5	5.5	5.7	4.8	4.9
Total Organic Carbon							0.0	1.0		4.05		
Total Organic Carbon							3.2	1.8	3.2	1.05	5.7	3.2

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC3-07_0.0-0.17	RI-AOC3-07_0.17-1.0	RI-AOC3-08_0.0-0.17	RI-AOC3-08_0.17-1.0	RI-AOC3-09_0.0-0.17	RI-AOC3-09_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/29/2022	8/29/2022	8/29/2022	8/29/2022	8/29/2022	8/29/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	IPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
ANALTIE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
Perfluorinated Alkyl Acids by Isotope Dilution									•	•	•	
Perfluorobutanoic Acid (PFBA)							0.523 U(UJ)	0.092 J(J)	0.51 U	0.096 J(J)	0.04 J(J)	0.085 J(J)
Perfluoropentanoic Acid (PFPeA)							0.523 U	0.514 U(UJ)	0.51 U	0.046 J(J)	0.496 U(UJ)	0.047 J(J)
Perfluorobutanesulfonic Acid (PFBS)							0.262 U	0.257 U(UJ)	0.255 U	0.24 U	0.248 U(UJ)	0.244 U(UJ
Perfluorohexanoic Acid (PFHxA)							0.523 U(UJ)	0.514 U(UJ)	0.51 U	0.052 J(J)	0.496 U(UJ)	0.055 J(J)
Perfluoroheptanoic Acid (PFHpA)							0.3 F(J)	0.257 U(UJ)	0.255 U	0.057 J(J)	0.248 U(UJ)	0.244 U(U.
Perfluorohexanesulfonic Acid (PFHxS)							0.262 U	0.257 U(UJ)	0.255 U	0.24 U	0.256 (J)	0.439 (J)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.262 U	0.045 J(J)	0.255 U	0.056 J(J)	0.248 U(UJ)	0.244 U(U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.523 U	0.514 U	0.51 U	0.48 U	0.496 U	0.488 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.523 U	0.514 U	0.51 U	0.48 U	0.496 U	0.488 U
Perfluorononanoic Acid (PFNA)							0.262 U	0.257 U(UJ)	0.255 U	0.075 J(J)	0.248 U(UJ)	0.244 U(U
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.296	0.273 (J)	0.255 U	0.212 J(J)	1.16 (J)	1.22 (J)
Perfluorodecanoic Acid (PFDA)							0.262 U(UJ)	0.257 U(UJ)	0.255 U	0.24 U(ÚJ)	0.248 U(UJ)	0.244 U(U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.523 U	0.514 U	0.51 U	0.48 U	0.496 U	0.488 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.523 U	0.514 U(UJ)	0.51 U	0.48 U	0.496 U(UJ)	0.488 U(R)
Perfluoroundecanoic Acid (PFUnA)							0.08 JF(J)	0.514 U(UJ)	0.51 U	0.48 U	0.047 J(J)	0.488 U(U
Perfluorodecanesulfonic Acid (PFDS)							0.523 U	0.514 U	0.51 U	0.48 U	0.496 U	0.488 U
Perfluorooctanesulfonamide (FOSA)							0.523 U	0.514 U	0.51 U	0.48 U	0.496 U	0.488 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.523 U	0.514 U(UJ)	0.51 U	0.48 U(UJ)	0.496 U(UJ)	0.182 J(J)
Perfluorododecanoic Acid (PFDoA)							0.523 U	0.514 U(UJ)	0.51 U	0.48 U	0.496 U(UJ)	0.488 U(U
Perfluorotridecanoic Acid (PFTrDA)							0.523 U	0.514 U	0.51 U	0.48 U	0.496 U	0.488 U
Perfluorotetradecanoic Acid (PFTA)							0.523 U	0.067 J(J)	0.51 U	0.48 U	0.496 U	0.488 U(R
PFOA/PFOS, Total		ļ					0.296	0.318 J	0.255 U	0.268 J	1.16	1.22
eneral Chemistry		ļ										
Solids, Total							87.5	91.8	89.2	90.7	88.5	95.1
рН (Н)							5.5	5.5	6.2	5.8	6.4	6.4
otal Organic Carbon							0.00	0.404	0.500	0.000		0.00
Total Organic Carbon							0.68	0.464	0.508	0.306	1.2	0.82

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC3-10 0.0-0.17	RI-AOC3-10 0.17-1.0	RI-AOC3-11-0.0-0.17	FD01-220830 (RI-AOC3-11-0.0-0.17)	RI-AOC3-11-0.17-1.0	RI-AOC3-12-0.0-0.17	RI-AOC3-12-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COL 1	ECTION DATE:	8/29/2022	8/29/2022	8/30/2022	8/30/2022	8/30/2022	8/30/2022	8/30/2022
ANALI NCAL DATA NAS DELIN VALIDATED						-							
					SAMPLE DEPT		0-2	2-12	0-2	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾							
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)							
Perfluorinated Alkyl Acids by Isotope Dilution													
Perfluorobutanoic Acid (PFBA)							0.068 J(J)	0.11 J(J)	0.138 J	0.136 J	0.105 J(J)	1.8 (J)	1.82 (J)
Perfluoropentanoic Acid (PFPeA)							0.504 U(UJ)	0.066 J(J)	0.549 U	0.551 U	0.05 J(J)	1.72 (J)	2.38 (J)
Perfluorobutanesulfonic Acid (PFBS)							0.252 U(UJ)	0.247 U(UJ)	0.275 U	0.276 U	0.271 U(UJ)	5.06 (J)	4.02 (J)
Perfluorohexanoic Acid (PFHxA)							0.504 U(UJ)	0.494 U(UJ)	0.549 U	0.551 U(UJ)	0.085 J(J)	3.5 (J)	5.23 (J)
Perfluoroheptanoic Acid (PFHpA)							0.252 U(UJ)	0.055 J(J)	0.053 J	0.06 J(J)	0.082 J(J)	0.318 (J)	0.518 (J)
Perfluorohexanesulfonic Acid (PFHxS)							0.252 U(UJ)	0.247 U(UJ)	0.11 J	0.124 J(J)	0.615 (J)	61.5 (J)	66.8 (J)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.252 U(UJ)	0.081 J(J)	0.275 U	0.276 U	0.264 JF(J)	0.569 (J)	0.881 (J)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.504 U	0.494 U(UJ)	0.549 U	0.551 U	0.542 U	0.604 U	0.678 Ú
Perfluoroheptanesulfonic Acid (PFHpS)							0.504 U	0.494 U	0.549 U	0.551 U	0.542 U	1.93	2.98
Perfluorononanoic Acid (PFNA)							0.252 U(UJ)	0.074 J(J)	0.275 U	0.276 U	0.271 U(UJ)	0.302 U(UJ)	0.339 U(U
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.552 (J)	1.14 (J)	0.95	0.862	0.343 (J)	284*** E(J)	365*** E(J 0.339 U(U
Perfluorodecanoic Acid (PFDA)							0.252 U(UJ)	0.084 J(J)	0.275 U	0.079 J	0.271 U(UJ)	0.302 U(UJ)	0.339 U(U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.504 U	0.494 U(UJ)	0.549 U	0.551 U	0.542 U	0.604 U	0.678 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.504 U	0.494 U(UJ)	0.549 U	0.551 U	NR -	0.604 U(UJ)	0.678 U(U
Perfluoroundecanoic Acid (PFUnA)							0.054 J(J)	0.494 U(UJ)	0.178 J	0.16 JF(J)	0.542 U(UJ)	0.604 U(UJ)	0.678 U(U
Perfluorodecanesulfonic Acid (PFDS)							0.197 J	0.494 U	0.549 U	0.551 U	0.542 U	0.604 U	0.678 U
Perfluorooctanesulfonamide (FOSA)							0.504 U	0.494 U	0.549 U	0.551 U	0.542 U	0.254 J	0.414 J
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.504 U	0.494 U(UJ)	0.549 U	0.551 U	NR -	0.604 U(UJ)	0.678 U
Perfluorododecanoic Acid (PFDoA)							0.504 U(UJ)	0.494 U(UJ)	0.549 U	0.551 U	0.542 U(UJ)	0.604 U(UJ)	0.678 U(U
Perfluorotridecanoic Acid (PFTrDA)							0.504 U	0.494 U	0.549 U	0.551 U	1.73 U	2 U(UJ)	2.22 U(U
Perfluorotetradecanoic Acid (PFTA)							0.504 U(UJ)	0.494 U(R)	0.549 U	0.551 U(UJ)	1.73 U(R)	2 U(R)	2.22 U(R)
PFOA/PFOS, Total							0.552	1.22 J	0.95	0.862	0.607 J	241.569	354.881
eneral Chemistry													
Solids, Total							91.4	90.2	86.7	86.4	81.6	75.9	69.9
рН (Н)							6.3	7.6	4.2	4	4.6	4.3	4.6
otal Organic Carbon										-			-
Total Organic Carbon							1.8	0.653	2.33	2.21	2.41	2.29	1.84

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC3-13-0.0-0.17	RI-AOC3-13-0.17-1.0	RI-AOC3-14-0.0-0.17	RI-AOC3-14-0.17-1.0	RI-AOC3-15-0.0-0.17	RI-AOC3-15-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/30/2022	8/30/2022	8/30/2022	8/30/2022	8/30/2022	8/30/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
ANALTIE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
Perfluorinated Alkyl Acids by Isotope Dilution										•		
Perfluorobutanoic Acid (PFBA))						8.75 (J)	1.36	0.244 J(J)	0.314 J(J)	0.214 J	0.11 J(J)
Perfluoropentanoic Acid (PFPeA))						24 (J)	5.16	0.257 J	0.408 J(J)	0.224 J	0.117 J(J)
Perfluorobutanesulfonic Acid (PFBS))						7.77	1.98	0.665	0.308 (J)	0.048 J	0.044 J(J)
Perfluorohexanoic Acid (PFHxA)							19.6 (J)	4.43 (J)	0.519 J(J)	0.794 (J)	0.305 J	0.231 J(J)
Perfluoroheptanoic Acid (PFHpA)							9.77 (J)	2.17 (J)	0.129 J(J)	0.153 J(J)	0.14 J(J)	0.11 J(J)
Perfluorohexanesulfonic Acid (PFHxS)							82.7 (J)	24.3 (J)	1.87 (J)	1.7 (J)	0.647 (J)	0.54 (J)
Perfluorooctanoic Acid (PFOA)		1.1	6.6	33	500	600	6.65** (J)	2.04* (J)	0.162 J(J)	0.586 (J)	0.081 J	0.174 J(J)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS))						7.58	4.11	0.618 U	0.578 U	0.527 U	0.535 U
Perfluoroheptanesulfonic Acid (PFHpS))						7.48	2.61	0.618 U	0.578 U	0.527 U	0.535 U
Perfluorononanoic Acid (PFNA))						2.82 (J)	0.712 (J)	0.309 U	0.289 U(UJ)	0.263 U	0.268 U(U
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	392*** E(J)	199*** E(J)	2.53 (J)	6.06* (J)	12.5** (J)	1.29 (J)
Perfluorodecanoic Acid (PFDA))						0.22 J(J)	0.303 U(UJ)	0.309 Ù(ÚJ)	0.289 Ú(ÚJ)	0.089 J(J)	0.268 U(U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS))						0.718 U	0.606 U	0.618 U	0.578 U	0.527 U	0.535 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA))						0.718 U(UJ)	0.606 U(UJ)	0.618 U	0.578 U(R)	0.527 U	NR -
Perfluoroundecanoic Acid (PFUnA))						0.179 J(J)	0.606 U(UJ)	0.066 J	0.578 U(UJ)	0.061 JF(J)	0.535 U(U
Perfluorodecanesulfonic Acid (PFDS))						0.718 U	0.606 U	0.618 U	0.578 U	0.527 U	0.535 U
Perfluorooctanesulfonamide (FOSA))						0.997	0.606 U	0.618 U	0.578 U	NR -	0.534 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.351 JF(J)	0.132 JF(J)	0.618 U	0.578 U(R)	0.527 U(UJ)	NR -
Perfluorododecanoic Acid (PFDoA)							0.718 U(UJ)	0.606 U(UJ)	0.618 U(UJ)		0.527 U(UJ)	0.535 U(U
Perfluorotridecanoic Acid (PFTrDA)							2.38 U(UJ)	0.606 U	0.618 U	1.78 U(UJ)	0.527 U	0.535 U
Perfluorotetradecanoic Acid (PFTA)							2.38 U(R)	0.606 U(UJ)		1.78 U(R)	0.527 U(UJ)	0.535 U(R)
PFOA/PFOS, Total	1						551.65	191.04	2.69 J	6.65	12.6 J	1.46 J
ieneral Chemistry												
Solids, Total	l						66.2	72.9	77.1	80.7	83.1	87.3
рН (Н))						4.8	5.1	3.9	5.4	5.2	5.6
otal Organic Carbon							0.00	4.00			0.07	0.047
Total Organic Carbon							2.89	1.69	2.3	1.44	2.87	0.614

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC3-16-0.0-0.17	RI-AOC3-16-0.17-1.0	RI-AOC3-17-0.0-0.17	RI-AOC3-17-0.17-1.0	RI-AOC3-18-0.0-0.17	RI-AOC3-18-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
ANALITE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)						
Perfluorinated Alkyl Acids by Isotope Dilution												
Perfluorobutanoic Acid (PFBA)							0.511 U(UJ)	0.056 J(J)	0.533 U(UJ)	0.23 J(J)	0.486 U(UJ)	0.075 J(J)
Perfluoropentanoic Acid (PFPeA)							0.511 U	0.089 J(J)	0.533 U	0.352 J(J)	0.486 U	0.115 J(J)
Perfluorobutanesulfonic Acid (PFBS)							0.255 U	0.25 U(UJ)		0.297 U(UJ)	0.243 U(UJ)	0.251 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.511 U(UJ)	0.064 J(J)	0.533 U(UJ)	0.2 J(J)	0.486 U(UJ)	0.237 J(J)
Perfluoroheptanoic Acid (PFHpA)							0.255 U(UJ)	0.25 U(UJ)		0.092 J(J)	0.243 U(UJ)	0.065 J(J)
Perfluorohexanesulfonic Acid (PFHxS)							0.255 U(UJ)	0.177 J(J)	0.503 (J)	0.405 (J)	0.532 (J)	1.39 F(J)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.255 U(UJ)	0.055 J(J)	0.266 U(UJ)	0.059 J(J)	0.243 U(UJ)	0.117 J(J)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.511 U	0.499 U(UJ)	0.533 U	0.594 U(UJ)	0.486 U	0.503 U(UJ)
Perfluoroheptanesulfonic Acid (PFHpS)							0.511 U	0.499 U	0.533 U	0.594 U	0.486 U	0.503 U
Perfluorononanoic Acid (PFNA)							0.255 U(UJ)	0.25 U(UJ)	0.266 U(UJ)	0.297 U(UJ)	0.243 U(UJ)	0.251 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.197 J(J)	0.632 (J)	4.57*	9.33** (J)	3.3 (J)	1.05 (J)
Perfluorodecanoic Acid (PFDA)							0.255 U(UJ)	0.25 U(UJ)	0.266 U(UJ)	0.297 Ú(ÚJ)	0.081 JF(J)	0.251 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.511 U	0.499 U(UJ)		0.594 U(UJ)	0.486 U	0.503 U(UJ)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.511 U	0.499 U(R)	0.533 U	0.594 U(R)	0.486 U	0.503 U(R)
Perfluoroundecanoic Acid (PFUnA)							0.511 U(UJ)	0.499 U(UJ)	0.094 J	0.594 U(UJ)	0.067 J(J)	0.503 U(UJ)
Perfluorodecanesulfonic Acid (PFDS)							0.511 U	0.499 U	0.533 U	0.594 U	0.486 U	0.503 U
Perfluorooctanesulfonamide (FOSA)							0.511 U	0.499 U	0.533 U	0.594 U	0.486 U	0.503 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.511 U	0.499 U(R)	0.533 U	0.594 U(R)	0.486 U	0.503 U(R)
Perfluorododecanoic Acid (PFDoA)							0.511 U(UJ)	0.499 U(UJ)		0.594 U(UJ)	0.486 U(UJ)	0.503 U(UJ)
Perfluorotridecanoic Acid (PFTrDA)							0.511 U	0.499 U	0.533 U	0.594 U	0.486 U	1.78 U(R)
Perfluorotetradecanoic Acid (PFTA)							0.511 U(UJ)	0.499 U(R)	0.533 U(UJ)	0.594 U(R)	0.486 U(UJ)	1.78 U(UJ)
PFOA/PFOS, Total							0.197 J	0.687 J	4.57	9.39 J	3.3	1.17 J
General Chemistry									•		•	
Solids, Total							94.8	92.7	86.9	80.7	96.3	88.2
pH (H)							6.2	6.1	6.5	6.1	6.4	5.3
Total Organic Carbon		ļ	ļ									
Total Organic Carbon							2.92	0.244	2.93	1.37	3.73	0.613

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC3-19-0.0-0.17	RI-AOC3-19-0.17-1.0	RI-AOC3-20-0.0-0.5	RI-AOC3-20-0.17-1.0	RI-AOC3-21-0.0-0.17	FD01-220831 (RI-AOC3-21-0.0-0.17)	RI-AOC3-21-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾							
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)							
Perfluorinated Alkyl Acids by Isotope Dilution										<u>.</u>	-		
Perfluorobutanoic Acid (PFBA)							0.076 J	0.484 U(UJ)	NR -	1.49 U(UJ)	1.75 U(UJ)	1.99 U(UJ)	2.08 U(UJ)
Perfluoropentanoic Acid (PFPeA)							0.56 U	0.484 U(UJ)	1.62 U(UJ)	1.49 U(UJ)	1.75 U(UJ)	1.99 U(UJ)	2.08 U(UJ)
Perfluorobutanesulfonic Acid (PFBS)							0.28 U(UJ)	0.242 U(UJ)	NR -	0.747 U(UJ)	0.877 U(UJ)		1.04 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.56 U(UJ)	0.484 U(UJ)	1.62 U(UJ)	1.49 U(UJ)	1.75 U(UJ)	1.99 U(UJ)	2.08 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.28 U(UJ)	0.242 U(UJ)	0.808 U(UJ)	0.747 U(UJ)	0.877 U(UJ)	0.993 U(UJ)	1.04 U(UJ)
Perfluorohexanesulfonic Acid (PFHxS)							0.28 U(UJ)	0.242 U(UJ)	0.808 U(UJ)	0.747 U(UJ)	0.877 U(UJ)	0.993 U(UJ)	1.04 U(UJ)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.28 U(UJ)	0.242 U(UJ)	0.808 U(UJ)	0.747 U(UJ)	0.877 U(UJ)	0.993 U(UJ)	1.04 U(UJ) 2.08 U(UJ)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.56 U	0.484 U	1.62 U(UJ)	1.49 U(UJ)	1.75 U(UJ)	1.99 U(UJ)	2.08 U(UJ)
Perfluoroheptanesulfonic Acid (PFHpS)							0.56 U	0.484 U	1.62 U(UJ)	1.49 U(UJ)	1.75 U(UJ)	1.99 U(UJ)	2.08 U(UJ)
Perfluorononanoic Acid (PFNA)							0.28 U(UJ)	0.242 U(UJ)	0.808 U(UJ)	0.747 U(UJ)	0.877 U(UJ)	0.993 U(UJ)	1.04 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.479 (J)	0.242 U(UJ)	0.808 U(UJ)	0.747 U(UJ)	0.877 U(UJ)	0.993 U(UJ)	1.04 U(UJ) 1.04 U(UJ)
Perfluorodecanoic Acid (PFDA)							0.28 U(UJ)	0.242 U(UJ)	0.808 U(UJ)	0.747 U(UJ)	0.877 U(UJ)	0.993 U(UJ)	1.04 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.56 U	0.484 U	1.62 U(UJ)	1.49 U(UJ)	1.75 U(R)	1.99 U(UJ)	2.08 U(UJ)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.56 U(UJ)	1.95 U(UJ)	1.62 U(R)	1.49 U(R)	1.75 U(R)	1.99 U(R)	2.08 U(R)
Perfluoroundecanoic Acid (PFUnA)							0.073 J(J)	0.484 U(UJ)	1.62 U(UJ)	1.49 U(UJ)	1.75 U(UJ)	1.99 U(UJ)	2.08 U(UJ)
Perfluorodecanesulfonic Acid (PFDS)							0.56 U	0.484 U	1.62 U(UJ)	1.49 U(UJ)	1.75 U(UJ)	1.99 U(UJ)	2.08 U(UJ)
Perfluorooctanesulfonamide (FOSA)							0.56 U	0.484 U	0.496 U	0.494 U	0.501 U	0.612 U	0.571 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.56 U(UJ)	1.95 U(UJ)	1.62 U(R)	1.49 U(UJ)	1.75 U(R)	1.99 U(R)	NR -
Perfluorododecanoic Acid (PFDoA)							0.56 U(UJ)	0.484 U(UJ)	1.62 U(UJ)	1.49 U(UJ)	1.75 U(R)	1.99 U(R)	2.08 U(R)
Perfluorotridecanoic Acid (PFTrDA)							1.77 U(UJ)	1.95 U(UJ)	1.62 U(UJ)	1.49 U(UJ)	NR -	1.99 U(UJ)	2.08 U(UJ)
Perfluorotetradecanoic Acid (PFTA)							1.77 U(UJ)	1.95 U(R)	1.62 U(UJ)	1.49 U(R)	NR -	1.99 U(R)	2.08 U(R)
PFOA/PFOS, Total							0.479	0.242 U	0.248 U	0.046 U(UJ)	0.877 U	0.993 U(UJ)	1.04 U(UJ)
General Chemistry										•	•		
Solids, Total							78.8	91.6	93.7	94.9	93.5	75.7	80.9
рН (Н)							5.7	6.4	6.4	6	5.8	5.6	5.4
Total Organic Carbon						ļ	4 7	0.000	0.147	0.005	0.47	0.100	0.446
Total Organic Carbon							1.7	0.086	0.147	0.065	0.17	0.188	0.416

PRELIMINARY ANALYTI(ANALYTICAL DATA HAS					COLL	SAMPLE ID: ECTION DATE:	RI-AOC3-09_0.17-1.0 8/29/2022	RI-AOC3-12-0.0-0.17 8/30/2022	RI-AOC3-20-0.0-0.5 8/31/2022	RI-AOC3-20-0.17-1.0 8/31/2022
					SAMPLE DEPT	H (Inches bgs):	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾				
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)				
/olatile Organics by EPA 5035 Acetone	0.05	0.05	100	100	500	1000	0.013 U	0.079 (U)	0.012 U	0.014 U
Semivolatile Organics by GC/MS	0.05	0.05	100	100	500	1000	0.013 0	0.079 (0)	0.012 0	0.014 0
2-Methylnaphthalene							0.14 J	0.26 U	1.1 U	0.2 U
Acenaphthene	20	98	100	100	500	1000	0.032 J	0.17 U	0.71 U	0.14 U
Acenaphthylene	100	107	100	100	500	1000	1.3	0.17 U	0.41 J	0.14 U
Anthracene	100	1000	100	100	500	1000	0.68	0.13 U	0.31 J	0.1 U
Benzaldehyde							0.072 J	0.12 J	1.2 U	0.22 U
Benzo(a)anthracene	1	1	1	1	5.6	11	2.2***	0.13 U	0.59	0.1 U
Benzo(a)pyrene	1	22	1	1	1	1.1	1.8**^	0.17 U	0.64 J	0.14 U
Benzo(b)fluoranthene		1.7	1	1	5.6	11	1.8***	0.13 U	0.76	0.1 U
Benzo(ghi)perylene	100	1.7	100	100	500	1000	1.2	0.13 U 0.17 U	0.76 0.36 J	0.14 U
Benzo(k)fluoranthene	0.8	1.7	100	3.9	56	110	0.42	0.17 U	0.30 J	0.14 0
Carbazole							0.037 J	0.13 U	0.21 0 0.88 U(UJ)	0.17 U(UJ
Chrysene	1	1	1	3.9	56	110	2.8**	0.13 U	0.6	0.1 U
Dibenzo(a,h)anthracene	0.33	1000	0.33	0.33	0.56	1.1	0.26	0.13 U	0.53 U	0.1 U
Fluoranthene	100	1000	100	100	500	1000	2.4	0.13 U	0.35 0	0.1 U
Fluorene	30	386	100	100	500	1000	0.24	0.13 U	0.88 U	0.17 U
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	1**^	0.17 U	0.4 J	0.14 U
Naphthalene	12	12	100	100	500	1000	0.13 J	0.17 U	0.4 J	0.14 0 0.17 U
Phenanthrene	12	12	100	100	500	1000	1.5	0.22 U 0.13 U	0.88 U 0.44 J	0.17 U
Pyrene	100	1000	100	100	500	1000	4.8	0.13 U	1	0.1 U
Drganochlorine Pesticides by GC (No					000	1000	1.0	0.10 0		0.1 0
Polychlorinated Biphenyls by GC (No										
Total Metals			2	,						
Aluminum, Total							2160	1140	1280 (J)	1450
Arsenic, Total	13	16	16	16	16	16	1.15	1.13	0.739 J(J)	0.559 J
Barium, Total	350	820	350	400	400	10000	4.99	5.47	4.7 (J)	4.08
Beryllium, Total	7.2	47	14	72	590	2700	0.073 J	0.07 J	0.088 J(J)	0.098 J
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.146 J	0.161 J	0.819 U	0.823 U
Calcium, Total	30						745	219	435 (J)	419
Chromium, Total Cobalt, Total	30		36	180	1500	6800	3.63 (J) 1.7	9.2 (J) 0.582 J	1.85 (J) 1.08 J(J)	2.29 1.16 J
Copper, Total	50	 1720	270	 270	270	10000	1.7	1.47	0.969 (J)	0.734 J
Iron, Total							6800	3010	4560 (J)	4680
Lead, Total	63	450	400	400	1000	3900	2.66 J(J)	4.49 J(J)	0.733 J(J)	0.493 J
Magnesium, Total							471 (J)	196 (J)	383 (J)	472
Manganese, Total	1600	2000	2000	2000	10000	10000	32.9	13.7	23.2 (J)	37.2
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	0.066 U	0.067 J	0.062 J(U)	0.055 J
Nickel, Total	30	130	140	310	310	10000	2 J	1.08 J	0.947 J(J)	1.87 J(U)
Potassium, Total							93.8 J	52.4 J	92.4 J(J)	74.8 J
Selenium, Total	3.9	4	36	180	1500	6800	1.62 U	2.01 U	1.64 U	1.65 U
Sodium, Total							18.9 J	12.2 J	9.54 J(J)	5.41 J
Vanadium, Total							7.89	4.13	5.78 (J)	4.69
Zinc, Total	109	2480	2200	10000	10000	10000	7.22 (J)	4.78 J(J)	4.83 (J)	4.92

PRELIMINARY ANALYTIC						SAMPLE ID:	RI-AOC3-09_0.17-1.0	RI-AOC3-12-0.0-0.17	RI-AOC3-20-0.0-0.5	RI-AOC3-20-0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COL	LECTION DATE:	8/29/2022	8/30/2022	8/31/2022	8/31/2022
					SAMPLE DEP	TH (Inches bgs):	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾				
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)				
General Chemistry										
pH (H)							6.4	4.3 -	6.4	6
Solids, Total							95.1	75.9 -	93.7	94.9
Total Organic Carbon										-
Total Organic Carbon							0.82	2.29 -	0.147	0.065

Notes:

(7) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(8) SCOs for Protection of Groundwater promulgated at 6 NYCRR Part 375.

(9) SCOs for Residential Use Sites promulgated at 6 NYCRR Part 375.

10) SCOs for Restricted-Residential Use Sites promulgated at 6 NYCRR Part 375.

(11) SCOs for Commercial Use Sites promulgated at 6 NYCRR Part 375.

(12) SCOs for Industrial Use Sites promulgated at 6 NYCRR Part 375.

(13) The sample was collected from the 0 to 2-inch depth interval except for the TCL VOC sample which was collected from the 2 to 6-inch depth interval.

(14) The sample was collected from the 2 to 12-inch depth interval except for the TCL VOC sample which was collected from the 6 to 12-inch depth interval.

* Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, and residential use.

**^ Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, residential use and restricted residential use, but not the protection of groundwater.

*** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, residential use and restricted residential use.

Bolded analytical result exceeds listed standard.

--- = No soil cleanup objective (SCO).

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG #'s L2246887, L2247267 and L2247519, dated October 11 & 13, 2022.

RELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC4-01-0.0-0.17	RI-AOC4-01-0.17-1.0	RI-AOC4-02-0.0-0.5	RI-AOC4-02-0.17-1.0	RI-AOC4-03-0.0-0.17	RI-AOC4-03-0.17-1
NALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
rfluorinated Alkyl Acids by Isotope Dilution										-		
Perfluorobutanoic Acid (PFBA)							0.114 J(J)	1.83 U(UJ)	0.097 J(J)	0.518 U(UJ)	0.177 J	0.087 J
Perfluoropentanoic Acid (PFPeA)							0.499 U	1.83 U(UJ)	0.575 U(UJ)	0.518 U(UJ)	0.556 U	0.053 J(
Perfluorobutanesulfonic Acid (PFBS)							0.249 U(UJ)	0.914 U(UJ)	0.288 U(UJ)	0.259 U(UJ)	0.278 U(UJ)	0.278 U
Perfluorohexanoic Acid (PFHxA)							0.499 U(UJ)	1.83 U(UJ)	0.575 U(UJ)	0.518 U(UJ)	0.556 U(UJ)	0.557 U
Perfluoroheptanoic Acid (PFHpA)							0.249 U(UJ)	0.914 U(UJ)	0.063 J(J)	0.259 U(UJ)	0.07 J(J)	0.07 J(
Perfluorohexanesulfonic Acid (PFHxS)							0.249 U(UJ)	0.914 U(UJ)	0.288 U(ÚJ)	0.259 U(UJ)	0.278 U(ÚJ)	0.278 U
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.249 U(UJ)	0.914 U(UJ)	0.101 J(J)	0.259 U(UJ)	0.062 J(J)	0.15 J
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.499 U	1.83 U(UJ)	0.575 U	1.66 U(UJ)	0.556 U	0.557 L
Perfluoroheptanesulfonic Acid (PFHpS)							0.499 U	1.83 U(UJ)	0.575 U	0.518 U	0.556 U	0.557 U
Perfluorononanoic Acid (PFNA)							0.249 U(UJ)	0.914 U(UJ)	0.118 J(J)	0.259 U(UJ)	0.132 J(J)	0.278 U
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.234 J(J)	0.914 U(UJ)	0.152 J(J)	0.259 U(UJ)	0.308 (J)	0.278 U
Perfluorodecanoic Acid (PFDA)							0.249 U(ÚJ)	0.914 U(UJ)	0.288 U(UJ)	0.828 U(UJ)	0.091 J(J)	0.278 U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.499 U	1.83 U(UJ)	0.575 U	1.66 U(UJ)	0.556 U	0.557 L
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.499 U(UJ)	NR	0.575 U	NR	0.556 U	1.92 L
Perfluoroundecanoic Acid (PFUnA)							0.048 J(J)	1.83 U(UJ)	0.575 U(UJ)	1.66 U(UJ)	0.101 J(J)	0.557 L
Perfluorodecanesulfonic Acid (PFDS)							0.499 U	1.83 U(UJ)	0.575 U	0.518 U	0.556 U	0.557 L
Perfluorooctanesulfonamide (FOSA)							0.499 U	0.561 U	0.575 U	0.518 U	0.556 U	0.557 L
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.499 U(UJ)	NR	0.575 U(UJ)	NR	0.556 U	0.933 J
Perfluorododecanoic Acid (PFDoA)							0.499 U(UJ)	1.83 U(R)	0.575 U(UJ)	1.66 U(UJ)	0.556 U(UJ)	0.557 L
Perfluorotridecanoic Acid (PFTrDA)							0.499 U(UJ)	1.83 U(UJ)	0.575 U	1.66 U(UJ)	0.556 U	0.557 L
Perfluorotetradecanoic Acid (PFTA)							0.499 U(UJ)	1.83 U(R)	1.52 U(UJ)	1.66 U(R)	1.78 U(UJ)	0.481 J
PFOA/PFOS. Total							0.234 J	0.914 U(UJ)	0.253 J	0.259 U	0.37 J	0.15 J
neral Chemistry	1			1							*	
Solids, Total							88.5	85.5	84	85.6	79.3	82.2
pH (H)							5.3	5.4	5	5.5	4.8	5.6
tal Organic Carbon	1			1		<u>↓</u>	0.0	0	, v	0.0		5.0
Total Organic Carbon							1.32	0.986	1.57	2.45	2.8	1.78

(1) Guidance Values for Anticipated Site Use (Unrestricted) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022). (1) Guidance Values for Anticipated Site Use (Protection of Groundwater) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(4) Guidance Values for Anticipated Site Use (Restricted Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(5) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022)

(6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022). Bolded analytical result exceeds listed guidance value.

* Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, residential use and restricted residential use.

--- = No guidance value.

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. R = Rejected Value.

NR = Not Reported by the analytical laboratory.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2245831, dated October 2, 2022.

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC4-04-0.0-0.5	RI-AOC4-04-0.17-1.0	RI-AOC4-05-0.0-0.17	FD01-220901 (RI-AOC4-05-0.0-0.17)	RI-AOC4-05-0.17-1.0	RI-AOC4-06-0.0-0.17	RI-AOC4-06-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	0-2	2-12	0-2	2-12
					SA		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾							
ANALTIE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)							
Perfluorinated Alkyl Acids by Isotope Dilution													•
Perfluorobutanoic Acid (PFBA)							0.223 J(J)	0.073 J	0.104 J	0.075 J	0.142 J(J)	0.156 J	0.13 J(J)
Perfluoropentanoic Acid (PFPeA)							0.063 J(J)	0.555 U	0.583 U	0.531 U	0.512 U(ÚJ)	0.584 U	0.584 U
Perfluorobutanesulfonic Acid (PFBS)							0.28 U(ÚJ)	0.277 U	0.291 U	0.265 U(UJ)	0.256 U(UJ)	0.292 U	0.292 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.56 U(UJ)	0.555 U(UJ)	0.583 U(UJ)	0.531 U(UJ)	0.512 U(UJ)	0.584 U	0.584 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.084 J(J)	0.277 U(UJ)	0.291 U(UJ)	0.265 U(UJ)	0.064 J(J)	0.057 J(J)	0.063 J(J)
Perfluorohexanesulfonic Acid (PFHxS)							0.28 U(UJ)	0.277 U(UJ)	0.291 U(UJ)	0.265 U(UJ)	0.256 U(UJ)	0.292 U	0.292 U(ÚJ)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.155 J(J)	0.097 J(J)	0.291 U(UJ)	0.265 U(UJ)	0.142 J(J)	0.292 U	0.113 J(J)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.56 U	0.555 U	0.583 U	0.531 U	0.512 U	0.584 U	0.584 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.56 U	0.555 U	0.583 U	0.531 U	0.512 U	0.584 U	0.584 U
Perfluorononanoic Acid (PFNA)							0.113 J(J)	0.277 U(UJ)	0.09 J(J)	0.09 J(J)	0.256 U(UJ)	0.102 J	0.292 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.28 U(ÚJ)	0.277 U(UJ)	0.226 J(J)	0.249 J(J)	0.256 U(UJ)	0.211 J	0.292 U(UJ)
Perfluorodecanoic Acid (PFDA)							0.28 U(UJ)	0.277 U(UJ)	0.09 J(J)	0.08 J(J)	0.256 U(UJ)	0.091 J	0.292 U(UJ
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.56 U	0.555 U	0.583 U	0.531 U	0.512 U	0.584 U	0.584 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.56 U(R)	0.555 U(R)	0.583 U	0.531 U	0.512 U(R)	0.584 U	0.584 U(UJ
Perfluoroundecanoic Acid (PFUnA)							0.56 U(UJ)	0.555 U(UJ)	0.133 J	0.099 J(J)	0.512 U(UJ)	0.142 J	0.584 U(UJ
Perfluorodecanesulfonic Acid (PFDS)							0.56 U	0.555 U	0.583 U	0.531 U	0.512 U	0.584 U	0.584 U
Perfluorooctanesulfonamide (FOSA)							0.56 U	0.555 U	0.583 U	0.531 U	0.512 U	0.584 U	0.584 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.56 U(R)	0.555 U(R)	0.583 U	0.531 U	0.512 U(R)	0.584 U	0.584 U(UJ
Perfluorododecanoic Acid (PFDoA)							0.56 U(UJ)	0.555 U(UJ)	0.583 U(UJ)	0.531 U	0.512 U(UJ)	0.584 U	0.584 U(UJ)
Perfluorotridecanoic Acid (PFTrDA)							0.56 U	0.555 U	0.583 U	0.531 U	0.512 U	0.584 U	0.584 U
Perfluorotetradecanoic Acid (PFTA)							0.56 U(R)	0.555 U(UJ)	0.069 J(J)	0.531 U(UJ)	0.512 U(R)	0.584 U	0.584 U
PFOA/PFOS, Total							0.155 J	0.097 J	0.226 J	0.249 J	0.142 J	0.211 J	0.113 J
General Chemistry													
Solids, Total							85.4	87.5	82.5	83	88.1	81.2	83.3
рН (Н)							6	5.9	4.4	4.5	5.3	5	5.3
Fotal Organic Carbon										-			
Total Organic Carbon							1.36	1.08	2.49	2.35	0.982	2.57	1.15

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC4-07-0.0-0.5	RI-AOC4-07-0.17-1.0	RI-AOC4-08-0.0-0.17	RI-AOC4-08-0.17-1.0	RI-AOC4-09-0.0-0.5	RI-AOC4-09-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾		NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)						
Perfluorinated Alkyl Acids by Isotope Dilution												
Perfluorobutanoic Acid (PFBA)							0.502 U(UJ)	0.026 J(J)	0.074 J	0.039 J(J)	0.031 J	0.574 U
Perfluoropentanoic Acid (PFPeA)							0.502 U(UJ)	0.502 U(UJ)	0.638 U	0.54 U(UJ)	0.576 U	0.574 U
Perfluorobutanesulfonic Acid (PFBS)							0.251 U(UJ)	0.251 U(UJ)	0.319 U(UJ)	0.27 U(UJ)	0.288 U(UJ)	0.287 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.502 U(UJ)	0.502 U(UJ)	0.638 U(UJ)	0.54 U(UJ)	0.576 U(UJ)	0.574 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.251 U(UJ)	0.251 U(UJ)	0.319 U(UJ)	0.27 U(UJ)	0.288 U(UJ)	0.287 U(UJ)
Perfluorohexanesulfonic Acid (PFHxS)							0.251 U(UJ)	0.251 U(UJ)	0.319 U(UJ)		0.288 U(UJ)	0.287 U(UJ)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.251 U(UJ)	0.056 J(J)	0.054 J(J)	0.27 U(UJ)	0.288 U(UJ)	0.287 U(UJ)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.502 U	0.502 U	0.638 U	0.54 U(UJ)	0.576 U	0.574 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.502 U	0.502 U	0.638 U	0.54 U	0.576 U	0.574 U
Perfluorononanoic Acid (PFNA)							0.251 U(UJ)	0.251 U(UJ)	0.319 U(UJ)	0.27 U(UJ)	0.288 U(UJ)	0.287 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.251 U(UJ)	0.251 U(UJ)	0.319 U(UJ)		0.288 U(UJ)	0.287 U(UJ)
Perfluorodecanoic Acid (PFDA)							0.251 U(UJ)	0.251 U(UJ)			0.288 U(UJ)	0.287 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.502 U	0.502 U	0.638 U	1.46 U(UJ)	0.576 U	0.574 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							NR	NR	0.638 U(UJ)	1.46 U(R)	0.576 U(R)	0.574 U(R)
Perfluoroundecanoic Acid (PFUnA)							0.502 U(UJ)	0.502 U(UJ)	0.638 U(UJ)	0.54 U(UJ)	0.576 U(UJ)	0.574 U(UJ)
Perfluorodecanesulfonic Acid (PFDS)							0.502 U	0.502 U	0.638 U	0.54 U	0.576 U	0.574 U
Perfluorooctanesulfonamide (FOSA)							0.502 U	0.502 U	0.638 U	0.54 U	0.576 U	0.574 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							NR	NR	0.638 U(UJ)	0.648 JF(J)	0.576 U(R)	0.574 U(R)
Perfluorododecanoic Acid (PFDoA)							0.502 U(UJ)	0.502 U(UJ)	0.638 U(UJ)	1.46 U(UJ)	0.576 U(UJ)	0.574 U(UJ)
Perfluorotridecanoic Acid (PFTrDA)							0.502 U	0.502 U	0.638 U	1.46 U(UJ)	0.576 U	0.574 U
Perfluorotetradecanoic Acid (PFTA)							0.502 U(R)	0.502 U(R)	0.638 U(R)	1.46 U(R)	0.576 U(R)	0.574 U(UJ)
PFOA/PFOS, Total							0.251 U	0.056 J	0.054 J	0.27 U	0.288 U	0.287 U
General Chemistry									•			•
Solids, Total							91.1	91.3	73.7	87.8	77.7	80.3
pH (H)							5.5	5.2	5	5.8	5.5	5.8
Total Organic Carbon						•				•		
Total Organic Carbon							0.604	1.08	2.05	0.083	1.21	0.374

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC4-10-0.0-0.5	RI-AOC4-10-0.17-1.0	RI-AOC4-11-0.0-0.17	RI-AOC4-11-0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COL	ECTION DATE:	9/1/2022	9/1/2022	9/1/2022	9/1/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12
					S	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾				
ANALTIE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)				
Perfluorinated Alkyl Acids by Isotope Dilution										
Perfluorobutanoic Acid (PFBA)							0.08 J	0.149 J(J)	0.219 J	0.07 J
Perfluoropentanoic Acid (PFPeA))						0.524 U(UJ)	0.506 U(ÚJ)	0.063 J	0.533 U
Perfluorobutanesulfonic Acid (PFBS)							0.262 U(UJ)	0.253 U(UJ)	0.293 U(UJ)	0.266 U(UJ)
Perfluorohexanoic Acid (PFHxA))						0.524 U(UJ)	0.506 U(UJ)	0.585 U	0.533 U
Perfluoroheptanoic Acid (PFHpA)							0.262 U(UJ)	0.253 U(UJ)	0.105 JF(J)	0.266 U
Perfluorohexanesulfonic Acid (PFHxS))						0.262 U(UJ)	0.253 U(UJ)	0.293 U	0.266 U
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.262 U(UJ)	0.253 U(UJ)	0.073 JF(J)	0.066 JF(J)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS))						0.524 U	0.506 U	0.585 U	0.533 U
Perfluoroheptanesulfonic Acid (PFHpS							0.524 U	0.506 U	0.585 U	0.533 U
Perfluorononanoic Acid (PFNA))						0.099 JF(J)	0.253 U(UJ)	0.108 J	0.266 U
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.186 J(J)	0.253 U(UJ)	0.265 J(J)	0.266 U(UJ)
Perfluorodecanoic Acid (PFDA))						0.262 U(UJ)	0.253 U(UJ)	0.293 U	0.266 U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS))						0.524 U	0.506 U(UJ)	0.585 U	0.533 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA))						0.524 U(UJ)	NR	0.585 U	0.533 U(UJ)
Perfluoroundecanoic Acid (PFUnA))						0.524 U	0.506 U(UJ)	0.07 J	0.533 U
Perfluorodecanesulfonic Acid (PFDS)						0.524 U	0.506 U	0.585 U	0.533 U
Perfluorooctanesulfonamide (FOSA))						0.524 U	0.506 U	0.585 U	0.533 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA))						0.524 U(UJ)	NR	0.585 U	0.533 U(UJ)
Perfluorododecanoic Acid (PFDoA))						0.524 U(UJ)	0.506 U(UJ)	0.585 U	0.533 U
Perfluorotridecanoic Acid (PFTrDA))						0.524 U	NR	0.585 U	0.533 U
Perfluorotetradecanoic Acid (PFTA))						0.524 U(UJ)	NR	0.585 U	0.533 U
PFOA/PFOS, Tota							0.186 J	0.253 U	0.338 J	0.066 J
General Chemistry										
Solids, Tota							87.1	87.3	76.6	83.2
pH (H)							5	5.2	5	5.3
Total Organic Carbon						•				
Total Organic Carbon							0.927	1.36	2.76	1.33

ANALYTICAL DATA HAS	BEEN VA	LIDATED			SAMPLE DEP	LECTION DATE: TH (Inches bgs):	8/31/2022 0-6 ⁽¹³⁾	8/31/2022 2-12 ⁽¹⁴⁾	9/1/2022 0-6 ⁽¹³⁾	9/1/2022 2-12 ⁽¹⁴⁾	9/1/2022 0-6 ⁽¹³⁾	9/1/2022 2-12 ⁽¹⁴⁾
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	AMPLE MATRIX: NY-RESI ⁽¹³⁾	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALTTE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
/olatile Organics by EPA 5035												
2-Butanone	0.12	0.12	100	100	500	1000	0.014 U	0.015 U	0.014 U	0.014 U	0.015 U	0.013 U
Acetone	0.05	0.05	100	100	500	1000	0.014 U	0.015 U	0.086*	0.014 (U)	0.015 U	0.013 U
olatile Organics by EPA 5035 High												
Methyl Acetate												
Semivolatile Organics by GC/MS												
Acenaphthylene	100	107	100	100	500	1000	0.16 U	0.15 U	0.15 U	0.15 U	0.14 U	0.14 U
Anthracene	100	1000	100	100	500	1000	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Benzaldehyde							0.3	0.076 J	0.25 U	0.25 U	0.24 U	0.23 U
Benzo(a)anthracene	1	1	1	1	5.6	11	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Benzo(a)pyrene	1	22	1	1	1	1.1	0.16 U	0.15 U	0.15 U	0.15 U	0.14 U	0.14 U
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Benzo(ghi)perylene	100	1000	100	100	500	1000	0.16 U	0.15 U	0.15 U	0.15 U	0.14 U	0.14 U
Benzo(k)fluoranthene	0.8	1.7	1	3.9	56	110	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Chrysene	1	1	1	3.9	56	110	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Fluoranthene	100	1000	100	100	500	1000	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	0.16 U	0.15 U	0.15 U	0.15 U	0.14 U	0.14 U
Phenanthrene	100	1000	100	100	500	1000	0.12 U	0.10 U	0.11 U	0.10 U	0.11 U	0.11 U
Pyrene	100	1000	100	100	500	1000	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Drganochlorine Pesticides by GC (No							0.12 0	00	0.11.0	0.1.7 0	0	00
Polychlorinated Biphenyls by GC (No												
fotal Metals			,									
Aluminum, Total							1170	5140	4310 (J)	5020 (J)	3680 (J)	3350 (J)
Arsenic. Total	13	16	16	16	16	16	0.618 J	0.745 J	0.554 J(U)	0.55 J(U)	0.67 J(U)	0.41 J(U)
Barium, Total	350	820	350	400	400	10000	12.4	10.6	8.74 (J)	6.37 (J)	2.41 (J)	2.49 (J)
Beryllium, Total	7.2	47	14	72	590	2700	0.043 J	0.109 J	0.101 J(J)	0.117 J(J)	0.096 J(J)	0.114 J(J)
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.192 J	0.096 J	0.911 U	0.866 U	0.858 U	0.837 U
Calcium, Total							136	191	295 (U)	192 (U)	180 (U)	199 (U)
Chromium, Total	30		36	180	1500	6800	2.89	3.71	3.24 (J)	2.98 (J)	1.52 (J)	1.6 (J)
Cobalt. Total							0.398 J	0.52 J	0.551 J(J)	0.76 J(J)	0.575 J(J)	0.828 J(J)
Copper. Total	50	1720	270	270	270	10000	1.12	0.478 J	0.542 J(J)	0.592 J(J)	0.542 J(J)	0.582 J(J)
Iron, Total							4650	8370	7350 (J)	6160 (J)	3010 (J)	3130 (J)
Lead, Total	63	450	400	400	1000	3900	4.79	3.12 J	2.32 J(J)	1.52 J(J)	0.918 J(J)	0.774 J(J)
Magnesium, Total							46.5	113	198 (J)	232 (J)	384 (J)	511 (J)
Magnesiani, Total Manganese. Total	1600	2000	2000	2000	10000	10000	63.2	59.4	72.6 (J)	25.6 (J)	21.1 (J)	25.9 (J)
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	0.078 J(U)	0.105 (U)	0.073 J(U)	0.067 J(U)	0.055 J(U)	0.052 J(U)
Nickel. Total	30	130	140	310	310	10000	0.926 J	0.806 J	1.08 J(J)	1.19 J(J)	0.99 J(J)	1.16 J(J)
Potassium. Total							29.9 J	23.9 J	36.5 J(J)	21.9 J(J)	40.1 J(J)	52.8 J(J)
Selenium, Total	3.9	4	36	180	1500	6800	1.88 U	0.24 J	1.82 U	1.73 U	1.72 U	1.67 U
Sodium, Total							188 U	4.42 J	1.02 U	173 U	2.97 J(U)	2.8 J(U)
Vanadium, Total							5.53	10	7.92 (J)	6.66 (J)	2.65 (J)	3.11 (J)
Zinc. Total	109	2480	2200	10000	10000	10000	6.16	7.34	5.28 (J)	5.1 (J)	3.59 J(J)	4.03 J(J)

		LTS				SAMPLE ID:	RI-AOC4-02-0.0-0.5	RI-AOC4-02-0.17-1.0	RI-AOC4-04-0.0-0.5	RI-AOC4-04-0.17-1.0	RI-AOC4-07-0.0-0.5	RI-AOC4-07-0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COLI	LECTION DATE:	8/31/2022	8/31/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022
					SAMPLE DEPT	ΓH (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹³⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
General Chemistry												
pH (H)							5	5.5	6	5.9	5.5	5.2
Solids, Total							84	85.6	85.4	87.5	91.1	91.3
Total Organic Carbon												
Total Organic Carbon							1.57	2.45	1.36	1.08	0.604	1.08

Notes:

(7) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(8) SCOs for Protection of Groundwater promulgated at 6 NYCRR Part 375.

(9) SCOs for Residential Use Sites promulgated at 6 NYCRR Part 375.

(10) SCOs for Restricted-Residential Use Sites promulgated at 6 NYCRR Part 375.

(11) SCOs for Commercial Use Sites promulgated at 6 NYCRR Part 375.

(12) SCOs for Industrial Use Sites promulgated at 6 NYCRR Part 375.

(13) The sample was collected from the 0 to 2-inch depth interval except for the TCL VOC sample which was collected from the 2 to 6-inch depth interval.

(14) The sample was collected from the 2 to 12-inch depth interval except for the TCL VOC sample which was collected from the 6 to 12-inch depth interval.

* Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, residential use and restricted residential use.

Bolded analytical result exceeds listed standard.

--- = No soil cleanup objective (SCO).

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG #'s L2247519 and L2247966, dated October 11 & 13, 2022.

PRELIMINARY ANALYTI						SAMPLE ID:	RI-AOC4-09-0.0-0.5	RI-AOC4-09-0.17-1.0	RI-AOC4-10-0.0-0.5	RI-AOC4-10-0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COLI	LECTION DATE:	9/1/2022	9/1/2022	9/1/2022	9/1/2022
					SAMPLE DEP	ΓH (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	2-12⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹³⁾				
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)				
Volatile Organics by EPA 5035										
2-Butanone	0.12	0.12	100	100	500	1000	0.028	0.014 U	0.0081 J	0.009 U
Acetone	0.05	0.05	100	100	500	1000	1.1* E(J)	0.014 U	0.58* E(J)	0.068*
Volatile Organics by EPA 5035 High										
Methyl Acetate							1.7		0.26 J	
Semivolatile Organics by GC/MS										
Acenaphthylene	100	107	100	100	500	1000	0.17 U	0.16 U	0.15 U	0.15 U
Anthracene	100	1000	100	100	500	1000	0.13 U	0.12 U	0.11 U	0.11 U
Benzaldehyde							0.28 U	0.27 U	0.058 J	0.087 J
Benzo(a)anthracene	1	1	1	1	5.6	11	0.13 U	0.12 U	0.11 U	0.11 U
Benzo(a)pyrene	1	22	1	1	1	1.1	0.17 U	0.16 U	0.15 U	0.15 U
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	0.13 U	0.12 U	0.11 U	0.11 U
Benzo(ghi)perylene	100	1000	100	100	500	1000	0.17 U	0.16 U	0.15 U	0.15 U
Benzo(k)fluoranthene	0.8	1.7	1	3.9	56	110	0.13 U	0.12 U	0.11 U	0.11 U
Chrysene	1	1	1	3.9	56	110	0.13 U	0.12 U	0.11 U	0.11 U
Fluoranthene	100	1000	100	100	500	1000	0.13 U	0.12 U	0.11 U	0.11 U
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	0.17 U	0.16 U	0.15 U	0.15 U
Phenanthrene	100	1000	100	100	500	1000	0.13 U	0.12 U	0.11 U	0.11 U
Pyrene	100	1000	100	100	500	1000	0.13 U	0.12 U	0.11 U	0.11 U
Organochlorine Pesticides by GC (No				tection Limits)						
Polychlorinated Biphenyls by GC (No	ne Detected Abo	ve the Laborato	rv's Method Det	tection Limits)						
Total Metals			,							
Aluminum, Total							2450 (J)	4400 (J)	2960 (J)	2120 (J)
Arsenic, Total	13	16	16	16	16	16	0.776 J(U)	0.563 J(U)	0.641 J(U)	0.59 J(U)
Barium, Total	350	820	350	400	400	10000	4.67 (J)	8.69 (J)	3.93 (J)	4.4 (J)
Beryllium, Total	7.2	47	14	72	590	2700	0.114 J(J)	0.109 J(J)	0.105 J(J)	0.064 J(J)
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.973 U	0.942 U	0.893 U	0.902 U
Calcium, Total							598 (U)	295 (U)	296 (U)	96 (U)
Chromium, Total	30		36	180	1500	6800	3.13 (J)	3.47 (J)	3.03 (J)	2.7 (J)
Cobalt, Total							0.931 J(J)	0.577 J(J)	0.891 J(J)	0.473 J(J)
Copper, Total	50	1720	270	270	270	10000	0.719 J(J)	0.558 J(J)	0.872 J(J)	0.661 J(J)
Iron, Total							5280 (J)	7490 (J)	6550 (J)	5710 (J)
Lead. Total	63	450	400	400	1000	3900	3.6 J(J)	2.4 J(J)	3.01 J(J)	2.31 J(J)
Magnesium, Total							478 (J)	206 (J)	456 (J)	139 (J)
Magnesiani, Total Manganese, Total	1600	2000	2000	2000	10000	10000	15.4 (J)	73.3 (J)	24.9 (J)	16.6 (J)
Manganese, Total Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	0.071 J(U)	0.072 J(U)	0.059 J(U)	0.066 J(U)
Nickel, Total	30	130	140	310	310	10000	1.88 J(J)	1.06 J(J)	1.91 J(J)	0.98 J(J)
Potassium, Total							84.2 J(J)	41.5 J(J)	74.9 J(J)	33.5 J(J)
Selenium, Total	3.9	4	36	180	1500	6800	1.94 U	1.88 U	1.79 U	1.8 U
Selenium, Total Sodium. Total	5.9						1.94 U 11.6 J(U)	1.00 U 188 U	6.67 J(U)	180 U
Vanadium, Total							7.44 (J)	8.32 (J)	7.01 (J)	6.62 (J)
Zinc, Total	109	2480	2200	10000	10000	10000			()	
Zinc, I otai	109	2400	2200	10000	10000	10000	6.02 (J)	5.43 (J)	5.21 (J)	2.76 J(J)

		LTS				SAMPLE ID:	RI-AOC4-09-0.0-0.5	RI-AOC4-09-0.17-1.0	RI-AOC4-10-0.0-0.5	RI-AOC4-10-0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED		LECTION DATE:	9/1/2022	9/1/2022	9/1/2022	9/1/2022		
					SAMPLE DEP	TH (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹³⁾				
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)				
General Chemistry										
pH (H)							5.5	5.8	5	5.2
Solids, Total							77.7	80.3	87.1	87.3
Total Organic Carbon										
Total Organic Carbon							1.21	0.374	0.927	1.36

RELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC5-01-0.0-0.5	RI-AOC5-01-0.17-1.0
NALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	9/14/2022	9/14/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12
						MPLE MATRIX:	SOIL	SOIL
	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾	SOIL	SOL
ANALYTE	(µg/kg)	(ug/kg)	(µg/kg)	μg/kg)	(µg/kg)	μg/kg)		
rfluorinated Alkyl Acids by Isotope Dilution	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)		<u> </u>
Perfluorobutanoic Acid (PFBA)							3.52 U	4.66 U
Perfluoropentanoic Acid (PFPeA)							3.52 U	4.66 U
Perfluorobutanesulfonic Acid (PFBS)							1.76 U	2.33 U
Perfluorohexanoic Acid (PFHxA)							3.52 U(UJ)	4.66 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							1.76 U	2.33 U(UJ)
Perfluorohexanesulfonic Acid (PFHxS)							1.76 U	2.33 U
Perfluorooctanoic Acid (PEOA)	0.66	1.1	6.6	33	500	600	1.76 U(UJ)	2.33 U(UJ)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							3.52 U	4.66 U
Perfluoroheptanesulfonic Acid (PFHpS)							3.52 U	4.66 U
Perfluorononanoic Acid (PFNA)							1.76 U(UJ)	2.33 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	1.76 U(UJ)	2.33 U
Perfluorodecanoic Acid (PFDA)							1.76 U(UJ)	2.33 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							3.52 U	4.66 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							3.52 U	4.66 U
Perfluoroundecanoic Acid (PFUnA)							3.52 U	4.66 U
Perfluorodecanesulfonic Acid (PFDS)							3.52 U	4.66 U
Perfluorooctanesulfonamide (FOSA)							3.52 U	4.66 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							3.52 U	4.66 U
Perfluorododecanoic Acid (PFDoA)							3.52 U(UJ)	4.66 U
Perfluorotridecanoic Acid (PFTrDA)							3.52 U	4.66 U
Perfluorotetradecanoic Acid (PFTA)							3.52 U	4.66 U
PFOA/PFOS, Total							1.76 U	2.33 U
neral Chemistry	l					· · · · ·		-
Solids, Total							13.1	10.5
pH (H)							4.5	4.8
tal Organic Carbon						•		•
Total Organic Carbon							49.8	63

(1) Guidance Values for Anticipated Site Use (Unrestricted) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(2) Guidance Values for Anticipated Site Use (Protection of Groundwater) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022). (3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022). (4) Guidance Values for Anticipated Site Use (Restricted Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022). (5) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022). (6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022). Bolded analytical result exceeds listed guidance value.

* Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, residential use and restricted residential use.

--- = No guidance value.

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

R = Rejected Value.

NR = Not Reported by the analytical laboratory.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2250671, dated October 26, 2022.

Data Validated

PRELIMINARY ANALYTIC						SAMPLE ID:	RI-AOC5-01-0.0-0.5	RI-AOC5-01-0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COLI	ECTION DATE:	9/14/2022	9/14/2022
					SAMPLE DEPT	H (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL
	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾		
ANALYTE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)		
Volatile Organics by EPA 5035								
2-Butanone	0.12	0.12	100	100	500	1000	0.13*	0.097 J
Acetone	0.05	0.05	100	100	500	1000	1.1*	0.55*
Methyl Acetate							0.014 J	0.013 J
Toluene	0.7	0.7	100	100	500	1000	0.76*	0.0088 J
Semivolatile Organics by GC/MS	0.1	0.7	100	100	000	1000	0110	0.0000 0
Benzaldehyde							2.1 J	6.2 U
Diethyl phthalate							3.1 J	4.7 U
Organochlorine Pesticides by GC (No								
Polychlorinated Biphenyls by GC (No	ne Detected Abo	ove the Laborato	ry's Method Det	ection Limits)				
Total Metals								
Aluminum, Total							5210	6700
Arsenic, Total	13	16	16	16	16	16	2.99 J	2.16 J
Barium, Total	350	820	350	400	400	10000	135	161
Beryllium, Total	7.2	47	14	72	590	2700	1.26 J	1.34 J
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	1.92 J	1.78 J
Calcium, Total							3790 (J)	3570 (J)
Chromium, Total Cobalt. Total	30		36	180	1500	6800	<u> </u>	3.05 J 2.38 J
Copper, Total	50	 1720	 270	270	270	10000	12.3 (J)	2.30 J 11.9 (J)
Iron. Total			270	270	270	10000	12.3 (J)	945
Lead. Total	63	 450	400	400	1000	3900	59.4 (J)	
Magnesium, Total		430	400	400	1000			137 (U)
Magnesium, Total Manganese, Total	1600	2000	2000	2000	10000	10000	31.9 (J)	36.6 (J)
Nickel. Total	30	130	140	310	310	10000	7.6 J(J)	8.03 J(J)
Sodium, Total							25.9 J(U)	27.8 J(U)
Vanadium, Total							7.66	7.43
Zinc, Total	109	2480	2200	10000	10000	10000	27.8 J	28.3 J

Data Validated

TABLE 5B: SUMMARY OF ANALYTICAL RESULTS - SURFACE AND SHALLOW SOIL (AOC-5 TCL/TAL/CN PARAMETERS) ADIRONDACK REGIONAL AIRPORT SITE (517013) TOWN OF HARRIETSTOWN, FRANKLIN COUNTY

PRELIMINARY ANALYTIC	CAL RESU	LTS				SAMPLE ID:	RI-AOC5-01-0.0-0.5	RI-AOC5-01-0.17-1.0			
ANALYTICAL DATA HAS	ALYTICAL DATA HAS BEEN VALIDATED COLLECTION DATE:										
					SAMPLE DEPT	H (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾			
					SA	MPLE MATRIX:	SOIL	SOIL			
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾					
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)					
General Chemistry											
pH (H)							4.5	4.8			
Solids, Total							13.1	10.5			
Total Organic Carbon											
Total Organic Carbon							49.8	63			
Notos:											

Notes:

(7) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(8) SCOs for Protection of Groundwater promulgated at 6 NYCRR Part 375.

(9) SCOs for Residential Use Sites promulgated at 6 NYCRR Part 375.

(10) SCOs for Restricted-Residential Use Sites promulgated at 6 NYCRR Part 375.

(11) SCOs for Commercial Use Sites promulgated at 6 NYCRR Part 375.

(12) SCOs for Industrial Use Sites promulgated at 6 NYCRR Part 375.

(13) The sample was collected from the 0 to 2-inch depth interval except for the TCL VOC sample which was collected from the 2 to 6-inch depth interval.

(14) The sample was collected from the 2 to 12-inch depth interval except for the TCL VOC sample which was collected from the 6 to 12-inch depth interval.

* Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, residential use and restricted residential use.

Bolded analytical result exceeds listed standard.

--- = No soil cleanup objective (SCO).

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2250671 dated October 26, 2022.

RELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC6-01-0.0-0.5	RI-AOC6-01-0.17-1.0
NALYTICAL DATA HAS BEEN VALIDATED					COLI	LECTION DATE:	9/15/2022	9/15/2022
					SAMPLE DEPT	TH (Inches bgs):	0-2	2-12
						MPLE MATRIX:	SOIL	SOIL
	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾		OOIL
ANALYTE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)		
rfluorinated Alkyl Acids by Isotope Dilution	(1-33)	(33)	(1-33/	(1-33/	(1-33/	(P33/		
Perfluorobutanoic Acid (PFBA)							0.03 J(J)	0.099 J(J)
Perfluoropentanoic Acid (PFPeA)							0.524 U(UJ)	0.534 U(UJ)
Perfluorobutanesulfonic Acid (PFBS)							0.262 U(UJ)	0.267 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.524 U(UJ)	0.534 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.262 U(UJ)	0.267 U(UJ)
Perfluorohexanesulfonic Acid (PFHxS)							0.262 U(UJ)	0.267 U(UJ)
Perfluorooctanoic Acid (PFOA)		1.1	6.6	33	500	600	0.063 JF(J)	0.056 JF(J)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.524 U	0.534 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.524 U	0.534 U
Perfluorononanoic Acid (PFNA)							0.262 U(UJ)	0.267 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.262 U(UJ)	0.267 U(UJ)
Perfluorodecanoic Acid (PFDA)							0.262 U(UJ)	0.267 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.524 U(UJ)	0.534 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.524 U	NR
Perfluoroundecanoic Acid (PFUnA)							0.524 U(UJ)	0.534 U(UJ)
Perfluorodecanesulfonic Acid (PFDS)							0.524 U	0.534 U
Perfluorooctanesulfonamide (FOSA)							0.524 U	0.534 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.524 U	1.86 U(R)
Perfluorododecanoic Acid (PFDoA)							1.81 U(UJ)	0.534 U(UJ)
Perfluorotridecanoic Acid (PFTrDA)							1.81 U	0.534 U
Perfluorotetradecanoic Acid (PFTA)							1.81 U(UJ)	1.86 U(UJ)
PFOA/PFOS, Total							0.063 J	0.056 J
neral Chemistry								
Solids, Total							91.5	84.7
рН (Н)							4.4	5
tal Organic Carbon								
Total Organic Carbon							1	2.14

Notes:

(1) Guidance Values for Anticipated Site Use (Unrestricted) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (2) Guidance Values for Anticipated Site Use (Protection of Groundwater) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (4) Guidance Values for Anticipated Site Use (Restricted Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (5) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (7) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (7) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (

* Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, residential use and restricted residential use.

--- = No guidance value.

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

R = Rejected Value.

NR = Not Reported by the analytical laboratory.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2250671, dated October 26, 2022.

Data Validated

PRELIMINARY ANALYTIC		те						
						SAMPLE ID:	RI-AOC6-01-0.0-0.5	RI-AOC6-01-0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COLL	ECTION DATE:	9/15/2022	9/15/2022
					SAMPLE DEPT	H (Inches bgs):	0-6 ⁽¹³⁾	2-12⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾		
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	Results Qual	Results Qual
Volatile Organics by EPA 5035								
Acetone	0.05	0.05	100	100	500	1000	0.029	0.043
Semivolatile Organics by GC/MS (Non	ne Detected Abo	ve the Laborator	y's Method Det	ection Limits)				
Organochlorine Pesticides by GC (No	ne Detected Abo	ve the Laborato	ry's Method Det	tection Limits)				
Polychlorinated Biphenyls by GC (Nor	ne Detected Abo	ve the Laborato	ry's Method Det	tection Limits)				
Total Metals								
Aluminum, Total							292	6580
Arsenic, Total	13	16	16	16	16	16	0.415 J(U)	0.724 J(U)
Barium, Total	350	820	350	400	400	10000	2.57	2.99
Beryllium, Total	7.2	47	14	72	590	2700	0.415 U	0.125 J
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.083 J	0.161 J
Calcium, Total							17.5 (U)	115 (U)
Chromium, Total	30		36	180	1500	6800	1.63	3.55
Cobalt, Total							0.498 J	1.16 J
Copper, Total	50	1720	270	270	270	10000	0.83 U	0.518 J(J)
Iron, Total							3470	6990
Lead, Total	63	450	400	400	1000	3900	1.24 J(J)	1.46 J(J)
Magnesium, Total							14.2 (U)	358
Manganese, Total	1600	2000	2000	2000	10000	10000	5.45 (J)	23.7 J
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	0.077 U	0.056 J
Nickel, Total	30	130	140	310	310	10000	0.54 J(J)	1.24 J(J)
Potassium, Total							36.6 J(Ú)	41 J(Ú)
Sodium, Total							5.41 J(U)	7.79 J(U)
Vanadium, Total							5.25	6.99
Zinc, Total	109	2480	2200	10000	10000	10000	1.76 J(U)	4.73 (U)

Data Validated

TABLE 6B: SUMMARY OF ANALYTICAL RESULTS - SURFACE AND SHALLOW SOIL (AOC-6 TCL/TAL/CN PARAMETERS) ADIRONDACK REGIONAL AIRPORT SITE (517013) TOWN OF HARRIETSTOWN, FRANKLIN COUNTY

								1
PRELIMINARY ANALYTIC	CAL RESU	LTS				SAMPLE ID:	RI-AOC6-01-0.0-0.5	RI-AOC6-01-0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COLL	ECTION DATE:	9/15/2022	9/15/2022
					SAMPLE DEPT	H (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾		
ANALTIE	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	Results Qual	Results Qual
General Chemistry								
pH (H)							4.4	5
Solids, Total							91.5	84.7
Total Organic Carbon								
Total Organic Carbon							1	2.14
Notes:	-	-		-		-		

Notes

(7) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(8) SCOs for Protection of Groundwater promulgated at 6 NYCRR Part 375.

(9) SCOs for Residential Use Sites promulgated at 6 NYCRR Part 375.

(10) SCOs for Restricted-Residential Use Sites promulgated at 6 NYCRR Part 375.

(11) SCOs for Commercial Use Sites promulgated at 6 NYCRR Part 375.

(12) SCOs for Industrial Use Sites promulgated at 6 NYCRR Part 375.

(13) The sample was collected from the 0 to 2-inch depth interval except for the TCL VOC sample which was collected from the 2 to 6-inch depth interval.

(14) The sample was collected from the 2 to 12-inch depth interval except for the TCL VOC sample which was collected from the 6 to 12-inch depth interval.

* Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, residential use and restricted residential use.

Bolded analytical result exceeds listed standard.

--- = No soil cleanup objective (SCO).

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2250671 dated October 26, 2022.

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC7-01_0.0-0.5	FD01-220823 (RI-AOC7-01_0.0-0.5)	RI-AOC7-01_0.17-1.0	RI-AOC7-02_0.0-0.17	RI-AOC7-02_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COL	LECTION DATE:	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022
					SAMPLE DEP	TH (Inches bgs):	0-2	0-2	2-12	0-2	2-12
					S	AMPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾					
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)					
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION											
Perfluorobutanoic Acid (PFBA)							0.049 J	0.069 J(J)	0.046 J(J)	0.097 J(J)	0.03 J(J)
Perfluoropentanoic Acid (PFPeA)							0.481 U(UJ)	0.493 U(UJ)	0.49 U(UJ)	0.527 U(UJ)	0.49 U(UJ)
Perfluorobutanesulfonic Acid (PFBS)							0.24 U(UJ)	0.246 U(UJ)	0.245 U(UJ)	0.264 U(UJ)	0.245 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.481 U(UJ)	0.493 U(UJ)	0.49 U(UJ)	0.527 U(UJ)	0.49 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.24 U(UJ)	0.046 J(J)	0.245 U(UJ)	0.081 J(J)	0.245 U(UJ)
Perfluorohexanesulfonic Acid (PFHxS)							0.24 U(UJ)	0.246 U(UJ)	0.245 U(UJ)	0.264 U(UJ)	0.245 U(UJ)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.047 J(J)	0.047 J(J)	0.245 U(UJ)	0.08 J(J)	0.245 U(UJ)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.481 U	0.493 U	0.49 U	0.527 U	0.49 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.481 U	0.493 U	0.49 U	0.527 U	0.49 U
Perfluorononanoic Acid (PFNA)							0.24 U(UJ)	0.246 U(UJ)	0.245 U(UJ)	0.264 U(UJ)	0.245 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.24 U(UJ)	0.246 U(UJ)	0.245 U(UJ)	0.326 (J)	0.245 U(UJ)
Perfluorodecanoic Acid (PFDA)							0.24 U(UJ)	0.246 U(UJ)	0.245 U(UJ)	0.264 U(UJ)	0.245 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.481 U(UJ)	0.493 U	0.49 U(UJ)	0.527 U	0.49 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.481 U(R)	0.493 U(R)	1.73 U(R)	0.527 U(UJ)	0.49 U(R)
Perfluoroundecanoic Acid (PFUnA)							0.481 U(UJ)	0.493 U(UJ)	0.49 U(UJ)	0.527 U(UJ)	0.49 U(UJ)
Perfluorodecanesulfonic Acid (PFDS)							0.481 U	0.493 U	0.49 U	0.527 U	0.49 U
Perfluorooctanesulfonamide (FOSA)							0.481 U	0.493 U	0.49 U	0.527 U	0.49 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.481 U(R)	0.493 U(R)	0.49 U(R)	0.527 U(UJ)	0.49 U(R)
Perfluorododecanoic Acid (PFDoA)							0.481 U(UJ)	0.493 U(UJ)	0.49 U(UJ)	0.527 U(UJ)	0.49 U(UJ)
Perfluorotridecanoic Acid (PFTrDA)							0.481 U	0.493 U	0.49 U(UJ)	0.527 U	0.49 U
Perfluorotetradecanoic Acid (PFTA)							0.159 U(UJ)	0.493 U(R)	0.49 U(R)	0.527 U(UJ)	1.72 U(UJ)
PFOA/PFOS, Total							0.047 J	0.047 J	0.245 U	0.406 J	0.245 U
GENERAL CHEMISTRY								•			
Solids, Total							93.7	93.7	93.8	88.6	92.2
рН (Н)							5.6	5.3	5.4	4.9	4.9
TOTAL ORGANIC CARBON								•			
Total Organic Carbon (as a %)							1.37	0.937	0.485	1.85	0.52

(1) Guidance Values for Anticipated Site Use (Unrestricted) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (2) Guidance Values for Anticipated Site Use (Protection of Groundwater) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (4) Guidance Values for Anticipated Site Use (Restricted Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (5) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (7) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (7) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs

--- = No guidance value.

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

R = Rejected Value.

NR = Not Reported by the analytical laboratory.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2245831, dated October 2, 2022.



RELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC7-03_0.0-0.5	RI-AOC7-03_0.17-1.0	RI-AOC7-04_0.0-0.5	RI-AOC7-04_0.17-1.0	RI-AOC7-05_0.0-0.17	RI-AOC7-05_0.17-1.0
NALYTICAL DATA HAS BEEN VALIDATED					COLI	LECTION DATE:	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022
					SAMPLE DEPT	TH (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)						
RFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION												
Perfluorobutanoic Acid (PFBA)							0.062 J(J)	0.511 U(UJ)	0.12 J(J)	0.046 J(UJ)	0.095 J	0.048 J(J
Perfluoropentanoic Acid (PFPeA)							0.551 U(UJ)	0.511 U(UJ)	0.057 J(J)	0.577 U(UJ)	0.101 J	0.596 U(l
Perfluorobutanesulfonic Acid (PFBS)							0.276 U(UJ)	0.255 U(UJ)	0.29 U(UJ)	0.288 U(UJ)	0.329 U	0.298 U(l
Perfluorohexanoic Acid (PFHxA)							0.551 U(UJ)	0.511 U(UJ)	0.071 JF(J)	0.577 U(UJ)	0.074 J	0.596 U(L
Perfluoroheptanoic Acid (PFHpA)							0.276 U(UJ)	0.255 U(UJ)	0.082 JF(J)	0.288 U(UJ)	0.101 J	0.298 U(l
Perfluorohexanesulfonic Acid (PFHxS)							0.276 U(UJ)	0.255 U(UJ)	0.29 U(UJ)	0.288 U(UJ)	0.167 J	0.182 J(J
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.066 J(J)	0.255 U(UJ)	0.146 JF(J)	0.053 J(J)	0.118 J	0.298 U(
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.551 U	0.511 U	0.579 U	0.577 U	0.659 U	0.596 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.551 U	0.511 U	0.579 U	0.577 U	0.659 U	0.596 U
Perfluorononanoic Acid (PFNA)							0.276 U(UJ)	0.255 U(UJ)	0.29 U(UJ)	0.288 U(UJ)	0.111 J	0.298 U(
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.276 U(UJ)	0.255 U(UJ)	0.17 J(J)	0.288 U(UJ)	1.76	0.298 U(
Perfluorodecanoic Acid (PFDA)							0.276 U(UJ)	0.255 U(UJ)	0.29 U(UJ)	0.288 U(UJ)	0.282 J	0.298 U(
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.551 U	0.511 U	0.579 U	0.577 U(UJ)	0.659 U	0.596 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.551 U(R)	0.511 U(R)	0.579 U(UJ)	0.577 U(R)	0.659 U(UJ)	0.596 U(
Perfluoroundecanoic Acid (PFUnA)							0.551 U(UJ)	0.511 U(UJ)	0.579 U(UJ)	0.577 U(UJ)	0.106 J	0.596 U(
Perfluorodecanesulfonic Acid (PFDS)							0.551 U	0.511 U	0.579 U	0.577 U	0.659 U	0.596 U
Perfluorooctanesulfonamide (FOSA)							0.551 U	0.511 U	0.579 U	0.577 U	0.659 U	0.596 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.551 U(R)	0.511 U(R)	0.579 U(UJ)	0.577 U(R)	0.659 U	0.596 U
Perfluorododecanoic Acid (PFDoA)							0.551 U(UJ)	0.511 U(UJ)	0.579 U(UJ)	0.577 U(R)	0.14 J	0.596 U
Perfluorotridecanoic Acid (PFTrDA)							0.551 U	0.511 U	0.579 U	1.98 U	0.659 U	0.596 U(
Perfluorotetradecanoic Acid (PFTA)							0.551 U(R)	0.511 U(R)	1.57 U	1.98 U(R)	0.659 U	0.596 U(
PFOA/PFOS, Total							0.066 J	0.255 U	0.316 J	0.053 J	1.88 J	0.298 U
NERAL CHEMISTRY												
Solids, Total							86	90.4	80.5	75.4	67.6	76.9
рН (Н)							5.3	5.4	5.2	5.2	5.5	5.6
DTAL ORGANIC CARBON									-			
Total Organic Carbon (as a %)							1.61	0.49	1.91	1.61	2.47	1.89

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC7-06_0.0-0.17	RI-AOC7-06_0.17-1.0	RI-AOC7-07_0.0-0.5	RI-AOC7-07_0.17-1.0	RI-AOC7-08_0.0-0.17	RI-AOC7-08_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLI	LECTION DATE:	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022
					SAMPLE DEPT	ΓH (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	AMPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)						
ERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION												
Perfluorobutanoic Acid (PFBA)							0.095 J(J)	0.044 J(J)	0.045 J(J)	0.027 J(J)	0.058 J(J)	0.541 U(U
Perfluoropentanoic Acid (PFPeA)							0.618 U(UJ)	0.553 U(UJ)	0.571 U(UJ)	0.524 U(UJ)	0.543 U(UJ)	0.541 U(U.
Perfluorobutanesulfonic Acid (PFBS)							0.309 U(UJ)	0.276 U(UJ)	0.286 U(UJ)	0.262 U(UJ)	0.272 U(UJ)	0.271 U(UJ
Perfluorohexanoic Acid (PFHxA)							0.618 U(UJ)	0.553 U(UJ)	0.571 U(UJ)	0.524 U(UJ)	0.543 U(UJ)	0.541 U(UJ
Perfluoroheptanoic Acid (PFHpA)							0.07 J(J)	0.276 U(UJ)	0.286 U(UJ)	0.262 U(UJ)	0.272 U(UJ)	0.271 U(UJ
Perfluorohexanesulfonic Acid (PFHxS)							0.309 U(UJ)	0.276 U(UJ)	0.286 U(UJ)	0.262 U(UJ)	0.272 U(UJ)	0.271 U(U.
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.309 U(UJ)	0.063 J(J)	0.05 J(J)	0.262 U(UJ)	0.272 U(UJ)	0.271 U(U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.618 U	0.553 U(ÚJ)	0.571 U	0.524 U	0.543 U	0.541 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.618 U	0.553 U	0.571 U	0.524 U	0.543 U	0.541 U
Perfluorononanoic Acid (PFNA)							0.309 U(UJ)	0.276 U(UJ)	0.286 U(UJ)	0.262 U(UJ)	0.272 U(UJ)	0.271 U(U
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.165 J(J)	0.276 U(UJ)	0.286 U(UJ)	0.262 U(UJ)	0.272 U(UJ)	0.271 U(U
Perfluorodecanoic Acid (PFDA)							0.309 U(ÚJ)	0.276 U(UJ)	0.286 U(UJ)	0.262 U(UJ)	0.272 U(UJ)	0.271 U(U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.618 U	0.553 U(UJ)	0.571 U	0.524 U	0.543 U	0.541 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.618 U(UJ)	1.8 U(R)	0.571 U(R)	0.524 U(R)	0.543 U(R)	0.541 U(R
Perfluoroundecanoic Acid (PFUnA)							0.618 U(UJ)	0.553 U(UJ)	0.571 U(UJ)	0.524 U(UJ)	0.543 U(UJ)	0.541 U(U
Perfluorodecanesulfonic Acid (PFDS)							0.618 U	0.553 U	0.571 U	0.524 U	0.543 U	0.541 U
Perfluorooctanesulfonamide (FOSA)							0.618 U	0.553 U	0.571 U	0.524 U	0.543 U	0.541 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.618 U(R)	1.8 U(R)	0.571 U(R)	NR -	0.543 U(R)	0.541 U(R
Perfluorododecanoic Acid (PFDoA)							0.618 U(UJ)	1.8 U(R)	0.571 U(UJ)	0.524 U(UJ)	0.543 U(UJ)	0.541 U(U
Perfluorotridecanoic Acid (PFTrDA)							2.42 U(R)	1.8 U	0.571 U	0.524 U	0.543 U	0.541 U
Perfluorotetradecanoic Acid (PFTA)							2.42 U	1.8 U(R)	0.571 U(R)	0.524 U(R)	0.543 U(R)	0.541 U(R)
PFOA/PFOS, Total							0.165 J	0.063 J	0.05 J	0.262 U	0.272 U	0.271 U
ENERAL CHEMISTRY												
Solids, Total							71.9	80.4	82.2	90.6	88.3	88.4
рН (Н)							5	5.2	5	5	5.3	5.7
OTAL ORGANIC CARBON												
Total Organic Carbon (as a %)							1.76	1.74	0.888	0.74	1.5	0.822

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-AOC7-09_0.0-0.17	RI-AOC7-09_0.17-1.0	RI-AOC7-10_0.0-0.5	RI-AOC7-10_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COL	LECTION DATE:	8/23/2022	8/23/2022	8/23/2022	8/23/2022
					SAMPLE DEP	TH (Inches bgs):	0-2	2-12	0-2	2-12
					S	AMPLE MATRIX:	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾				
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)				
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION										
Perfluorobutanoic Acid (PFBA)							0.042 J	0.53 U(UJ)	0.049 J(J)	0.532 U(UJ)
Perfluoropentanoic Acid (PFPeA)							0.578 U	0.53 U(UJ)	0.535 U(UJ)	0.532 U(UJ)
Perfluorobutanesulfonic Acid (PFBS)							0.289 U(UJ)	0.265 U(UJ)	0.268 U(UJ)	0.266 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.578 U(UJ)	0.53 U(UJ)	0.535 U(UJ)	0.532 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.289 U(UJ)	0.265 U(UJ)	0.268 U(UJ)	0.266 U(UJ)
Perfluorohexanesulfonic Acid (PFHxS)							0.289 U(UJ)	0.265 U(UJ)	0.268 U(UJ)	0.072 J(J)
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.289 U(UJ)	0.265 U(UJ)	0.268 U(UJ)	0.266 U(UJ)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.578 U	0.53 U	0.535 U	0.532 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.578 U	0.53 U	0.535 U	0.532 U
Perfluorononanoic Acid (PFNA)							0.289 U(UJ)	0.265 U(UJ)	0.268 U(UJ)	0.266 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.289 U(UJ)	0.265 U(UJ)	0.268 U(UJ)	0.591 (J)
Perfluorodecanoic Acid (PFDA)							0.289 U(UJ)	0.265 U(UJ)	0.268 U(UJ)	0.266 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.578 U	0.53 U(UJ)	0.535 U	0.532 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.578 U(UJ)	0.53 U(R)	0.535 U(R)	0.532 U(R)
Perfluoroundecanoic Acid (PFUnA)							0.578 U	0.53 U(UJ)	0.535 U(UJ)	0.532 U(UJ)
Perfluorodecanesulfonic Acid (PFDS)							0.578 U	0.53 U	0.535 U	0.532 U
Perfluorooctanesulfonamide (FOSA)							0.578 U	0.53 U	0.535 U	0.532 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.578 U(UJ)	0.53 U(R)	0.535 U(R)	0.532 U(R)
Perfluorododecanoic Acid (PFDoA)							0.578 U(UJ)	0.53 U(UJ)	0.535 U(UJ)	0.532 U(UJ)
Perfluorotridecanoic Acid (PFTrDA)							0.578 U	NR -	0.535 U	0.532 U
Perfluorotetradecanoic Acid (PFTA)							2.13 U(UJ)	NR -	0.535 U(R)	0.532 U(R)
PFOA/PFOS, Total							0.289 U	0.265 U	0.268 U	0.591
GENERAL CHEMISTRY										
Solids, Total							78.8	86.7	86.1	88.4
pH (H)							5.3	5.7	5.2	5.6
TOTAL ORGANIC CARBON										
Total Organic Carbon (as a %)							0.976	0.622	0.647	0.456

						SAMPLE ID:	RI-AOC7-01_0.0-0.5	FD01-220823 (RI-AOC7-01_0.0-0.5)	RI-AOC7-01_0.17-1.0	RI-AOC7-03_0.0-0.5	RI-AOC7-03_0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COLI	LECTION DATE:	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022
					SAMPLE DEPT	ΓH (Inches bgs):	0-6 ⁽¹³⁾	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	2-12⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾					
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)					
Volatile Organics by EPA 5035										-	
2-Butanone	0.12	0.12	100	100	500	1000	0.012 U	0.011 U	0.012 U	0.0049 J	0.011 U
Acetone	0.05	0.05	100	100	500	1000	0.025 (U)	0.044 (U)	0.012 U	0.13*	0.011 U
Semivolatile Organics by GC/MS											
Acetophenone							0.18 U	0.17 U	0.17 U	0.19 U	0.9 U
Benzaldehyde							0.23 U	0.05 J	0.23 U	0.18 J	1.2 U
Caprolactam							0.18 U	0.17 U	0.17 U	0.06 J	0.9 U
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	0.14 U	0.14 U	0.14 U	0.15 U	0.17 J
Organochlorine Pesticides by GC											
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	0.00208 U	0.00208 U	0.00205 U	0.00368 IP	0.00216 U
Polychlorinated Biphenyls by GC (Nor		ve the Laborato					0.00200 0	0.00200 0	0100200 0	0.000000	0.002.000
Total Metals			,								
Aluminum, Total							2530	2550	1630	2520	1450
Arsenic, Total	13	16	16	16	16	16	0.449 J	0.272 J	0.41 J	0.472 J	0.237 J
Barium, Total	350	820	350	400	400	10000	6.16	6.31	2.93	7.32	3.99
Beryllium, Total	7.2	47	14	72	590	2700	0.083 J	0.085 J	0.09 J	0.073 J	0.051 J
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.183 J	0.17 J	0.823 U	0.2 J	0.846 U
Calcium, Total							388	458	298	429	477
Chromium, Total	30		36	180	1500	6800	3.1	3.26	1.71	3.77	2.15
Cobalt, Total							0.965 J	1.13 J	0.459 J	1.02 J	0.804 J
Copper, Total	50	1720	270	270	270	10000	0.241 J	0.272 J	0.458 J	0.926	0.355 J
Iron, Total							5270	5160	2900	5050	2260
Lead, Total	63	450	400	400	1000	3900	1.28 J	1.15 J	0.57 J	2.89 J	0.558 J
Magnesium, Total							313	352	231	320	313
Manganese, Total	1600	2000	2000	2000	10000	10000	15.9	20.1	9.08	12.3	10
Manganese, Total Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	0.082 U	0.087 U	0.074 U	0.086 U	0.075 U
Nickel, Total	30	130	140	310	310	10000	1.15 J	1.29 J	0.462 J	1.49 J	1.04 J
Potassium, Total							110 J	94.2 J	65.7 J	97.9 J	96.8 J
Sodium, Total							47.4 J	24.4 J	19.5 J	31.2 J	31.5 J
Vanadium, Total							8.39	8.74	4.04	8.18	4.43
Zinc, Total	109	2480	2200	10000	10000	10000	4.17	4.14 J	2.3 J	5.31	3.21 J
General Chemistry	100	2,000	2200	10000	10000	10000	7.17	V TI.T	2.0 0	0.01	0.210
pH (H)							5.6	5.3	5.4	5.3	5.4
Solids, Total							93.7	93.7	93.8	86	90.4
Total Organic Carbon							00.1	00.1	55.0	00	JU.T
Total Organic Carbon							1.37	0.937	0.485	1.61	0.49
Notos:							1.07	0.001	0.400	1.01	0.40

Notes:

(7) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(8) SCOs for Protection of Groundwater promulgated at 6 NYCRR Part 375.

(9) SCOs for Residential Use Sites promulgated at 6 NYCRR Part 375.

(10) SCOs for Restricted-Residential Use Sites promulgated at 6 NYCRR Part 375.

(11) SCOs for Commercial Use Sites promulgated at 6 NYCRR Part 375.

(12) SCOs for Industrial Use Sites promulgated at 6 NYCRR Part 375.

(13) The sample was collected from the 0 to 2-inch depth interval except for the TCL VOC sample which was collected from the 2 to 6-inch depth interval.

(14) The sample was collected from the 2 to 12-inch depth interval except for the TCL VOC sample which was collected from the 6 to 12-inch depth interval.

Bolded analytical result exceeds listed standard.

--- = No soil cleanup objective (SCO).

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

R = Rejected Value.

NR = Not Reported by the analytical laboratory.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Report (DUSR) for SDG # L2245831, dated October 2, 2022.

PRELIMINARY ANALYTIC						SAMPLE ID:	RI-AOC7-04_0.0-0.5	RI-AOC7-04_0.17-1.0	RI-AOC7-07_0.0-0.5	RI-AOC7-07_0.17-1.0	RI-AOC7-10_0.0-0.5	RI-AOC7-10_0.17-1.0
ANALYTICAL DATA HAS	BEEN VA	LIDATED			COLI	ECTION DATE:	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022
					SAMPLE DEPT	H (Inches bgs):	0-6 ⁽¹³⁾	2-12 ⁽¹⁴⁾	0-6 ⁽¹³⁾	2-12⁽¹⁴⁾	0-6 ⁽¹³⁾	2-12⁽¹⁴⁾
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽⁷⁾	NY-RESGW ⁽⁸⁾	NY-RESR ⁽⁹⁾	NY-RESRR ⁽¹⁰⁾	NY-RESC ⁽¹¹⁾	NY-RESI ⁽¹²⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
Volatile Organics by EPA 5035												
2-Butanone	0.12	0.12	100	100	500	1000	0.0048 J	0.012 U	0.0086 J	0.012 U	0.011 U	0.01 U
Acetone	0.05	0.05	100	100	500	1000	0.072*	0.027 (U)	0.2*	0.015 (U)	0.011 U	0.01 U
Semivolatile Organics by GC/MS						<u>.</u>						
Acetophenone							0.038 J	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U
Benzaldehyde							0.7	0.16 J	0.081 J	0.16 J	0.25 U	0.24 U
Caprolactam							0.2 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	0.16 U	0.17 U	0.16 U	0.14 U	0.15 U	0.15 U
Organochlorine Pesticides by GC												
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	0.00247 U	0.00251 U	0.00234 U	0.00214 U	0.0022 U	0.00222 U
Polychlorinated Biphenyls by GC (Nor	ne Detected Abo	ove the Laborato	ry's Method Det	tection Limits)								
Total Metals												
Aluminum, Total							2070	3010	1910	2620	1960	1840
Arsenic, Total	13	16	16	16	16	16	0.96 U	0.223 J	0.264 J	0.546 J	0.327 J	0.348 J
Barium, Total	350	820	350	400	400	10000	7.8	5.26	4.26	5.76	6.73	6.09
Beryllium, Total	7.2	47	14	72	590	2700	0.048 J	0.041 J	0.057 J	0.076 J	0.082 J	0.071 J
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.182 J	0.132 J	0.151 J	0.185 J	0.091 J	0.098 J
Calcium, Total							196	203	406	478	618	569
Chromium, Total	30		36	180	1500	6800	3.01	2.76	3.07	3.22	3.71	2.75
Cobalt, Total							0.576 J	0.648 J	0.973 J	1.26 J	0.953 J	0.865 J
Copper, Total	50	1720	270	270	270	10000	0.25 J	1.01 U	0.274 J	0.84 U	0.427 J	0.437 J
Iron, Total							5100	3880	4760	5940	2680	2620
Lead, Total	63	450	400	400	1000	3900	2.32 J	1.59 J	0.727 J	0.832 J	0.881 J	0.901 J
Magnesium, Total					10000	10000	<u>131</u> 5.64	186 7.47	298 13.6	383 16.1	356	342 11.4
Manganese, Total	1600 0.18	2000 0.73	2000 0.81	2000 0.81	2.8	5.7	0.088 U	0.066 J	0.082 U	16.1 0.082 U	11.8 0.094 U	0.078 U
Mercury, Total Nickel. Total	30	130	140	310	310	10000	0.088 U 0.797 J	0.066 J 0.821 J	0.062 U 1.31 J	0.082 U 1.49 J	0.094 0 1.49 J	0.078 U 1.19 J
Potassium. Total			140		310		<u> </u>	58.3 J	92.5 J	1.49 J 101 J	1.49 J	1.19 J 107 J
Sodium. Total							24.1 J	25.1 J	92.5 J 30.9 J	101 J 27 J	33.4 J	30.3 J
Vanadium, Total							7.61	5.95	6.72	8.62	6.82	5.58
Zinc, Total	109	2480	2200	10000	10000	10000	2.87 J	2.43 J	3.3 J	4.26	4.4 J	4.04 J
General Chemistry	100	2700	2200	10000	10000	10000	2.01 0	2.70 0	0.0 0	7.20	י ד.ד	ט דט.ד
pH (H)							5.2	5.2	5	5	5.2	5.6
Solids, Total							80.5	75.4	82.2	90.6	86.1	88.4
Total Organic Carbon				1			00.0	1 10.1	1 02.2	00.0	00.1	00.1
Total Organic Carbon							1.91	1.61	0.888	0.74	0.647	0.456

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-ARA-01_0.0-0.5	RI-ARA-01_0.17-1.0	RI-ARA-02_0.0-0.17	RI-ARA-02_0.17-1.0	RI-ARA-03_0.0-0.17	RI-ARA-03_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLL	ECTION DATE:	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)						1
erfluorinated Alkyl Acids by Isotope Dilution												
Perfluorobutanoic Acid (PFBA)							0.133 J	0.101 J	0.053 J(J)	0.032 J	0.119 J	0.066 J(J
Perfluoropentanoic Acid (PFPeA)							0.481 U	0.648 U	0.63 U(UJ)	0.539 U	0.067 J	0.569 U(L
Perfluorobutanesulfonic Acid (PFBS)							0.24 U	0.324 U(UJ)	0.315 U(UJ)	0.27 U	0.284 U(UJ)	0.285 U(L
Perfluorohexanoic Acid (PFHxA)							0.481 U	0.648 U(UJ)	0.63 U(UJ)	0.539 U(UJ)	0.569 U(UJ)	0.102 J(J)
Perfluoroheptanoic Acid (PFHpA)							0.24 U	0.324 U	0.315 U(UJ)	0.27 U	0.052 J(J)	0.285 U(l
Perfluorohexanesulfonic Acid (PFHxS)							0.24 U	0.324 U	0.315 U(UJ)	0.27 U	0.166 J	0.285 U(l
Perfluorooctanoic Acid (PFOA) 1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.66	1.1	6.6	33	500	600	0.24 U	0.116 JF(J)	0.074 JF(J)	0.27 U	0.084 J	0.285 U(l
							0.481 U	0.648 U	0.63 U(UJ)	0.539 U	0.569 U	0.569 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.481 U	0.648 U	0.63 U	0.539 U	0.569 U	0.569 U
Perfluorononanoic Acid (PFNA)							0.24 U	0.324 U(UJ)	0.315 U(UJ)	0.27 U(UJ)	0.106 JF(J)	0.285 U(L
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.24 U	0.324 U(UJ)	0.315 U(UJ)	0.178 J(J)	3.72* (J)	0.597 (J)
Perfluorooctanesulfonic Acid (PFOS) Perfluorodecanoic Acid (PFDA)							0.24 U	0.324 U(UJ)	0.315 U(UJ)	0.27 U(ÚJ)	0.088 J(J)	0.285 U(l
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.481 U	0.648 U	0.63 U(UJ)	0.539 U	0.569 U	1.74 U(l
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.481 U	0.648 U(UJ)	2.25 U(R)	0.539 U(UJ)	0.569 U(UJ)	1.74 U(F
Perfluoroundecanoic Acid (PFUnA)							0.481 U	0.648 U	0.63 U(UJ)	0.539 U	0.065 JF	0.569 U(L
Perfluorodecanesulfonic Acid (PFDS)							0.481 U	0.648 U	0.63 U	0.539 U	0.569 U	0.569 U
Perfluorooctanesulfonamide (FOSA)							0.481 U	0.648 U	0.63 U	0.539 U	0.569 U	0.569 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.481 U	0.648 U(UJ)	2.25 U(R)	0.539 U(UJ)	0.569 U(UJ)	0.569 U
Perfluorododecanoic Acid (PFDoA)							0.481 U	0.648 U(UJ)	0.63 U(UJ)	0.539 U	0.569 U(UJ)	1.74 U(l
Perfluorotridecanoic Acid (PFTrDA)							0.481 U	0.648 U	2.25 U(UJ)	0.539 U	0.569 U	1.74 U(L
Perfluorotetradecanoic Acid (PFTA)							0.481 U	0.261 JF(J)	2.25 U(UJ)	0.539 U	2.08 U(UJ)	1.74 U(F
PFOA/PFOS, Total							0.24 U	0.116 J	0.074 J	0.178 J	3.8 J	0.597
eneral Chemistry							-			•		
Solids, Total							95.2	69.4	76.7	85.1	80.8	80
pH (H)							6.2	5.9	5.7	5.3	5.4	5.7
otal Organic Carbon									-		-	
Total Organic Carbon							1.47	0.594	0.251	0.986	2	0.656

Notes:

(1) Guidance Values for Anticipated Site Use (Unrestricted) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(2) Guidance Values for Anticipated Site Use (Protection of Groundwater) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (3) Guidance Values for Anticipated Site Use (Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

(4) Guidance Values for Anticipated Site Use (Restricted Residential) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (5) Guidance Values for Anticipated Site Use (Commercial promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (6) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).
 (7) Guidance Values for Anticipated Site Use (Industrial) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (November 2022).

Bolded analytical result exceeds listed guidance value.

* Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 guidance value for unrestricted use, protection of groundwater, residential use and restricted residential use.

--- = No guidance value.

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

R = Rejected Value.

NR = Not Reported by the analytical laboratory.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Reports (DUSRs) for SDG # L2249668 and L2250010, dated October 26, 2022.



PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-ARA-04_0.0-0.17	RI-ARA-04_0.17-1.0	RI-ARA-05_0.0-0.17	RI-ARA-05_0.17-1.0	RI-ARA-06_0.0-0.17	RI-ARA-06_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLI	ECTION DATE:	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/13/2022	9/13/2022
					SAMPLE DEP	TH (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)						
Perfluorinated Alkyl Acids by Isotope Dilution												
Perfluorobutanoic Acid (PFBA)							0.096 J(J)	2.01 U(UJ)	0.06 J	0.09 J	0.325 J(J)	0.523 U(UJ)
Perfluoropentanoic Acid (PFPeA)							0.643 U(UJ)	2.01 U(UJ)	0.045 J	0.084 J	0.435 J(J)	0.523 U(UJ)
Perfluorobutanesulfonic Acid (PFBS)							0.321 U(UJ)	1 U(UJ)	0.066 J	0.044 JF(J)	0.075 J(J)	0.262 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.643 U(UJ)	2.01 U(UJ)	0.07 JF(J)	0.165 J(J)	0.287 J(J)	0.523 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.321 U(UJ)	1 U(UJ)	0.24 U(UJ)	0.068 JF(J)	0.173 J(J)	0.262 U(UJ
Perfluorohexanesulfonic Acid (PFHxS)							0.321 U(UJ)	1 U(UJ)	1.56	1.84 (J)	0.989 (J)	0.262 U(UJ
Perfluorooctanoic Acid (PFOA) 1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.66	1.1	6.6	33	500	600	0.321 U(UJ) 2.34 U(UJ)	1 U(UJ)	1.56 0.24 U 0.48 U	0.253 U(UJ)	0.114 J(J) 0.517 U	0.262 U(UJ
								2.01 U(UJ)		0.507 U		0.523 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.643 U	2.01 U(UJ)	0.48 U	0.507 U	0.517 U	0.523 U
Perfluorononanoic Acid (PFNA)							1.17 U(UJ)	1 U(UJ)	0.24 U(UJ)	0.253 U(UJ)	0.116 J(J)	0.262 U(UJ
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	1.17 U(UJ)	1 U(UJ)	3.43	7.56* (J)	1.69 (J)	0.262 U(UJ
Perfluorodecanoic Acid (PFDA)							1.17 U(UJ)	1 U(UJ)	0.24 U	0.253 Ù(ÚJ)	0.258 Ù(ÚJ)	0.262 U(UJ
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							2.34 U(UJ)	2.01 U(R)	0.48 U	0.507 U	0.517 U	0.523 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							NR	NR	0.48 U(UJ)	1.71 U(UJ)	0.517 U(UJ)	0.523 U(R)
Perfluoroundecanoic Acid (PFUnA)							2.34 U(UJ)	2.01 U(UJ)	0.48 U	0.507 U(UJ)	0.066 JF(J)	0.523 U(UJ
Perfluorodecanesulfonic Acid (PFDS)							2.34 U(UJ)	2.01 U(UJ)	0.48 U	0.507 U	0.517 U	0.523 U
Perfluorooctanesulfonamide (FOSA)							0.643 U	0.519 U	0.48 U	0.507 U	0.517 U	0.523 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							2.34 U(R)	NR	0.48 U(UJ)	0.507 U(UJ)	0.517 U(UJ)	0.523 U(R)
Perfluorododecanoic Acid (PFDoA)							2.34 U(UJ)	2.01 U(UJ)	0.48 U	0.507 U(UJ)	0.517 U(UJ)	0.523 U(UJ
Perfluorotridecanoic Acid (PFTrDA)							2.34 U(UJ)	2.01 U(UJ)	0.48 U	0.507 U	0.517 U	0.523 U
Perfluorotetradecanoic Acid (PFTA)							2.34 U(UJ)	2.01 U(R)	0.48 U	0.507 U(UJ)	0.517 U(UJ)	1.84 U(UJ
PFOA/PFOS, Total							0.321 U	1 U(UJ)	3.43	7.56	1.8 J	0.262 U
General Chemistry									•	•		
Solids, Total							69.9	88.2	96	93.3	85	87.1
pH (H)							4.9	4.9	5.9	5.8	5.3	5.1
Total Organic Carbon												
Total Organic Carbon							1.92	0.528	0.872	0.73	3.88	1.84

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-ARA-07_0.0-0.17	FD01-220913 (RI-ARA-07_0.0-0.17)	RI-ARA-07_0.17-1.0	RI-ARA-08_0.0-0.17	RI-ARA-08_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLI	ECTION DATE:	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022
					SAMPLE DEPT	TH (Inches bgs):	0-2	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾					
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)					
Perfluorinated Alkyl Acids by Isotope Dilution											
Perfluorobutanoic Acid (PFBA)							0.533 U(UJ)	0.556 U	0.106 J(J)	0.051 J	0.029 J
Perfluoropentanoic Acid (PFPeA)							0.533 U(UJ)	0.556 U	0.536 U	0.545 U	0.545 U
Perfluorobutanesulfonic Acid (PFBS)							0.266 U(UJ)	0.278 U	0.268 U(UJ)	0.272 U	0.272 U
Perfluorohexanoic Acid (PFHxA)							0.533 U(UJ)	0.556 U	0.536 U(UJ)	0.545 U	0.545 U
Perfluoroheptanoic Acid (PFHpA)							0.266 U(UJ)	0.278 U	0.268 U(UJ)	0.272 U(UJ)	0.272 U(U
Perfluorohexanesulfonic Acid (PFHxS)							0.266 U(UJ)	0.278 U	0.268 U(UJ)	0.272 U(UJ)	0.272 U
Perfluorooctanoic Acid (PFOA) 1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.66	1.1	6.6	33	500	600	0.266 U(UJ)	0.278 U	0.098 J(J)	0.272 U	0.062 J
							0.533 U	0.556 U	0.536 U	0.545 U	0.545 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.533 U	0.556 U	0.536 U	0.545 U	0.545 U
Perfluorononanoic Acid (PFNA)							0.266 U(UJ)	0.278 U	0.268 U(UJ)	0.272 U	0.272 U
Perfluorooctanesulfonic Acid (PFOS) Perfluorodecanoic Acid (PFDA)	0.88	3.7	8.8	44	440	440	0.266 U	0.278 U	0.268 U(UJ)	0.272 U	0.272 U
Perfluorodecanoic Acid (PFDA)							0.266 U(UJ)	0.278 U	0.268 U(UJ)	0.272 U	0.272 U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.533 U	0.556 U	0.536 U	0.545 U	0.545 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.533 U(UJ)	0.556 U	0.536 U(R)	0.545 U(UJ)	0.234 JF(J
Perfluoroundecanoic Acid (PFUnA)							0.09 J(J)	0.063 J	0.536 U(UJ)	0.146 J	0.545 U
Perfluorodecanesulfonic Acid (PFDS)							0.533 U	0.556 U	0.536 U(UJ)	0.545 U	0.545 U
Perfluorooctanesulfonamide (FOSA)							0.533 U	0.556 U	0.536 U	0.545 U	0.545 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.533 U(UJ)	0.556 U	0.536 U(R)	0.545 U(UJ)	0.193 J(J)
Perfluorododecanoic Acid (PFDoA)							0.533 U(UJ)	0.556 U	0.536 U(UJ)	0.545 U(UJ)	0.545 U(Ú
Perfluorotridecanoic Acid (PFTrDA)							0.533 U	0.556 U	0.536 U	0.545 U	0.545 U
Perfluorotetradecanoic Acid (PFTA)							2.04 U(UJ)	0.556 U	2.01 U(UJ)	0.545 U(UJ)	0.545 U(U
PFOA/PFOS, Total							0.266 U	0.278 U	0.098 J	0.272 U	0.062 J
General Chemistry										-	
Solids, Total							85.3	84.7	85.2	85.8	84.6
pH (H)							5	4.8	5.1	5.4	5.6
Total Organic Carbon					I					-	
Total Organic Carbon							0.974	1.14	2.32	1.19	0.38

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-ARA-09_0.0-0.17	RI-ARA-09_0.17-1.0	RI-ARA-10_0.0-0.17	RI-ARA-10_0.17-1.0	RI-ARA-11_0.0-0.17	RI-ARA-11_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLI	ECTION DATE:	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022
					SAMPLE DEPT	H (Inches bgs):	0-2	2-12	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾						
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)						
Perfluorinated Alkyl Acids by Isotope Dilution												
Perfluorobutanoic Acid (PFBA)							0.494 U(UJ)	0.49 U(UJ)	0.109 J	0.549 U	0.665 (J)	0.582 U(UJ)
Perfluoropentanoic Acid (PFPeA)							0.494 U(UJ)	0.49 U(UJ)	0.587 U	0.549 U	0.286 J(J)	0.582 U(UJ)
Perfluorobutanesulfonic Acid (PFBS)							0.247 U(UJ)	0.245 U(UJ)	0.294 U	0.275 U	0.322 U(UJ)	0.291 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.494 U(UJ)	0.49 U(UJ)	0.587 U(UJ)	0.549 U	0.248 J(J)	0.582 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.247 U(UJ)	0.245 U(UJ)	0.058 J(J)	0.275 U	0.349 (J)	0.291 U(UJ)
Perfluorohexanesulfonic Acid (PFHxS)							0.247 U(UJ)	0.245 U(UJ) 0.245 U(UJ)	0.294 U(UJ)	0.275 U	0.322 U(UJ)	0.291 U(UJ)
Perfluorooctanoic Acid (PFOA) 1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.66	1.1	6.6	33	500	600	0.247 U(UJ)	0.245 U(UJ)	0.294 U	0.275 U	0.536 (J)	0 291 U(UJ)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.494 U	0.49 U	0.587 U	0.549 U	0.644 U	0.582 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.494 U	0.49 U	0.587 U	0.549 U	0.644 U	0.582 U
Perfluorononanoic Acid (PFNA)							0.247 U(UJ)	0.245 U(UJ)	0.294 U	0.275 U	0.331 (J)	0.291 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.247 U(UJ)	0.245 U(UJ)	0.294 U	0.275 U	0.519 F(J)	0.291 U(UJ)
Perfluorodecanoic Acid (PFDA)							0.247 U(UJ)	0.245 U(UJ)	0.294 U(UJ)	0.275 U	0.13 JF(J)	0.291 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.494 U	0.49 U	0.587 U	0.549 U	0.644 U	0.582 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.494 U(UJ)	NR	0.587 U(UJ)	0.549 U(R)	0.644 U	
Perfluoroundecanoic Acid (PFUnA)							0.101 JF(J)	0.49 U(UJ)	0.065 J(J)	0.549 U	0.132 JF(J)	0.582 U(UJ)
Perfluorodecanesulfonic Acid (PFDS)							0.494 U	0.49 U	0.587 U	0.549 U	0.644 U	0.582 U
Perfluorooctanesulfonamide (FOSA)							0.494 U	0.49 U	0.587 U	0.549 U	0.644 U	0.582 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							1.9 U(UJ)	NR	0.587 U(UJ)	0.549 U(R)	0.644 U	0.582 U(R)
Perfluorododecanoic Acid (PFDoA)							0.494 U(UJ)	0.49 U(UJ)	0.587 U(UJ)	0.549 U	0.644 U(UJ)	0.582 U(UJ)
Perfluorotridecanoic Acid (PFTrDA)							0.494 U	0.49 U	0.587 U	0.549 U	0.644 U	0.582 U
Perfluorotetradecanoic Acid (PFTA)							1.9 U(UJ)	1.84 U(UJ)	2.02 U(UJ)	0.549 U(UJ)	2.54 U(UJ)	0.582 U(R)
PFOA/PFOS, Total							0.247 U	0.245 U	0.294 U	0.275 U	1.06	0.291 U
General Chemistry												
Solids, Total							94.8	93	79.4	83.7	71	79.1
рН (Н)							5	5.5	5.4	5.5	4.6	5
Total Organic Carbon												
Total Organic Carbon							0.531	0.134	3.09	2.48	4.32	1.58

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-ARA-12_0.0-0.17	RI-ARA-12_0.17-1.0	RI-ARA-13_0.0-0.17	RI-ARA-13_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLI	ECTION DATE:	9/13/2022	9/13/2022	9/13/2022	9/13/2022
					SAMPLE DEPT	TH (Inches bgs):	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾				
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)				
Perfluorinated Alkyl Acids by Isotope Dilution										
Perfluorobutanoic Acid (PFBA)							0.152 J	0.096 J(J)	0.155 J	0.043 J(J)
Perfluoropentanoic Acid (PFPeA)							0.058 J	0.502 U(UJ)	0.06 J	0.488 U(UJ)
Perfluorobutanesulfonic Acid (PFBS)							0.294 U	0.251 U(UJ)	0.283 U	0.244 U(UJ)
Perfluorohexanoic Acid (PFHxA)							0.589 U(UJ)	0.502 U(UJ)	0.565 U	0.488 U(UJ)
Perfluoroheptanoic Acid (PFHpA)							0.067 J(J)	0.251 U(UJ)	0.059 J(J)	0.244 U(UJ)
Perfluorohexanesulfonic Acid (PFHxS)							0.294 U(UJ)	0.251 U(UJ)	0.283_U(UJ)	0.244 U(UJ)
Perfluorooctanoic Acid (PFOA) 1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.66	1.1	6.6	33	500	600	0.059 J	0.064 JF(J)	0.283 U	0.047 JF(J)
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.589 U	0.502 U	0.565 U	0.488 U
Perfluoroheptanesulfonic Acid (PFHpS)							0.589 U	0.502 U	0.565 U	0.488 U
Perfluorononanoic Acid (PFNA)							0.117 J	0.251 U(UJ)	0.086 J	0.244 U(UJ)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.252 J	0.251 U(UJ)	0.24 J	0.244 U(UJ)
Perfluorodecanoic Acid (PFDA)							0.294 U	0.251 U(UJ)	0.283 U	0.244 U(UJ)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.589 U	0.502 U	0.565 U	0.488 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.589 U	0.502 U(R)	0.565 U	0.488 U(R)
Perfluoroundecanoic Acid (PFUnA)							0.152 J	0.502 U(UJ)	0.115 J(J)	0.488 U(UJ)
Perfluorodecanesulfonic Acid (PFDS)							0.589 U	0.502 U	0.565 U	0.488 U
Perfluorooctanesulfonamide (FOSA)							0.589 U	0.502 U	0.565 U	0.488 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.589 U	0.502 U(R)	0.565 U	NR
Perfluorododecanoic Acid (PFDoA)							0.589 U(UJ)	0.502 U(UJ)	0.565 U(UJ)	0.488 U(UJ)
Perfluorotridecanoic Acid (PFTrDA)							0.589 U	0.502 U	0.565 U	0.488 U
Perfluorotetradecanoic Acid (PFTA)							0.589 U(UJ)	2.12 U(UJ)	2.07 U(UJ)	1.81 U(UJ)
PFOA/PFOS, Total							0.311 J	0.064 J	0.24 J	0.047 J
General Chemistry							•			
Solids, Total							78.4	88.2	80.6	91.5
pH (H)							4.5	5.5	4.6	5.6
Total Organic Carbon										
Total Organic Carbon							5.07	1.36	2.61	1.14

PRELIMINARY ANALYTICAL RESULTS						SAMPLE ID:	RI-ARA-14_0.0-0.5	RI-ARA-14_0.17-1.0	RI-ARA-15_0.0-0.17	RI-ARA-15_0.17-1.0
ANALYTICAL DATA HAS BEEN VALIDATED					COLI	ECTION DATE:	9/13/2022	9/13/2022	9/13/2022	9/13/2022
					SAMPLE DEPT	TH (Inches bgs):	0-2	2-12	0-2	2-12
					SA	MPLE MATRIX:	SOIL	SOIL	SOIL	SOIL
ANALYTE	NY-UNRES ⁽¹⁾	NY-RESGW ⁽²⁾	NY-RESR ⁽³⁾	NY-RESRR ⁽⁴⁾	NY-RESC ⁽⁵⁾	NY-RESI ⁽⁶⁾				
	(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)				
Perfluorinated Alkyl Acids by Isotope Dilution										
Perfluorobutanoic Acid (PFBA)							0.032 J	0.539 U(UJ)	0.05 J	0.048 J(J)
Perfluoropentanoic Acid (PFPeA)							0.557 U	0.539 U(UJ)	0.058 J	0.054 J(J)
Perfluorobutanesulfonic Acid (PFBS)							0.278 U(UJ)	0.269 U(UJ)	0.292 U	0.262 U(UJ
Perfluorohexanoic Acid (PFHxA)							0.557 U(UJ)	0.539 U(UJ)	0.583 U	0.525 U(UJ
Perfluoroheptanoic Acid (PFHpA)							0.278 U(UJ)	0.269 U(UJ)	0.055 J	0.062 J(J)
Perfluorohexanesulfonic Acid (PFHxS)							0.278 U(UJ)	0.269 U(UJ)	0.292 U(UJ)	0.262 U(UJ
Perfluorooctanoic Acid (PFOA)	0.66	1.1	6.6	33	500	600	0.278 U	0.269 U(UJ)	0.197 J	0.22 J(J) 0.525 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)							0.557 U	0.539 U	0.583 U	
Perfluoroheptanesulfonic Acid (PFHpS)							0.557 U	0.539 U	0.583 U	0.525 U
Perfluorononanoic Acid (PFNA)							0.278 U	0.269 U(UJ)	0.292 U	0.135 J(J)
Perfluorooctanesulfonic Acid (PFOS)	0.88	3.7	8.8	44	440	440	0.278 U	0.269 U(UJ)	1.78	1.92 (J)
Perfluorodecanoic Acid (PFDA)							0.278 U(UJ)	0.269 U(UJ)	0.336	0.117 J(J)
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)							0.557 U	0.539 U	0.583 U	0.525 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)							0.557 U(R)	0.539 U(R)	0.583 U(UJ)	
Perfluoroundecanoic Acid (PFUnA)							0.557 U(UJ)	0.539 U(UJ)	0.381 J	0.525 U(UJ
Perfluorodecanesulfonic Acid (PFDS)							0.557 U	0.539 U	1.02	0.525 U
Perfluorooctanesulfonamide (FOSA)							0.557 U	0.539 U	0.134 J	0.525 U(R)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)							0.557 U(R)	0.539 U(R)	0.406 J(J)	
Perfluorododecanoic Acid (PFDoA)							0.557 U(UJ)	0.539 U(UJ)	0.599 (J)	0.525 U(UJ
Perfluorotridecanoic Acid (PFTrDA)							0.557 U	0.539 U	0.583 U	0.525 U
Perfluorotetradecanoic Acid (PFTA)							2.17 U(UJ)	2.04 U(UJ)	0.207 J(J)	1.91 U(UJ
PFOA/PFOS, Tota							0.278 U	0.269 U	1.98 J	2.14 J
eneral Chemistry										
Solids, Total							80.9	91	80.3	87.8
рН (Н)							5	5.1	5.9	6
otal Organic Carbon										
Total Organic Carbon							1.16	0.695	3.26	1.26

PRELIMINARY ANALYTICAL RESULTS ANALYTICAL DATA HAS BEEN VALIDATED						SAMPLE ID:	RI-ARA-01_0.0-0.5 9/12/2022 0-6 ⁽¹³⁾ SOIL	RI-ARA-01_0.17-1.0 9/12/2022 2-12 ⁽¹⁴⁾ SOIL	RI-ARA-14_0.0-0.5 9/13/2022 0-6 ⁽¹³⁾ SOIL	RI-ARA-14_0.17-1.0 9/13/2022 2-12 ⁽¹⁴⁾ SOIL
						LECTION DATE:				
					SAMPLE DEPTH (Inches bgs): SAMPLE MATRIX:					
(µg/kg)	(ug/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)					
/olatile Organics by EPA 5035										
2-Butanone	0.12	0.12	100	100	500	1000	0.01 J	0.015 U	0.012 U	0.011 U
Acetone	0.05	0.05	100	100	500	1000	0.09 (UJ)	0.2* (J)	0.035 (U)	0.011 U
Toluene	0.7	0.7	100	100	500	1000	0.0007 J	0.0015 U	0.0012 U	0.0011 U
Semivolatile Organics by GC/MS										
Benzaldehyde							0.23 U	0.31 U	0.15 J	0.05 J
Organochlorine Pesticides by GC (No		ove the Laborato	rv's Method De	tection Limits)						
Polychlorinated Biphenyls by GC (No										
Fotal Metals										
Aluminum, Total							1040	2320	2180	1550
Arsenic, Total	13	16	16	16	16	16	0.4 J(U)	0.584 J(U)	0.614 J(U)	0.291 J(U)
Barium, Total		820	350	400	400	10000	5.4	3.66	7.02	4.72
Beryllium, Total		47	14	72	590	2700	0.072 J	0.092 J	0.047 J	0.042 J
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.088 J(J)	1.14 U	0.232 J	0.108 J
Calcium, Total							741	497	71.7 (U)	146 (U)
Chromium, Total			36	180	1500	6800	1.41	2.92	4.75	2.44
Cobalt, Total							1.17 J	1.41 J	0.67 J	0.599 J
Copper, Total	50	1720	270	270	270	10000	0.839	0.825 J	0.353 J	0.316 J
Iron, Total							3760	4980	5390	3650
Lead, Total	63	450	400	400	1000	3900	2.3 J(J)	1.67 J(J)	4.23 J(J)	0.807 J(J)
Magnesium, Total							529 (J)	418 (J)	112 (Ù)	166 (Ù)
Manganese, Total	1600	2000	2000	2000	10000	10000	44	36.1	12.6	14.1
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	0.073 U	0.103 U	0.267 (U)	0.071 J(U)
Nickel, Total	30	130	140	310	310	10000	1.35 J	1.97 J	0.781 J(J)	1.01 J(J)
Potassium, Total							101 J(U)	92.9 J(U)	35.1 J(U)	36.8 J(U)
Sodium, Total							47 J(U)	35.4 J(U)	24.3 J	11.5 J(U)
Vanadium, Total							3.73	5.77	6.89	4.71
Zinc, Total	109	2480	2200	10000	10000	10000	40.8	11.1	3.58 J(UJ)	3.74 J(UJ
General Chemistry										
pH (H)							6.2	5.9	5	5.1
Solids, Total							95.2	69.4	80.9	91
Total Organic Carbon										
Total Organic Carbon							1.47	0.594	1.16	0.695

Notes:

(7) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(8) SCOs for Protection of Groundwater promulgated at 6 NYCRR Part 375.

(9) SCOs for Residential Use Sites promulgated at 6 NYCRR Part 375.

(10) SCOs for Restricted-Residential Use Sites promulgated at 6 NYCRR Part 375.

(11) SCOs for Commercial Use Sites promulgated at 6 NYCRR Part 375.

(12) SCOs for Industrial Use Sites promulgated at 6 NYCRR Part 375.

(13) The sample was collected from the 0 to 2-inch depth interval except for the TCL VOC sample which was collected from the 2 to 6-inch depth interval.

(14) The sample was collected from the 2 to 12-inch depth interval except for the TCL VOC sample which was collected from the 6 to 12-inch depth interval.

* Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use and protection of groundwater.

** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, and residential use.

*** Analytical result exceeds NYSDEC Part 375 soil cleanup objectives for unrestricted use, protection of groundwater, residential use and restricted residential use. Bolded analytical result exceeds listed standard.

--- = No soil cleanup objective (SCO).

U = Analytical result is not detected at the reported detection limit for the sample.

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the method detection limit (MDL).

E = Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

UJ = Per the DUSR, any results qualified (U) due to blank contamination may then be qualified (J) due to another action. Therefore, the results may be qualified (UJ)

due to the culmination of the blank contaminations and actions from other exceedances of the quality control (QC) criteria.

Qualifiers in parantheses are from the data validator as presented in the Data Usability Summary Reports (DUSRs) for SDG #'s L2249668 and L2250010 dated October 26, 2022.

ATTACHMENT C

DATA REJECTIONS SUMMARY

DATA REJECTIONS SUMMARY

SURFACE-SHALLOW SOIL SAMPLING

ADIRONDACK REGIONAL AIRPORT SITE

<u>AOC-1</u>

Several PFAS compounds were rejected due to severely low surrogate recoveries¹, as follows.

RI-AOC1-03-0.0-0.17: N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA) and Perfluorotetradecanoic Acid (PFTA). The analytes were non-detect (U) in the analytical results.

RI-AOC1-02-0.0-0.5: N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA). The analyte was non-detect (U) in the analytical results.

RI-AOC1-03-0.0-0.17: NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC1-05-0.17-1.0: PFTA. The analyte was non-detect (U) in the analytical results.

<u>AOC-2</u>

Several PFAS compounds were rejected due to severely low surrogate recoveries, as follows.

RI-AOC2-01-0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC2-02-0.17-1.0: NMeFOSAA, NEtFOSAA and Perfluorotridecanoic Acid (PFTrDA). The analytes were non-detect (U) in the analytical results.

RI-AOC2-03_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC2-06_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-AOC2-08_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-AOC2-10_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical.

¹ Target analytes with a known concentration introduced by the laboratory into the environmental soil sample were detected in the sample at concentrations outside of the laboratory's internal quality control detection range criteria.

Two SVOCs were rejected due to severely low MS/MSD recoveries, as follows.

RI-AOC2-12_0.17-1.0: Hexachlorocyclopentadiene and 2,4-Dinitrophenol. The analytes were non-detect (U) in the analytical results.

AOC-3

Several PFAS compounds were rejected due to severely low surrogate recoveries, as follows.

RI-AOC3-01_0.0-0.17: Perfluoropentanoic Acid (PFPeA), Perfluorohexanoic Acid (PFHxA) and Perfluoroheptanoic Acid (PFHpA). The analytes were non-detect (U) in the analytical results.

RI-AOC3-03_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-04_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-05_0.17-1.0: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC3-09_0.17-1.0: NMeFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-10_0.17-1.0: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC3-11-0.17-1.0: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC3-12-0.0-0.17: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC3-12-0.17-1.0: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC3-13-0.0-0.17: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC3-14_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-15_0.17-1.0: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC3-16_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-17_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-18_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTrDA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-19-0.17-1.0: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC3-20_0.0-0.5: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-20_0.17-1.0: NMeFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-21_0.0-0.17: 1H, 1H, 2H, 2H-Perfluorodecanesulfonic Acid (8:2FTS), NMeFOSAA, NEtFOSAA and Perfluorododecanoic Acid (PFDoA). The analytes were non-detect (U) in the analytical results.

FIELD DUPLICATE of RI-AOC3-21_0.0-0.17: NMeFOSAA, NEtFOSAA, PFDoA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC3-21_0.17-1.0: NMeFOSAA, PFDoA and PFTA. The analytes were non-detect (U) in the analytical results.

<u>AOC-4</u>

Several PFAS compounds were rejected due to severely low surrogate recoveries, as follows.

RI-AOC4-01_0.0-0.17: PFDoA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC4-02_0.17-1.0: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC4-03_0.17-1.0: NMeFOSSA. The analyte was non-detect (U) in the analytical results.

RI-AOC4-04_0.0-0.5: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC4-04_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-AOC4-05_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC4-07_0.0-0.5: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC4-07_0.17-1.0: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC4-08-0.0-0.17: PFTA. The analyte was non-detect (U) in the analytical results.

RI-AOC4-08_0.17-1.0: NMeFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC4-09_0.0-0.5: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC4-09_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

<u>AOC-5</u>

No PFAS and TCL/TAL Parameters rejected.

<u>AOC-6</u>

RI-AOC6-01_0.17-1.0: NEtFOSAA. The analyte was non-detect (U) in the analytical results.

<u>AOC-7</u>

Several PFAS compounds were rejected due to severely low surrogate recoveries, as follows.

RI-AOC7-01_0.0-0.5: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

FIELD DUPLICATE OF RI-AOC7-01_0.0-0.5: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-01_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-02_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-03_0.0-0.5: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-03_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-04_0.17-1.0: NMeFOSAA, NEtFOSAA, PFDoA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-05_0.17-1.0: NMeFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-06_0.0-0.17: NEtFOSAA and PFTrDA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-06_0.17-1.0: NMeFOSAA, NEtFOSAA, PFDoA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-07_0.0-0.5: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-07_0.17-1.0: NMeFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-08_0.0-0.17: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-08_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-09_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-10_0.0-0.5: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-AOC7-10_0.17-1.0: NMeFOSAA, NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

AREAS OUTSIDE OF THE AOCs

Several PFAS compounds were rejected due to severely low surrogate recoveries, as follows.

RI-ARA-02_0.0-0.17: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-ARA-03_0.17-1.0: NMeFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-ARA-04_0.0-0.17: NEtFOSAA. The analyte was non-detect (U) in the analytical results.

RI-ARA-04_0.17-1.0: 8:2FTS and PFTA. The analytes were non-detect (U) in the analytical results.

RI-ARA-06_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-ARA-07_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-ARA-10_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-ARA-11-0.17-1.0: NEtFOSAA and PFTA. The analytes were non-detect (U) in the analytical results.

RI-ARA-12_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-ARA-13_0.17-1.0: NMeFOSSA. The analyte was non-detect (U) in the analytical results.

RI-ARA-14_0.0-0.5: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-ARA-14_0.17-1.0: NMeFOSAA and NEtFOSAA. The analytes were non-detect (U) in the analytical results.

RI-ARA-15_0.17-1.0: Perfluorooctanesulfonamide (FOSA). The analyte was non-detect (U) in the analytical results.

EXHIBIT 2

NYSDEC RI/FS Work Plan Modification Requests Letter

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Office of Environmental Quality, Region 5 1115 State Route 86, PO Box 296, Ray Brook, NY 12977 P: (518) 897-1241 | F: (518) 897-1245 www.dec.ny.gov

Sent Via Email Only

April 27, 2023

Honorable Jordanna Mallach Supervisor, Town of Harrietstown 39 Main Street Saranac Lake, NY 12983 jmallach@harrietstown.org

RE: RI/FS Work Plan Modification Requests Adirondack Regional Airport NYSDEC Site No.: 517013 Harrietstown (T), Franklin County

Dear Supervisor Mallach:

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has completed a review of the Remedial Investigation/Feasibility Study Work Plan (RI/FS Work Plan) Modification Requests within the Technical Memorandum prepared by C.T. Male Associates (C.T. Male), on behalf of the Town of Harrietstown, and dated March 10, 2023. Based on such review, NYSDEC has the following comments.

General Comment

• If evidence of contamination is encountered at additional sampling locations, environmental media should be analyzed for the Target Compound List, Target Analyte List, and cyanide (TCL/TAL Parameters).

<u>AOC-1</u>

- Modification Request: Additional surface/shallow soil sampling to further delineate per- and polyfluoroalkyl substances (PFAS).
- NYSDEC Response: Agreed. Please consider including an additional surface/shallow soil sample location north of RI-AOC1-01.
- Modification Request: No further soil investigation of pesticide detections at RI-AOC1-02.
- NYSDEC Response: Per RI/FS Work Plan, subsurface soil/groundwater should be sampled for TCL/TAL Parameters at this location.



Honorable Jordanna Mallach Re: RI/FS Work Plan Modification Requests, Adirondack Regional Airport April 27, 2023 Page 2

<u>AOC-2</u>

- Modification Request: Additional surface/shallow soil sampling and additional soil borings/overburden monitoring wells to further delineate PFAS.
- NYSDEC Response: Agreed.
- Modification Request: No further surface/shallow soil investigation of pesticide and semi-volatile organic compound (SVOC) detections at RI-AOC2-08.
- NYSDEC Response: Per RI/FS Work Plan, subsurface soil/groundwater should be sampled for TCL/TAL Parameters at this location.

<u>AOC-3</u>

- Modification Request: Additional surface/shallow soil sampling, additional soil borings/overburden monitoring wells at RI-AOC3-15, -17, and -18, and an additional bedrock monitoring well.
- NYSDEC Response: Agreed.
- Modification Request: Elimination of proposed soil borings/overburden monitoring wells at RI-AOC3-20 and RI-AOC3-21.
- NYSDEC Response: Per RI/FS Work Plan, soil borings/overburden monitoring wells were not planned at these locations.
- Modification Request: No further soil investigation of SVOC detections at RI-AOC3-09.
- NYSDEC Response: SVOCs in soil should be delineated and, per RI/FS Work Plan, subsurface soil/groundwater should be sampled for TCL/TAL Parameters at this location.

<u>AOC-4</u>

- Modification Request: Elimination of proposed soil borings/overburden monitoring wells at RI-AOC4-02, -04, -06, -07, -09, and -10.
- NYSDEC Response: Agreed; please ensure all remaining locations are sampled for TCL/TAL Parameters.

<u>AOC-5</u>

- Modification Request: No further investigation of AOC-5.
- NYSDEC Response: AOC-5 should be investigated in accordance with RI/FS Work Plan.

<u>AOC-6</u>

- Modification Request: No further investigation of AOC-6.
- NYSDEC Response: AOC-6 should be investigated in accordance with RI/FS Work Plan.

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<u>AOC-7</u>

- Modification Request: Additional surface/shallow soil, surface water, and sediment sampling for PFAS and a representative subset of samples analyzed for TCL/TAL Parameters.
- NYSDEC Response: Agreed.
- Modification Request: No further soil investigation of acetone detections at RI-AOC7-03, -04, and -07.
- NYSDEC Response: Please ensure subsurface soil/groundwater at soil boring/overburden monitoring well locations RI-AOC7-03 and RI-AOC7-04 are analyzed for TCL/TAL Parameters.

Areas Outside of the AOCs

- Modification Request: Additional surface/shallow soil sampling and additional soil boring/overburden monitoring well at RI-ARA-15.
- NYSDEC Response: Agreed.
- Modification Request: No further sampling conducted at RI-ARA-01.
- NYSDEC Response: Please ensure subsurface soil/groundwater at soil boring/overburden monitoring well location RI-ARA-01 are analyzed for TCL/TAL Parameters.

Please provide an RI/FS Work Plan Addendum to NYSDEC and NYSDOH for review. If you have any questions regarding this matter, please feel free to contact me by phone at (518) 897-1241 or by email at <u>Nicole.Hinze@dec.ny.gov</u>.

Sincerely, missie Hunge

Nicole Hinze Assistant Engineer (Environmental)

NH:ks

ec: Kieran McCarthy, NYSDEC - <u>Kieran.McCarthy@dec.ny.gov</u> Harolyn Hood, NYSDOH - <u>Harolyn.Hood@health.ny.gov</u> Stephanie Selmer, NYSDOH - <u>Stephanie.Selmer@health.ny.gov</u> Justin Deming, NYSDOH - <u>Justin.Deming@health.ny.gov</u> Stephen Bieber, C.T. Male - <u>s.bieber@ctmale.com</u> Kirk Moline, C.T. Male - <u>k.moline@ctmale.com</u> Mark Williams, C.T. Male - <u>m.williams@ctmale.com</u> Nicholas Rigano, Rigano, LLC - <u>nrigano@riganollc.com</u>