
PERIODIC REVIEW REPORT

2020 HETTLING PARK

TOWN OF CLERMONT, COLUMBIA COUNTY, NY

CPL PROJECT NO.: 15763

DOCUMENT DATE: NOVEMBER 2020

Revisions to Periodic Review Report:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

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I. Executive Summary

CPL has prepared this Periodic Review Report (PRR) for the Hettling Park (the Site) in the Town of Clermont, Columbia County, NY (Figure 1). The period of review for this report is October 2020 to January 2022. This PRR was prepared in accordance with the requirements in Section 6.3(b) NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010 and guidelines provided by the NYSDEC.

1.1 Site History and Remedial Program

The Site, Hettling Park (formerly Hettling Farm) has been remediated from its previous contaminated state. The New York State Department of Environmental Conservation (NYSDEC) produced a Record of Decision for the Site in March of 2008. The description of the Site characteristics are as follows:

"The Former Hettling Farm Site is located in the Town of Clermont, in Columbia County, New York. The Site consists of 20.5 acres and is located along the western side of U.S. Route 9, approximately 1,100 feet north of the intersection of U.S. Route 9 and County Route 6. The Site's general location is in a rural setting, and presently consists of vacant land which has historically been utilized for agricultural purposes. The Site is bordered on the west and north by other lands belonging to Hettling, by private property and a cemetery to the southwest, and by private and Town lands to the south. The Site rises gradually from its eastern border with Route 9, to the property boundary on the west side. An artificial ditch and intermittent stream, constructed for drainage and/or irrigation, roughly bisect the Site flowing south to north.

The soils at the Site consist of sand, gravel, and varying percentages of silt and cobbles. Distinct clay layers consisting of greyish-brown and or blueish-grey clay of various thicknesses were encountered at different areas around the Site. Bedrock at the Site is composed of shale and was encountered at depths ranging from 6.5 feet below ground surface up on the west side of the Site, to greater than 20 feet below ground surface in the east side of the Site.

A majority of the 20.5 acres of the Site were historically utilized for agricultural purposes. Generally, the lands to the west of the artificial ditch and intermittent stream were primarily utilized as apple orchards and the lands on the eastern portion were utilized for cultivation of row crops, vegetables and/or vineyards and orchards. The use of persistent inorganic and organic pesticides as well as the application of fertilizers resulted in the deposition of these hazardous substances in the Site media. In addition, there was evidence that waste material may have been disposed on the surface and in the subsurface adjacent to the Site. A large stockpile of railroad ties and poles, which may have been treated with coal tar creosote and/or chromated

copper arsenate (CCA) for preservation, were disposed on the surface in the north section of the site."

Arcadis was hired to design and implement one of the various plans the NYSDEC produced for the remediation of the Site.

A Remedial Investigation / Alternatives Analysis Work Plan (RI) was performed by C.T. Male Associates, P.C. (July 2006) to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the Record of Decision (ROD) dated March 2008. In April 2009, a supplemental soil investigation was performed in addition to the RI. The site was remediated in accordance with the NYSDEC-approved ROD and the Final Engineering Report. Remediation of sediments on the Former Hettling Farm site was completed in 2019. The remedial action also includes continued environmental monitoring.

A Site Management Plan (SMP), dated January 2019, was developed to provide a detailed description of all procedures required to manage remaining contamination at the site after completion of the Remedial Action.

1.2 Remedy Evaluation and Recommendations Summary

In summary, this PRR is intended to evaluate the ongoing management of the selected remedial program for the site as outlined in the Site Management Plan (SMP) dated January 2019. Based on information reviewed as part of this PRR, implementation of investigation and maintenance activities is required in order to ensure that the remedy is performing properly and effectively and is protective of public health and the environment.

In order to maintain compliance with the requirements presented in the SMP, a summary of recommended investigation and maintenance activities is provided below.

- Continue groundwater sampling on an annual basis in order to evaluate trends in groundwater criteria.
- Sample surface/sediment locations if discharge is present in these locations and actively flowing to evaluate trends.
- Continue annual routine site inspection and maintenance of the landfill.

- Repair deficiencies noted in routine site inspections.

II. Site Overview

This PRR has been prepared for the Former Hettling Farm site, located in the Town of Clermont, Columbia County, New York. This PRR covers the period of October through January 2022. The NYSDEC has assigned the Site the ID No. E411015. This site is currently not on the NYSDEC's registry of inactive hazardous waste sites. The Site is a Class C site. A Class C site is a site that has been determined that the remediation has been satisfactorily completed under a remedial program but requires continued operation and maintenance.

2.1 Objectives of the Periodic Review

The periodic review process is used for determining if a remedy continues to be properly managed as set forth in the guidance documents for the Site and is protective of human health and the environment. The objectives of the periodic review for sites in the State Superfund Program are as follows:

- Determine if the remedy remains in place, is performing properly and effectively, and is protective of public health and the environment;
- Evaluate compliance with the decision document(s) and the SMP; Evaluate the condition of the remedy;
- Verify, if appropriate, that the intent of Institutional Controls (IC) continues to be met, and that Engineering Controls (EC) remain in place, are effective and protective of public health and the environment;
- Evaluate the implemented remedies' effectiveness towards moving the Site to closure.

2.2 Remedial History

The Former Hettling Park site is an approximately 20.5-acre former orchard/farming. Based upon the soil investigation, the main farming areas were identified at the site to have soil contamination and agricultural

waste. Numerous types of testing were completed during the soil investigation; Surface soil, subsurface soil, groundwater, surface water, sediments, and soil vapor. Surface soil and subsurface soil investigations both produced areas of concern outlined within the SI report and echoed with in the ROD. Arsenic was found in the surface soils at a level that exceeded the Part 375 of the Protection for Public Health – Restricted Use Commercial criteria. Like surface soils, the subsurface soils were sampled via test pits in the locations where anomalies were detected in the electromagnetic survey and analyzed against the Part 375, SCO for arsenic (16 ppm). Groundwater, surface water, sediments and soil vapor were all found to have no significant site-related contamination at levels of concern of the SCO so no remedial alternatives were needed for these scenarios.

A RI was performed to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the ROD dated March 2008. The site was remediated in accordance with the NYSDEC-approved ROD and the Final Closure Plan. A Part 360 cap was installed at the site. The potential for soil vapor intrusion was evaluated by the NYSDOH and the NYSDEC, and no further actions were deemed necessary. The remedial action also includes continued environmental monitoring (annual groundwater and surface water sampling).

A SMP, dated January 2019, was developed to provide a detailed description of all procedures required to manage remaining contamination at the site after completion of the Remedial Action.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

The SMP describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, the soil cover system, and all affected site media. Groundwater monitoring was performed in July 2020 in each of the monitoring wells on site. The monitoring consisted of sampling and analysis on monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7 with a surface water sample SW-1.

In 2019, the SMP and accompanying Environmental Easement was implemented. As a result, the site received a re-classification from a Class 2 site to a Class 4 site. Based on these efforts, the site received a reduction in the long-term groundwater monitoring program from five-quarter rotation to once every three years and reduction in the number of monitoring wells from ten to seven wells. The current monitoring program for the site is summarized in the Table below.

Task	Frequency	Matrix	Reporting
Groundwater Monitoring	Annually for the First Five Years	Groundwater	Field Parameters TAL Metals 1,4-Dioxane PFAs
Surface water Monitoring	Annually for the First Five Years	Surface water	Field Parameters TAL Metals 1,4-Dioxane PFAs
Cover System	Inspection during each groundwater	Soil, Asphalt, and Gravel cover	Visual Inspection

	monitoring event		
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IV. IC/EC Plan Compliance Report

A series of institutional controls (IC) and engineering controls (EC) at the Site currently consist of an environmental monitoring to ensure effectiveness of the remedy.

The following tables are a comparison of the IC and EC identified in the SMP and the actual site conditions:

DER-10	Remedial Actions	Actual Site Conditions
Source Removal	Contaminated railroad ties and poles as well as contaminated surface soil / subsurface soil to covered or removed from site	Contaminated railroad ties and poles disposed of off site at an approved location.
Containment/ Isolation	Installation of a final cover	Engineered cover system installed included soil cover (Type II), stone cover (Type III), and asphalt cover (Type IV)
Long Term Monitoring	Long term monitoring of groundwater	Long term monitoring of groundwater performed on an annual basis
Long Term Monitoring	Long term monitoring of surface water	Sampled Annually if there is standing water present in drainage ditch

4.1 IC/EC Requirements and Compliance

Determination of compliance with the IC/EC at the Site is made based on the following criteria:

- The EC(s) applied at the site are in place and unchanged from previous certification. However, several of the monitoring wells are either dry, obstructed, or missing/not locatable,
- Nothing has occurred that would impair the ability of such controls to protect the public health and the environment, or constitute a violation or failure to comply with any element of the SMP for such controls,
- Access to the Site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of such controls.

Currently, certification that the site IC and EC's are in compliance with the requirements stated above.

4.2 IC/EC Certification

See Appendix A.

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V. Monitoring Plan Compliance Report

The current Monitoring Plan was prepared by Arcadis CE, Inc. dated January 2019. A copy of the plan is included within the SMP. This PRR assesses whether the site has been managed as set forth in Monitoring Plan.

5.1 Components of the Monitoring Plan

The monitoring plan consists of the following:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and documentation of site conditions.

The groundwater monitoring was performed August 26th, 2020 for the first set of sampling since the cover was installed. The groundwater samples will continue to be monitored for the next 4 years. The initial groundwater monitoring consisted of sampling and analysis of seven monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7 along with surface water samples SW-1. In 2019, the SMP and accompanying Environmental Easement was implemented.

5.2 Summary of Monitoring Completed During Reporting Period

The monitoring completed during the reporting period of March 2019 through October 2020 consisted of the following:

Activity	Compliance Date(s)
Site Management Plan	January 2019
Groundwater and Surface Water Quality Monitoring	August 2020

5.3 Comparisons with Remedial Objectives

The sections below discuss the results of the groundwater conducted in accordance with the guidance documents and provided a summary of the results. The surface water samples could not be taken at this time, as there was no water within the drainage ditch at the time of the groundwater samples. Once the surface water samples are taken and analyzed this PRR will be revised and amended.

5.3.1 Summary of Sampling Results

Groundwater samples were collected from the seven (7) monitoring wells. A summary of the results can be found in Appendix B.

The samples were collected from each of the monitoring wells, analyzed and the results were compared with the Water Quality Regulations for groundwater as promulgated by NYCRR 6 Part 703.5 (f). The laboratory test results define the following: sample collection dates, field observations, analytical test results and monitoring well alphanumeric designation.

Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7 were sampled during this event. During the sampling of the monitoring wells it was discovered that several of the wells were either damaged or missing all together. These included; MW-3 (missing), MW-6 (missing), and MW-7 (abstracted at about 5' below grade). In these cases, samples could not be taken and analyzed

further. In addition, surface water samples were attempted to be collected but as previously stated, at the time of sampling SW-1 was dry and observed only.

The New York State Department of Environmental Conservation, Division of Water T.O.G.S.-1.1.1, Ambient Water Quality Standards and Guidance Values and 6 NYCRR Part 703 define the quality criteria for the sampled waters. The monitoring well samples were compared to the "GA" classification criteria.

Below is the data summary table listing parameters that have exceeded the standard or guidance value in the current period. All sample results are presented in comparable units to the guidance values. Following the summary table is a brief discussion of the parameters that are monitored and further discussion for those parameters that exceeded the guidance values/standards.

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Parameter ¹	Maximum Allowable Concentration (ug/L)	MW-1 (d)	MW-2* (d)	MW-3* (d)	MW-4 (d)	MW-5 (u)	MW-5 DUP (u)	MW-6 (u)	MW-7 (u)
Aluminum	2000.0 ug/L	ND	WELL WENT DRY	WELL IS MISSING	WELL DRY	ND	ND	WELL IS MISSING	WELL OBSTRUCTED AT 5 FT
Antimony	6.0 ug/L	ND	-	-	-	ND	ND	-	-
Arsenic	50.0 ug/L	ND	-	-	-	ND	ND	-	-
Barium	2000.0 ug/L	27.2	-	-	-	58.8	59.7	-	-
Beryllium	3.0 ug/L	ND	-	-	-	ND	ND	-	-
Boron	2000.0 ug/L	81.9	-	-	-	20.1	20.1	-	-
Cadmium	10.0 ug/L	ND	-	-	-	ND	ND	-	-
Calcium ²	-	19300	-	-	-	21600	21800	-	-
Chromium	100.0 ug/L	ND	-	-	-	ND	ND	-	-
Cobalt	5.0 ug/L	0.25	-	-	-	ND	ND	-	-
Copper	200.0 ug/L	5.41	-	-	-	2.82	3.41	-	-
Iron	300.0 ug/L	102	-	-	-	94.1	73.8	-	-
Lead	50.0 ug/L	ND	-	-	-	ND	ND	-	-
Magnesium	35000.0 ug/L	4660	-	-	-	5200	5260	-	-
Manganese	600.0 ug/L	8.21	-	-	-	5.47	4.48	-	-
Mercury	1.4 ug/L	ND	-	-	-	ND	ND	-	-
Nickel	200.0 ug/L	0.71	-	-	-	ND	ND	-	-
Potassium ²	-	5180	-	-	-	540	510	-	-
Selenium	20.0 ug/L	ND	-	-	-	ND	ND	-	-
Silver	100.0 ug/L	ND	-	-	-	ND	ND	-	-
Sodium	20000 ug/L	70500	-	-	-	3050	2890	-	-
Thallium	0.5 ug/L	0.22	-	-	-	1.6	1.32	-	-
Vanadium ²	-	7.62	-	-	-	5.76	5.58	-	-
Zinc	5000.0 ug/L	3.45	-	-	-	5.52	2.7	-	-
1-4 Dioxane ³	0.04 ug/L	ND	-	-	-	ND	0.03	-	-

Sampling Date: August 26th, 2020

Notes:

(u) = Upgradient Monitoring Well

(d) = Downgradient Monitoring Well

* = Wells produced no data during sampling.

¹Standard or Guidance Value (GV) per NYS DEC Division of Water, T.O.G.S. – 1.1.1 and 6 NYCRR §703

²Standard or Guidance Value (GA) per NYS DEC Division of Water, T.O.G.S. – 1.1.1 and 6 NYCRR §703 not provided

³Reporting Limit used during lab analysis by ALS Environmental using Method 8270D SIM

- = Either non-detect or not exceeded or no sample taken this period

Parameter	MW-1 (Downgradient)	MW-5 (Upgradient)	MW-5 DUP (Upgradient)
	ng/L	ng/L	ng/L
Perfluorobutanesulfonic acid (PFBS)	4.99	ND	ND
Perfluorohexanoic acid (PFHxA)	13.40	ND	ND
Perfluoroheptanoic acid (PFHpA)	3.89	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	ND	ND	ND
Perfluorooctanoic acid (PFOA)	16.70	ND	ND
Perfluorooctanesulfonic acid (PFOS)	3.32	2.26	ND
Perfluorononanoic acid (PFNA)	ND	ND	ND
Perfluorodecanoic acid (PFDA)	ND	ND	ND
PerFluoroUndecanoic Acid (PFUnA)	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND
Perfluorotetradecanoic acid (PFTA)	ND	ND	ND
N-Methyl perFluoroOctaneSulfonAmidoacetic Acid (NMeFOSAA)	ND	ND	ND
N-Ethyl perFluoroOctaneSulfonamidoAcetic Acid (NEtFOSAA)	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	8.33	ND	ND
Perfluorooctane Sulfonamide (FOSA)	ND	ND	ND
Sodium Perfluoro -1- heptanesulfonate (PFHpS)	ND	ND	ND
Perfluorodecanesulfonic acid (PFDS)	ND	ND	ND
Sodium H1, H1, H2,H2- Perfluoro -1- octanesulfonate (6:2FTS)	ND	ND	ND
Sodium H1, H1, H2,H2- Perfluoro -1- decanesulfonate (8:2FTS)	ND	ND	ND
Perfluorobutanoic acid (PFBA)	4.03	ND	ND
MPFOA (ng/mL)	0.00	0.00	0.00

Notes: Emerging Containments were tested in accordance with method SPE Ext-PFAS-EPA 537m

5.3.2 Discussion of Sampling Results

Aluminum:

The standard of aluminum at a concentration of 2000.0 ug/l was not exceeded by any wells.

Antimony:

The standard for antimony at a concentration of 6.0 ug/l was not exceeded by any wells for this report period.

Arsenic:

The standard for Arsenic at a concentration of 50.0 ug/l was not exceeded by any wells for this report period.

Barium:

The standard for Barium at a concentration of 2000.0 ug/l was not exceeded by any wells.

Beryllium:

The standard for beryllium at a concentration of 3.0 ug/l was not exceeded by any wells.

Boron:

The standard for boron at a concentration of 2000.0 ug/l was not exceeded by any wells.

Cadmium:

The standard for cadmium at a concentration of 10.0 ug/l was not exceeded by any wells.

Calcium:

There is no standard for calcium, levels will continue to be monitored.

Chromium:

The standard for chromium at a concentration of 100.0 ug/l was not exceeded by any wells.

Cobalt:

The standard for cobalt at a concentration of 5.0 ug/l was not exceeded by any wells.

Copper:

The standard for copper at a concentration of 200.0 ug/l was not exceeded by any wells

Iron:

The standard for iron at a concentration of 300.0 ug/l was not exceeded by any wells.

Lead:

The standard for lead at a concentration of 50.0 ug/l was not exceeded by any wells.

Magnesium:

The standard for magnesium at a concentration of 35000.0 ug/l was not exceeded by any wells.

Manganese:

The standard for manganese at a concentration of 600.0 ug/l was not exceeded by any wells.

Mercury:

The standard for mercury at a concentration of 1.4 ug/l was not exceeded by any wells.

Nickel:

The standard for nickel at a concentration of 200.0 ug/l was not exceeded by any wells.

Potassium:

There is no standard for Potassium, levels will continue to be monitored.

Selenium:

The standard for selenium at a concentration of 20.0 ug/l was not exceeded by any wells.

Silver:

The standard for silver at a concentration of 100.0 ug/l was not exceeded by any wells.

Sodium:

The sodium standard of 20000.0 ug/l was exceeded at one down

gradient monitoring wells MW-1 with a reported result of 70500.0 ug/l. Results will be closely observed in future monitoring events to establish any long-term trends.

Thallium:

The thallium standard of 0.5 ug/l was exceeded at one up gradient monitoring well MW-5 with a reported result of 1.6 ug/l. A similar result was found during the analysis of the duplicate sample MW-5 DUP which was also taken from monitoring well MW-5. The reported result in MW-5 DUP was 1.32 ug/l. Results will be closely observed in future monitoring events to establish any long-term trends.

Vanadium:

There is no standard for calcium, levels will continue to be monitored.

Zinc:

The standard for zinc at a concentration of 5000.0 ug/l was not exceeded by any wells.

1,4-Dioxane:

There is no standard limit for 1,4-Dioxane, however the lab was examining the samples with a reporting limit of 0.04 ug/l. MW-1 and MW-5 registered as Non detects (ND) and MW-5 DUP had a result of 0.03 ug/l. Results for 1,4-Dioxane will be closely monitored during future observation events to establish any long-term trend.

Perfluorinated Alkyl Acids (PFAs):

The monitoring wells had varying results during the PFA analysis. MW-1 had a recorded result for several of the PFAs that were tested for. PFBS, PFHxA, PFHpA, PFOA, PFOS, PFPeA, and PFBA were all found during sampling of monitor well 1 (MW-1) with the results being 4.99 ng/L, 13.40 ng/L, 3.98 ng/L, 16.70 ng/L, 3.32 ng/L, 8.33 ng/L, and 4.03 ng/L respectively. MW-5 had one result; 2.26 ng/L for PFOS. MW-5 DUP resulted in all non-detects (ND). PFAs have been a larger concern in recent years and as such will continued to be observed diligently in the future to establish any long-term trends.

5.4 Monitoring Deficiencies

As was previously stated throughout this report, there are several deficiencies that will require maintenance prior to the next annual PPR. Monitoring Wells MW-3 and 6 will be located on the property and inspected to make sure they are still functional. Monitoring Well 7 (MW-7) will be inspected to see if the reference blockage can be mended or if a new well will be necessary to replace MW-7. If MW-3 and MW-6 can't be located as well as MW-7 truly being blocked, the NYSDEC will be notified prior to any decommissioning or replacement as stated within section 3.3.7.2 Monitoring Well Repairs, Replacement and Decommissioning of the SMP.

No surface water samples have been taken at this time due to the lack of stormwater runoff at the discharge point on the project site. 2020 was an excessively dry year and moving forward stormwater samples will be taken if/when possible per the SMP.

5.5 Conclusions and Recommendations for Changes

Due to this being year one of the annual groundwater and stormwater sampling there is very little data to identify trends for if the installed cap is functioning properly or not. The only metals that were of some concern were Sodium, Calcium, Potassium, and Thallium. Of those chemicals only sodium and thallium has results over their maximum allowable concentration. MW-1 may have an abundance of Sodium as it is right near the state road that borders the property. Road salt usage could have an impact on the ground water in that specific area as levels of sodium in MW-5 are substantially less. Over the next couple years list of analytes will continue to be analyzed to monitor their concentrations within the site and its surroundings.

It is recommended that the monitoring wells all be evaluated for functionality and accessibility, and that all wells that are found to be not useable be fixed by either correcting the existing issue or decommissioning the existing well and drilling a new monitoring well per the NYSDEC's request.

VI. Overall PRR Conclusions and Recommendations

The following sections summarize the overall compliance with the SMP, performance and effectiveness of the remedy based on media sampling results and future submission of the PRR.

6.1 Compliance with SMP

The schedule and reporting of the monitoring and inspections performed to date have been in compliance with the SMP and the current long-term monitoring program, however due to site conditions stated multiple times previously no stormwater runoff samples have been taken to date. This is out of compliance with the SMP but is being monitored still moving forward when it is allowed due to site conditions.

In accordance with the SMP, the NYSDEC will be notified of any impacts to the cover system or other issues discovered during the monitoring and inspections that may limit the effectiveness of the engineering controls within seven days of discovery.

A copy of the Site Management Periodic Review Report Notice and Institutional and Engineering Controls Certification Form is included in Appendix A.

6.2 Performance and Effectiveness of the Remedy

The completed final capping system is expected to significantly eliminate surface water and precipitation infiltration into the waste mass thereby reducing impacts to local groundwater quality as the waste mass desiccates. Most of the exceedances of groundwater standards or guidance values at down gradient monitoring wells and sampling points can be attributed, in part, to either naturally occurring background concentrations. Monitoring data indicates that the former hettling farm site is not contributing to the elevated levels recorded in the monitoring wells. Future monitoring events will be studied to observe long-term trends in groundwater and surface water quality.

Surface water sample results were not able to be analyzed due to lack of surface discharge at the sampling point. This will be continued to be monitored on subsequent PRR submittals.

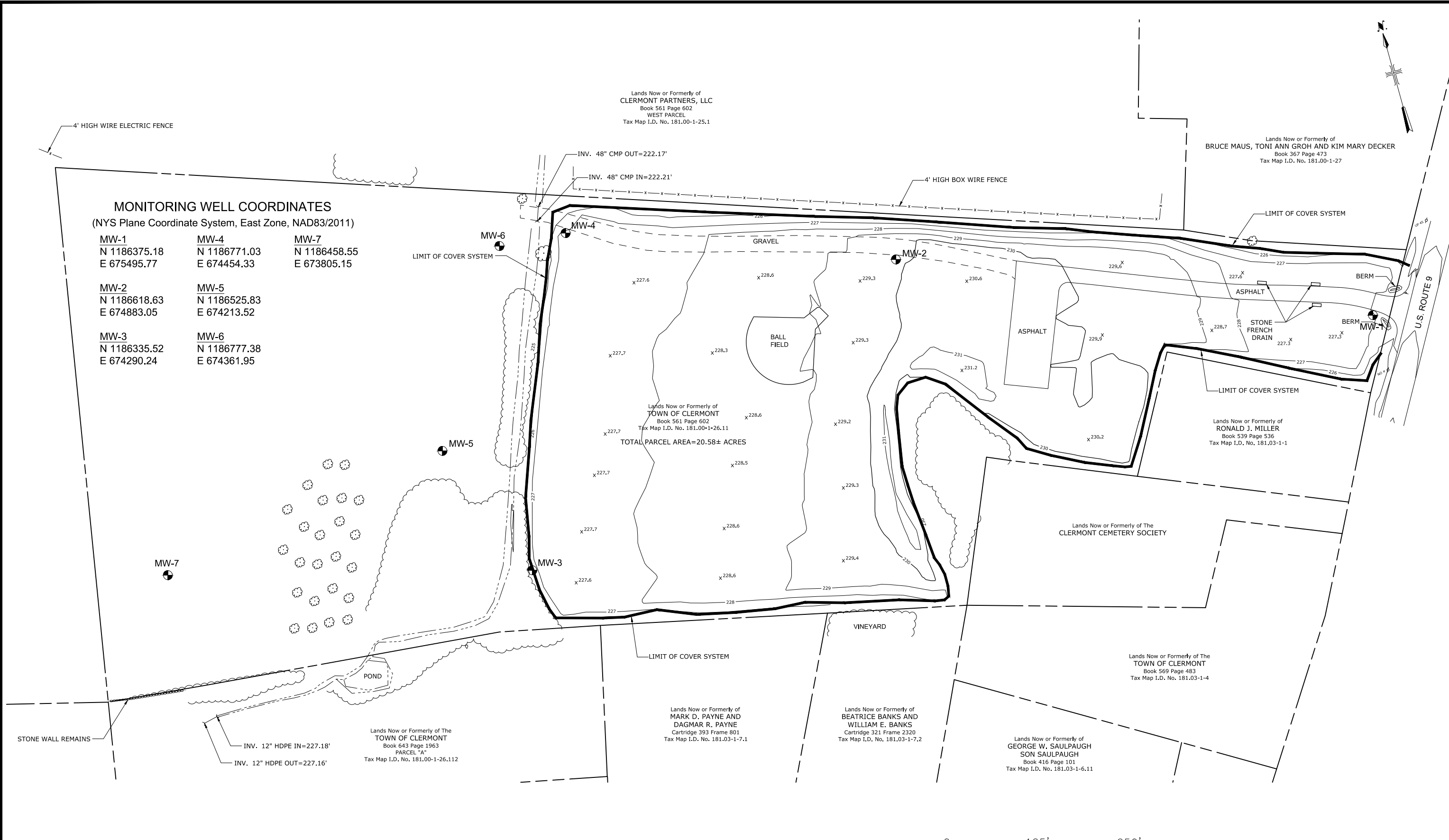
6.3 Future PRR Submittals

Future PRR's will be submitted to the Department annually. The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45-days of the end of each certification period. A summary of the sampling results will also be incorporated into the Periodic Review Report as well as submitted electronically via the Equis Software.

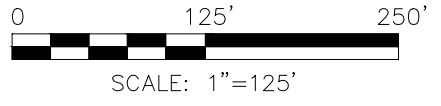
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FIGURES

USER: HAUSMANN FILENAME: G:\ACAD\PROJ\00266425\0000\FIGURES\HETTLING FARM\FIGURE 4-MONITORING WELLS.DWG SAVE DATE: 1/16/2019 2:36 PM PLOT DATE: 1/16/2019 2:37 PM



SOURCE: MAP TITLED "FINISH GRADE TOPOGRAPHY, FORMER HETTLING FARM SITE", CREATED BY NMB LAND SURVEYING, DATED 8/8/17.



APPENDIX A

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



	Site Details		Box 1
Site No.	E411015		
Site Name Former Hettling Property			
	1811 Route 9		
Site Address:	1795 Route 9	Zip Code:	12526
City/Town:	Clermont		
County:	Columbia		
Site Acreage:	20.570		
Reporting Period: November 28, 2018 to July 01, 2020			
			YES NO
1.	Is the information above correct?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	If NO, include handwritten above or on a separate sheet.		
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			Box 2
			YES NO
6.	Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.			
A Corrective Measures Work Plan must be submitted along with this form to address these issues.			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

Description of Institutional Controls

Parcel

Owner

Institutional Control

181-1-26.11

Williams Banks, Town of Clermont

Landuse Restriction
Site Management Plan

Soil Management Plan
Monitoring Plan

Environmental easement which limits the use and development of property to restricted-residential use and requires compliance with approved SMP. SMP will require: (a) management and monitoring of final cover system; (b) compliance with soil excavation plan; (c) monitoring of groundwater and required water quality testing in accordance with local and county requirements for any use of groundwater as a potable water source; (d) identification of any use restrictions on-site; (e)provisions for maintenance of remedy components. A periodic certification of the IC/ECs will be required by property owner.

Description of Engineering Controls

Parcel

Engineering Control

181-1-26.11

Cover System
Monitoring Wells

A cover system to allow restricted-residential use of the site.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

**IC CERTIFICATIONS
SITE NO. E411015**

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I _____ at _____,
print name print business address

am certifying as _____ (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

Date

IC/EC CERTIFICATIONS

Box 7

Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I _____ at _____,
print name print business address

am certifying as a _____
(Owner or Remedial Party)

Signature of _____, for the Owner or Remedial Party,
Rendering Certification

Stamp
(Required for PE)

Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

- I. Executive Summary: (1/2-page or less)
 - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
 - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding:
 1. progress made during the reporting period toward meeting the remedial objectives for the site
 2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
 - C. Compliance
 1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
 2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
 - D. Recommendations
 1. recommend whether any changes to the SMP are needed
 2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
 3. recommend whether the requirements for discontinuing site management have been met.

- II. Site Overview (one page or less)
 - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
 - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

- IV. IC/EC Plan Compliance Report (if applicable)
 - A. IC/EC Requirements and Compliance
 1. Describe each control, its objective, and how performance of the control is evaluated.
 2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
 3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
 4. Conclusions and recommendations for changes.
 - B. IC/EC Certification
 1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

- V. Monitoring Plan Compliance Report (if applicable)
 - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
 - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
 - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
 - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
 - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
 - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
 - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
 - C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

- D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
 - 1. whether all requirements of each plan were met during the reporting period
 - 2. any requirements not met
 - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. Future PRR Submittals
 - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
 - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

APPENDIX B

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
 Work Order: 200826074
 Reference: Former Hettling Farm Site / Annual GW
 PO#:

Client Sample ID: FHS-MW-01
 Collection Date: 8/26/2020 12:40:00 PM
 Lab Sample ID: 200826074-001
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

Analyst: FLD

Conductivity (E120.1)	549	1.0		umhos/cm		8/26/2020 12:40:00 PM
Dissolved Oxygen (E360.1)	7.23	0.10		mg/L		8/26/2020 12:40:00 PM
eH (Orion)	170.1			mV		8/26/2020 12:40:00 PM
pH (E150.1)	5.8			S.U.		8/26/2020 12:40:00 PM
Static Water Level	17.69			ft		8/26/2020 12:40:00 PM
Temperature (E170.1)	16			deg C		8/26/2020 12:40:00 PM
Turbidity (E180.1)	8	1.0		NTU		8/26/2020 12:40:00 PM

MERCURY - EPA 245.1 REV 3.0

Analyst: AVB

(Prep: E245.1 - 8/27/2020)

Mercury	ND	0.20		µg/L	1	8/27/2020 2:28:30 PM
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ICP METALS - EPA 200.7

Analyst: KH

(Prep: SW3010A - 8/27/2020)

Aluminum	ND	100		µg/L	1	9/1/2020 11:23:00 AM
Antimony	ND	60.0		µg/L	1	9/1/2020 11:23:00 AM
Arsenic	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Barium	27.2	10.0		µg/L	1	9/1/2020 11:23:00 AM
Beryllium	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Boron	81.9	50.0		µg/L	1	9/1/2020 11:23:00 AM
Cadmium	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Calcium	19300	50.0		µg/L	1	9/1/2020 11:23:00 AM
Chromium	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Cobalt	0.25	50.0	J	µg/L	1	9/1/2020 11:23:00 AM
Copper	5.41	5.00		µg/L	1	9/1/2020 11:23:00 AM
Iron	102	50.0		µg/L	1	9/1/2020 11:23:00 AM
Lead	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Magnesium	4660	50.0		µg/L	1	9/1/2020 11:23:00 AM
Manganese	8.21	20.0	J	µg/L	1	9/1/2020 11:23:00 AM
Nickel	0.71	20.0	J	µg/L	1	9/1/2020 11:23:00 AM
Potassium	5180	50.0		µg/L	1	9/1/2020 11:23:00 AM
Selenium	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Silver	ND	10.0		µg/L	1	9/1/2020 11:23:00 AM
Sodium	70500	500		µg/L	10	9/1/2020 11:28:00 AM
Thallium	0.22	10.0	J	µg/L	1	9/1/2020 11:23:00 AM
Vanadium	7.62	20.0	J	µg/L	1	9/1/2020 11:23:00 AM
Zinc	3.45	10.0	J	µg/L	1	9/1/2020 11:23:00 AM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 X - Value exceeds Maximum Contaminant Level
 E - Value above quantitation range-Estimate
 S - LCS Spike below accepted limits (+ above)
 Z - RPD outside accepted recovery limits
 N - Matrix Spike below accepted limits (+ above)
 T - Tentatively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT:	Town of Clarmont	Client Sample ID:	FHS-MW-01
Work Order:	200826074	Collection Date:	8/26/2020 12:40:00 PM
Reference:	Former Hettling Farm Site / Annual GW	Lab Sample ID:	200826074-001
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SEMI-VOLATILE ORGANICS - EPA 8270D SIM						Analyst: 10145
1,4-Dioxane	ND	0.04		µg/L	1	9/2/2020 6:39:00 PM
Surr: 1,4-Dioxane - d8	93.0	64-124		%REC	1	9/2/2020 6:39:00 PM

Qualifiers:	ND - Not Detected at the Reporting Limit	S - LCS Spike below accepted limits (+ above)
	J - Analyte detected below quantitation limits	Z - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	N - Matrix Spike below accepted limits (+ above)
	X - Value exceeds Maximum Contaminant Level	T - Tentitively Identified Compound-Estimated Conc.
	E - Value above quantitation range-Estimate	

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
 Work Order: 200826074
 Reference: Former Hettling Farm Site / Annual GW
 PO#:

Client Sample ID: FHS-MW-05
 Collection Date: 8/26/2020 11:30:00 AM
 Lab Sample ID: 200826074-002
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD

Conductivity (E120.1)	181	1.0		umhos/cm		8/26/2020 11:30:00 AM
Dissolved Oxygen (E360.1)	4.04	0.10		mg/L		8/26/2020 11:30:00 AM
eH (Orion)	192.6			mV		8/26/2020 11:30:00 AM
pH (E150.1)	5.6			S.U.		8/26/2020 11:30:00 AM
Static Water Level	9.87			ft		8/26/2020 11:30:00 AM
Temperature (E170.1)	16			deg C		8/26/2020 11:30:00 AM
Turbidity (E180.1)	8	1.0		NTU		8/26/2020 11:30:00 AM

MERCURY - EPA 245.1 REV 3.0 Analyst: AVB
 (Prep: E245.1 - 8/27/2020)

Mercury	ND	0.20		µg/L	1	8/27/2020 2:30:13 PM
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ICP METALS - EPA 200.7 Analyst: KH
 (Prep: SW3010A - 8/27/2020)

Aluminum	ND	100		µg/L	1	9/1/2020 11:33:00 AM
Antimony	ND	60.0		µg/L	1	9/1/2020 11:33:00 AM
Arsenic	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Barium	58.8	10.0		µg/L	1	9/1/2020 11:33:00 AM
Beryllium	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Boron	20.1	50.0	J	µg/L	1	9/1/2020 11:33:00 AM
Cadmium	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Calcium	21600	50.0		µg/L	1	9/1/2020 11:33:00 AM
Chromium	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Cobalt	ND	50.0		µg/L	1	9/1/2020 11:33:00 AM
Copper	2.82	5.00	J	µg/L	1	9/1/2020 11:33:00 AM
Iron	94.1	50.0		µg/L	1	9/1/2020 11:33:00 AM
Lead	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Magnesium	5200	50.0		µg/L	1	9/1/2020 11:33:00 AM
Manganese	5.47	20.0	J	µg/L	1	9/1/2020 11:33:00 AM
Nickel	ND	20.0		µg/L	1	9/1/2020 11:33:00 AM
Potassium	540	50.0		µg/L	1	9/1/2020 11:33:00 AM
Selenium	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Silver	ND	10.0		µg/L	1	9/1/2020 11:33:00 AM
Sodium	3050	50.0		µg/L	1	9/1/2020 11:33:00 AM
Thallium	1.60	10.0	J	µg/L	1	9/1/2020 11:33:00 AM
Vanadium	5.76	20.0	J	µg/L	1	9/1/2020 11:33:00 AM
Zinc	5.52	10.0	J	µg/L	1	9/1/2020 11:33:00 AM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 X - Value exceeds Maximum Contaminant Level
 E - Value above quantitation range-Estimate
 S - LCS Spike below accepted limits (+ above)
 Z - RPD outside accepted recovery limits
 N - Matrix Spike below accepted limits (+ above)
 T - Tentatively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT:	Town of Clarmont	Client Sample ID:	FHS-MW-05
Work Order:	200826074	Collection Date:	8/26/2020 11:30:00 AM
Reference:	Former Hettling Farm Site / Annual GW	Lab Sample ID:	200826074-002
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SEMI-VOLATILE ORGANICS - EPA 8270D SIM						Analyst: 10145
1,4-Dioxane	ND	0.04		µg/L	1	9/2/2020 6:57:00 PM
Surr: 1,4-Dioxane - d8	87.0	64-124		%REC	1	9/2/2020 6:57:00 PM

Qualifiers:	ND - Not Detected at the Reporting Limit	S - LCS Spike below accepted limits (+ above)
	J - Analyte detected below quantitation limits	Z - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	N - Matrix Spike below accepted limits (+ above)
	X - Value exceeds Maximum Contaminant Level	T - Tentatively Identified Compound-Estimated Conc.
	E - Value above quantitation range-Estimate	

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
 Work Order: 200826074
 Reference: Former Hettling Farm Site / Annual GW
 PO#:

Client Sample ID: FHS-MW-05-08262020 DUP
 Collection Date: 8/26/2020 11:30:00 AM
 Lab Sample ID: 200826074-003
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

Analyst: FLD

Conductivity (E120.1)	181	1.0		umhos/cm		8/26/2020 11:30:00 AM
Dissolved Oxygen (E360.1)	4.04	0.10		mg/L		8/26/2020 11:30:00 AM
eH (Orion)	192.6			mV		8/26/2020 11:30:00 AM
pH (E150.1)	5.6			S.U.		8/26/2020 11:30:00 AM
Static Water Level	9.87			ft		8/26/2020 11:30:00 AM
Temperature (E170.1)	16			deg C		8/26/2020 11:30:00 AM
Turbidity (E180.1)	8	1.0		NTU		8/26/2020 11:30:00 AM

MERCURY - EPA 245.1 REV 3.0

Analyst: AVB

(Prep: E245.1 - 8/27/2020)

Mercury	ND	0.20		µg/L	1	8/27/2020 2:35:14 PM
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ICP METALS - EPA 200.7

Analyst: KH

(Prep: SW3010A - 8/27/2020)

Aluminum	ND	100		µg/L	1	9/1/2020 12:17:00 PM
Antimony	ND	60.0		µg/L	1	9/1/2020 12:17:00 PM
Arsenic	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Barium	59.7	10.0		µg/L	1	9/1/2020 12:17:00 PM
Beryllium	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Boron	20.1	50.0	J	µg/L	1	9/1/2020 12:17:00 PM
Cadmium	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Calcium	21800	50.0		µg/L	1	9/1/2020 12:17:00 PM
Chromium	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Cobalt	ND	50.0		µg/L	1	9/1/2020 12:17:00 PM
Copper	3.41	5.00	J	µg/L	1	9/1/2020 12:17:00 PM
Iron	73.8	50.0		µg/L	1	9/1/2020 12:17:00 PM
Lead	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Magnesium	5260	50.0		µg/L	1	9/1/2020 12:17:00 PM
Manganese	4.48	20.0	J	µg/L	1	9/1/2020 12:17:00 PM
Nickel	ND	20.0		µg/L	1	9/1/2020 12:17:00 PM
Potassium	510	50.0		µg/L	1	9/1/2020 12:17:00 PM
Selenium	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Silver	ND	10.0		µg/L	1	9/1/2020 12:17:00 PM
Sodium	2890	50.0		µg/L	1	9/1/2020 12:17:00 PM
Thallium	1.32	10.0	J	µg/L	1	9/1/2020 12:17:00 PM
Vanadium	5.58	20.0	J	µg/L	1	9/1/2020 12:17:00 PM
Zinc	2.70	10.0	J	µg/L	1	9/1/2020 12:17:00 PM

Qualifiers:

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 B - Analyte detected in the associated Method Blank
 X - Value exceeds Maximum Contaminant Level
 E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)
 Z - RPD outside accepted recovery limits
 N - Matrix Spike below accepted limits (+ above)
 T - Tentatively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
 Work Order: 200826074
 Reference: Former Hettling Farm Site / Annual GW
 PO#:

Client Sample ID: FHS-MW-05-08262020 DUP
 Collection Date: 8/26/2020 11:30:00 AM
 Lab Sample ID: 200826074-003
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SEMI-VOLATILE ORGANICS - EPA 8270D SIM						Analyst: 10145
1,4-Dioxane	0.03	0.04	J	µg/L	1	9/2/2020 7:51:00 PM
Surr: 1,4-Dioxane - d8	110	64-124		%REC	1	9/2/2020 7:51:00 PM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 X - Value exceeds Maximum Contaminant Level
 E - Value above quantitation range-Estimate
 S - LCS Spike below accepted limits (+ above)
 Z - RPD outside accepted recovery limits
 N - Matrix Spike below accepted limits (+ above)
 T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
 Work Order: 200826074
 Reference: Former Hettling Farm Site / Annual GW
 PO#:

Client Sample ID: Field Blank 08262020
 Collection Date: 8/26/2020 12:20:00 PM
 Lab Sample ID: 200826074-004
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY - EPA 245.1 REV 3.0						Analyst: AVB
(Prep: E245.1 - 8/27/2020)						
Mercury	ND	0.20		µg/L	1	8/27/2020 2:36:54 PM
ICP METALS - EPA 200.7						Analyst: KH
(Prep: SW3010A - 8/27/2020)						
Aluminum	56.2	100	J	µg/L	1	9/1/2020 12:46:00 PM
Antimony	ND	60.0		µg/L	1	9/1/2020 12:46:00 PM
Arsenic	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Barium	ND	10.0		µg/L	1	9/1/2020 12:46:00 PM
Beryllium	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Boron	8.87	50.0	J	µg/L	1	9/1/2020 12:46:00 PM
Cadmium	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Calcium	257	50.0		µg/L	1	9/1/2020 12:46:00 PM
Chromium	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Cobalt	ND	50.0		µg/L	1	9/1/2020 12:46:00 PM
Copper	2.74	5.00	J	µg/L	1	9/1/2020 12:46:00 PM
Iron	5.89	50.0	J	µg/L	1	9/1/2020 12:46:00 PM
Lead	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Magnesium	ND	50.0		µg/L	1	9/1/2020 12:46:00 PM
Manganese	ND	20.0		µg/L	1	9/1/2020 12:46:00 PM
Nickel	ND	20.0		µg/L	1	9/1/2020 12:46:00 PM
Potassium	31.7	50.0	J	µg/L	1	9/1/2020 12:46:00 PM
Selenium	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Silver	ND	10.0		µg/L	1	9/1/2020 12:46:00 PM
Sodium	254	50.0		µg/L	1	9/1/2020 12:46:00 PM
Thallium	1.21	10.0	J	µg/L	1	9/1/2020 12:46:00 PM
Vanadium	ND	20.0		µg/L	1	9/1/2020 12:46:00 PM
Zinc	3.62	10.0	J	µg/L	1	9/1/2020 12:46:00 PM

SEMI-VOLATILE ORGANICS - EPA 8270D SIM Analyst: 10145

1,4-Dioxane	ND	0.04		µg/L	1	9/2/2020 8:11:00 PM
Surr: 1,4-Dioxane - d8	103	64-124		%REC	1	9/2/2020 8:11:00 PM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 X - Value exceeds Maximum Contaminant Level
 E - Value above quantitation range-Estimate
 S - LCS Spike below accepted limits (+ above)
 Z - RPD outside accepted recovery limits
 N - Matrix Spike below accepted limits (+ above)
 T - Tentatively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT:	Town of Clarmont	Client Sample ID:	FHS-MW-02-08262020
Work Order:	200826074	Collection Date:	8/26/2020 1:00:00 PM
Reference:	Former Hettling Farm Site / Annual GW	Lab Sample ID:	200826074-005
PO#:		Matrix:	WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD

Observation	Poor Recovery			NA		8/26/2020 1:00:00 PM
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Qualifiers:	ND - Not Detected at the Reporting Limit	S - LCS Spike below accepted limits (+ above)
	J - Analyte detected below quantitation limits	Z - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	N - Matrix Spike below accepted limits (+ above)
	X - Value exceeds Maximum Contaminant Level	T - Tentitively Identified Compound-Estimated Conc.
	E - Value above quantitation range-Estimate	

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT:	Town of Clarmont	Client Sample ID:	FHS-MW-03-08262020
Work Order:	200826074	Collection Date:	8/26/2020 9:50:00 AM
Reference:	Former Hettling Farm Site / Annual GW	Lab Sample ID:	200826074-006
PO#:		Matrix:	WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD

Observation	Missing			NA		8/26/2020 9:50:00 AM
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Qualifiers:	ND - Not Detected at the Reporting Limit	S - LCS Spike below accepted limits (+ above)
	J - Analyte detected below quantitation limits	Z - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	N - Matrix Spike below accepted limits (+ above)
	X - Value exceeds Maximum Contaminant Level	T - Tentitively Identified Compound-Estimated Conc.
	E - Value above quantitation range-Estimate	

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT:	Town of Clarmont	Client Sample ID:	FHS-MW-04-08262020
Work Order:	200826074	Collection Date:	8/26/2020 1:05:00 PM
Reference:	Former Hettling Farm Site / Annual GW	Lab Sample ID:	200826074-007
PO#:		Matrix:	WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD

Observation	Poor Recovery			NA		8/26/2020 1:05:00 PM
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Qualifiers:	ND - Not Detected at the Reporting Limit	S - LCS Spike below accepted limits (+ above)
	J - Analyte detected below quantitation limits	Z - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	N - Matrix Spike below accepted limits (+ above)
	X - Value exceeds Maximum Contaminant Level	T - Tentitively Identified Compound-Estimated Conc.
	E - Value above quantitation range-Estimate	

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
Work Order: 200826074
Reference: Former Hettling Farm Site / Annual GW
PO#:

Client Sample ID: FHS-MW-06-08262020
Collection Date: 8/26/2020 9:40:00 AM
Lab Sample ID: 200826074-008
Matrix: WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD

Observation	Missing			NA		8/26/2020 9:40:00 AM
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Qualifiers:

ND - Not Detected at the Reporting Limit	S - LCS Spike below accepted limits (+ above)
J - Analyte detected below quantitation limits	Z - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank	N - Matrix Spike below accepted limits (+ above)
X - Value exceeds Maximum Contaminant Level	T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range-Estimate	

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT:	Town of Clarmont	Client Sample ID:	FHS-MW-07-08262020
Work Order:	200826074	Collection Date:	8/26/2020 9:35:00 AM
Reference:	Former Hettling Farm Site / Annual GW	Lab Sample ID:	200826074-009
PO#:		Matrix:	WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD

Observation	Obstructed			NA		8/26/2020 9:35:00 AM
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Qualifiers:	ND - Not Detected at the Reporting Limit	S - LCS Spike below accepted limits (+ above)
	J - Analyte detected below quantitation limits	Z - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	N - Matrix Spike below accepted limits (+ above)
	X - Value exceeds Maximum Contaminant Level	T - Tentitively Identified Compound-Estimated Conc.
	E - Value above quantitation range-Estimate	

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
 Work Order: 200826074
 Reference: Former Hettling Farm Site / Annual GW
 PO#:

Client Sample ID: FHS-MW-01
 Collection Date: 8/26/2020 12:40:00 PM
 Lab Sample ID: 200826074-001
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY - EPA 245.1 REV 3.0						Analyst: AVB
(Prep: E245.1 - 8/27/2020)						
Mercury	ND	0.20		µg/L	1	8/27/2020 2:28:30 PM
ICP METALS - EPA 200.7						Analyst: KH
(Prep: SW3010A - 8/27/2020)						
Aluminum	ND	100		µg/L	1	9/1/2020 11:23:00 AM
Antimony	ND	60.0		µg/L	1	9/1/2020 11:23:00 AM
Arsenic	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Barium	27.2	10.0		µg/L	1	9/1/2020 11:23:00 AM
Beryllium	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Boron	81.9	50.0		µg/L	1	9/1/2020 11:23:00 AM
Cadmium	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Calcium	19300	50.0		µg/L	1	9/1/2020 11:23:00 AM
Chromium	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Cobalt	0.25	50.0	J	µg/L	1	9/1/2020 11:23:00 AM
Copper	5.41	5.00		µg/L	1	9/1/2020 11:23:00 AM
Iron	102	50.0		µg/L	1	9/1/2020 11:23:00 AM
Lead	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Magnesium	4660	50.0		µg/L	1	9/1/2020 11:23:00 AM
Manganese	8.21	20.0	J	µg/L	1	9/1/2020 11:23:00 AM
Nickel	0.71	20.0	J	µg/L	1	9/1/2020 11:23:00 AM
Potassium	5180	50.0		µg/L	1	9/1/2020 11:23:00 AM
Selenium	ND	5.00		µg/L	1	9/1/2020 11:23:00 AM
Silver	ND	10.0		µg/L	1	9/1/2020 11:23:00 AM
Sodium	70500	500		µg/L	10	9/1/2020 11:28:00 AM
Thallium	0.22	10.0	J	µg/L	1	9/1/2020 11:23:00 AM
Vanadium	7.62	20.0	J	µg/L	1	9/1/2020 11:23:00 AM
Zinc	3.45	10.0	J	µg/L	1	9/1/2020 11:23:00 AM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 X - Value exceeds Maximum Contaminant Level
 E - Value above quantitation range-Estimate
 S - LCS Spike below accepted limits (+ above)
 Z - RPD outside accepted recovery limits
 N - Matrix Spike below accepted limits (+ above)
 T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
 Work Order: 200826074
 Reference: Former Hettling Farm Site / Annual GW
 PO#:

Client Sample ID: FHS-MW-05
 Collection Date: 8/26/2020 11:30:00 AM
 Lab Sample ID: 200826074-002
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY - EPA 245.1 REV 3.0						Analyst: AVB
(Prep: E245.1 - 8/27/2020)						
Mercury	ND	0.20		µg/L	1	8/27/2020 2:30:13 PM
ICP METALS - EPA 200.7						Analyst: KH
(Prep: SW3010A - 8/27/2020)						
Aluminum	ND	100		µg/L	1	9/1/2020 11:33:00 AM
Antimony	ND	60.0		µg/L	1	9/1/2020 11:33:00 AM
Arsenic	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Barium	58.8	10.0		µg/L	1	9/1/2020 11:33:00 AM
Beryllium	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Boron	20.1	50.0	J	µg/L	1	9/1/2020 11:33:00 AM
Cadmium	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Calcium	21600	50.0		µg/L	1	9/1/2020 11:33:00 AM
Chromium	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Cobalt	ND	50.0		µg/L	1	9/1/2020 11:33:00 AM
Copper	2.82	5.00	J	µg/L	1	9/1/2020 11:33:00 AM
Iron	94.1	50.0		µg/L	1	9/1/2020 11:33:00 AM
Lead	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Magnesium	5200	50.0		µg/L	1	9/1/2020 11:33:00 AM
Manganese	5.47	20.0	J	µg/L	1	9/1/2020 11:33:00 AM
Nickel	ND	20.0		µg/L	1	9/1/2020 11:33:00 AM
Potassium	540	50.0		µg/L	1	9/1/2020 11:33:00 AM
Selenium	ND	5.00		µg/L	1	9/1/2020 11:33:00 AM
Silver	ND	10.0		µg/L	1	9/1/2020 11:33:00 AM
Sodium	3050	50.0		µg/L	1	9/1/2020 11:33:00 AM
Thallium	1.60	10.0	J	µg/L	1	9/1/2020 11:33:00 AM
Vanadium	5.76	20.0	J	µg/L	1	9/1/2020 11:33:00 AM
Zinc	5.52	10.0	J	µg/L	1	9/1/2020 11:33:00 AM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 X - Value exceeds Maximum Contaminant Level
 E - Value above quantitation range-Estimate
 S - LCS Spike below accepted limits (+ above)
 Z - RPD outside accepted recovery limits
 N - Matrix Spike below accepted limits (+ above)
 T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
 Work Order: 200826074
 Reference: Former Hettling Farm Site / Annual GW
 PO#:

Client Sample ID: FHS-MW-05-08262020 DUP
 Collection Date: 8/26/2020 11:30:00 AM
 Lab Sample ID: 200826074-003
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY - EPA 245.1 REV 3.0						Analyst: AVB
(Prep: E245.1 - 8/27/2020)						
Mercury	ND	0.20		µg/L	1	8/27/2020 2:35:14 PM
ICP METALS - EPA 200.7						Analyst: KH
(Prep: SW3010A - 8/27/2020)						
Aluminum	ND	100		µg/L	1	9/1/2020 12:17:00 PM
Antimony	ND	60.0		µg/L	1	9/1/2020 12:17:00 PM
Arsenic	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Barium	59.7	10.0		µg/L	1	9/1/2020 12:17:00 PM
Beryllium	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Boron	20.1	50.0	J	µg/L	1	9/1/2020 12:17:00 PM
Cadmium	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Calcium	21800	50.0		µg/L	1	9/1/2020 12:17:00 PM
Chromium	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Cobalt	ND	50.0		µg/L	1	9/1/2020 12:17:00 PM
Copper	3.41	5.00	J	µg/L	1	9/1/2020 12:17:00 PM
Iron	73.8	50.0		µg/L	1	9/1/2020 12:17:00 PM
Lead	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Magnesium	5260	50.0		µg/L	1	9/1/2020 12:17:00 PM
Manganese	4.48	20.0	J	µg/L	1	9/1/2020 12:17:00 PM
Nickel	ND	20.0		µg/L	1	9/1/2020 12:17:00 PM
Potassium	510	50.0		µg/L	1	9/1/2020 12:17:00 PM
Selenium	ND	5.00		µg/L	1	9/1/2020 12:17:00 PM
Silver	ND	10.0		µg/L	1	9/1/2020 12:17:00 PM
Sodium	2890	50.0		µg/L	1	9/1/2020 12:17:00 PM
Thallium	1.32	10.0	J	µg/L	1	9/1/2020 12:17:00 PM
Vanadium	5.58	20.0	J	µg/L	1	9/1/2020 12:17:00 PM
Zinc	2.70	10.0	J	µg/L	1	9/1/2020 12:17:00 PM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 X - Value exceeds Maximum Contaminant Level
 E - Value above quantitation range-Estimate
 S - LCS Spike below accepted limits (+ above)
 Z - RPD outside accepted recovery limits
 N - Matrix Spike below accepted limits (+ above)
 T - Tentatively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

Date: 02-Oct-20

CLIENT: Town of Clarmont
 Work Order: 200826074
 Reference: Former Hettling Farm Site / Annual GW
 PO#:

Client Sample ID: Field Blank 08262020
 Collection Date: 8/26/2020 12:20:00 PM
 Lab Sample ID: 200826074-004
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY - EPA 245.1 REV 3.0						Analyst: AVB
(Prep: E245.1 - 8/27/2020)						
Mercury	ND	0.20		µg/L	1	8/27/2020 2:36:54 PM
ICP METALS - EPA 200.7						Analyst: KH
(Prep: SW3010A - 8/27/2020)						
Aluminum	56.2	100	J	µg/L	1	9/1/2020 12:46:00 PM
Antimony	ND	60.0		µg/L	1	9/1/2020 12:46:00 PM
Arsenic	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Barium	ND	10.0		µg/L	1	9/1/2020 12:46:00 PM
Beryllium	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Boron	8.87	50.0	J	µg/L	1	9/1/2020 12:46:00 PM
Cadmium	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Calcium	257	50.0		µg/L	1	9/1/2020 12:46:00 PM
Chromium	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Cobalt	ND	50.0		µg/L	1	9/1/2020 12:46:00 PM
Copper	2.74	5.00	J	µg/L	1	9/1/2020 12:46:00 PM
Iron	5.89	50.0	J	µg/L	1	9/1/2020 12:46:00 PM
Lead	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Magnesium	ND	50.0		µg/L	1	9/1/2020 12:46:00 PM
Manganese	ND	20.0		µg/L	1	9/1/2020 12:46:00 PM
Nickel	ND	20.0		µg/L	1	9/1/2020 12:46:00 PM
Potassium	31.7	50.0	J	µg/L	1	9/1/2020 12:46:00 PM
Selenium	ND	5.00		µg/L	1	9/1/2020 12:46:00 PM
Silver	ND	10.0		µg/L	1	9/1/2020 12:46:00 PM
Sodium	254	50.0		µg/L	1	9/1/2020 12:46:00 PM
Thallium	1.21	10.0	J	µg/L	1	9/1/2020 12:46:00 PM
Vanadium	ND	20.0		µg/L	1	9/1/2020 12:46:00 PM
Zinc	3.62	10.0	J	µg/L	1	9/1/2020 12:46:00 PM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 X - Value exceeds Maximum Contaminant Level
 E - Value above quantitation range-Estimate
 S - LCS Spike below accepted limits (+ above)
 Z - RPD outside accepted recovery limits
 N - Matrix Spike below accepted limits (+ above)
 T - Tentatively Identified Compound-Estimated Conc.



Sample Information

Client Sample ID: **FHS-MW-01**

York Sample ID: **20H1144-01**

York Project (SDG) No. 20H1144	Client Project ID 200826074	Matrix Water	Collection Date/Time August 26, 2020 12:00 am	Date Received 08/28/2020
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to 1.00	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	4.99		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
307-24-4	* Perfluorohexanoic acid (PFHxA)	13.4		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
375-85-9	* Perfluoroheptanoic acid (PFHpA)	3.89		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
335-67-1	* Perfluorooctanoic acid (PFOA)	16.7		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	3.32		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
2355-31-9	* N-MeFOSAA	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
2991-50-6	* N-EtFOSAA	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
2706-90-3	* Perfluoropentanoic acid (PFPeA)	8.33		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	5.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT



Sample Information

Client Sample ID: FHS-MW-01

York Sample ID: 20H1144-01

<u>York Project (SDG) No.</u> 20H1144	<u>Client Project ID</u> 200826074	<u>Matrix</u> Water	<u>Collection Date/Time</u> August 26, 2020 12:00 am	<u>Date Received</u> 08/28/2020
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	4.03		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
	* MPFOA	0.00		ng/mL		1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 07:42	KT
	Surrogate Recoveries	Result					Acceptance Range			
	Surrogate: M3PFBS	151 %		PFSu-H			25-150			
	Surrogate: M5PFHxA	142 %					25-150			
	Surrogate: M4PFHpA	154 %		PFSu-H			25-150			
	Surrogate: M3PFHxS	156 %		PFSu-H			25-150			
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	151 %		PFSu-H			25-150			
	Surrogate: M6PFDA	126 %					25-150			
	Surrogate: M7PFUDA	73.6 %					25-150			
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	34.2 %					25-150			
	Surrogate: M2PFTeDA	16.4 %					10-150			
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	132 %					25-150			
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	141 %					25-150			
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	148 %					25-150			
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	36.2 %					10-150			
	Surrogate: d3-N-MeFOSAA	64.2 %					25-150			
	Surrogate: d5-N-EtFOSAA	53.0 %					25-150			
	Surrogate: M2-6:2 FTS	165 %		PFSu-H			25-150			
	Surrogate: M2-8:2 FTS	166 %		PFSu-H			25-150			
	Surrogate: M9PFNA	150 %					25-150			

Sample Information

Client Sample ID: FHS-MW-05

York Sample ID: 20H1144-02

<u>York Project (SDG) No.</u> 20H1144	<u>Client Project ID</u> 200826074	<u>Matrix</u> Water	<u>Collection Date/Time</u> August 26, 2020 12:00 am	<u>Date Received</u> 08/28/2020
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Sample Information

Client Sample ID: FHS-MW-05

York Sample ID: 20H1144-02

<u>York Project (SDG) No.</u> 20H1144	<u>Client Project ID</u> 200826074	<u>Matrix</u> Water	<u>Collection Date/Time</u> August 26, 2020 12:00 am	<u>Date Received</u> 08/28/2020
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to 1.00	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	2.26		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
2355-31-9	* N-MeFOSAA	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
2991-50-6	* N-EtFOSAA	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	5.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 08:07	KT



Sample Information

Client Sample ID: FHS-MW-05					York Sample ID: 20H1144-02
<u>York Project (SDG) No.</u> 20H1144	<u>Client Project ID</u> 200826074	<u>Matrix</u> Water	<u>Collection Date/Time</u> August 26, 2020 12:00 am	<u>Date Received</u> 08/28/2020	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
* MPFOA		0.00		ng/mL		1	EPA 537m	09/02/2020 10:11	09/04/2020 08:07	KT
	Surrogate Recoveries	Result		Acceptance Range			Certifications:			
	Surrogate: M3PFBS	121 %		25-150						
	Surrogate: M5PFHxA	120 %		25-150						
	Surrogate: M4PFHpA	122 %		25-150						
	Surrogate: M3PFHxS	127 %		25-150						
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	125 %		25-150						
	Surrogate: M6PFDA	115 %		25-150						
	Surrogate: M7PFUdA	97.1 %		25-150						
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	60.4 %		25-150						
	Surrogate: M2PFTeDA	13.0 %		10-150						
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	121 %		25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	126 %		25-150						
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	125 %		25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	35.9 %		10-150						
	Surrogate: d3-N-MeFOSAA	91.2 %		25-150						
	Surrogate: d5-N-EtFOSAA	90.5 %		25-150						
	Surrogate: M2-6:2 FTS	132 %		25-150						
	Surrogate: M2-8:2 FTS	139 %		25-150						
	Surrogate: M9PFNA	125 %		25-150						

Sample Information

Client Sample ID: FHS-MW-05					York Sample ID: 20H1144-03
<u>York Project (SDG) No.</u> 20H1144	<u>Client Project ID</u> 200826074	<u>Matrix</u> Water	<u>Collection Date/Time</u> August 26, 2020 12:00 am	<u>Date Received</u> 08/28/2020	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: FHS-MW-05

York Sample ID: 20H1144-03

<u>York Project (SDG) No.</u> 20H1144	<u>Client Project ID</u> 200826074	<u>Matrix</u> Water	<u>Collection Date/Time</u> August 26, 2020 12:00 am	<u>Date Received</u> 08/28/2020
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
72629-94-8	* Perfluorotridecanoic acid (PFTriDA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
2355-31-9	* N-MeFOSAA	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
2991-50-6	* N-EtFOSAA	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	5.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 09:46	KT



Sample Information

Client Sample ID: FHS-MW-05 **York Sample ID:** 20H1144-03
York Project (SDG) No.: 20H1144 **Client Project ID:** 200826074 **Matrix:** Water **Collection Date/Time:** August 26, 2020 12:00 am **Date Received:** 08/28/2020

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
* MPFOA		0.00		ng/mL		1	EPA 537m	09/02/2020 10:11	09/04/2020 09:46	KT
	Surrogate Recoveries	Result		Acceptance Range			Certifications:			
	Surrogate: M3PFBS	113 %		25-150						
	Surrogate: M5PFHxA	111 %		25-150						
	Surrogate: M4PFHpA	115 %		25-150						
	Surrogate: M3PFHxS	118 %		25-150						
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	115 %		25-150						
	Surrogate: M6PFDA	115 %		25-150						
	Surrogate: M7PFUdA	109 %		25-150						
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	90.8 %		25-150						
	Surrogate: M2PFTeDA	33.6 %		10-150						
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	114 %		25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	121 %		25-150						
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	110 %		25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	75.4 %		10-150						
	Surrogate: d3-N-MeFOSAA	102 %		25-150						
	Surrogate: d5-N-EtFOSAA	108 %		25-150						
	Surrogate: M2-6:2 FTS	121 %		25-150						
	Surrogate: M2-8:2 FTS	141 %		25-150						
	Surrogate: M9PFNA	118 %		25-150						

Sample Information

Client Sample ID: Field Blank 08262020 **York Sample ID:** 20H1144-04
York Project (SDG) No.: 20H1144 **Client Project ID:** 200826074 **Matrix:** Water **Collection Date/Time:** August 26, 2020 12:00 am **Date Received:** 08/28/2020

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: Field Blank 08262020

York Sample ID: 20H1144-04

<u>York Project (SDG) No.</u> 20H1144	<u>Client Project ID</u> 200826074	<u>Matrix</u> Water	<u>Collection Date/Time</u> August 26, 2020 12:00 am	<u>Date Received</u> 08/28/2020
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
72629-94-8	* Perfluorotridecanoic acid (PFTriDA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
2355-31-9	* N-MeFOSAA	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
2991-50-6	* N-EtFOSAA	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	5.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	2.00	1	EPA 537m Certifications:	09/02/2020 10:11	09/04/2020 10:11	KT



Sample Information

Client Sample ID: Field Blank 08262020

York Sample ID: 20H1144-04

<u>York Project (SDG) No.</u> 20H1144	<u>Client Project ID</u> 200826074	<u>Matrix</u> Water	<u>Collection Date/Time</u> August 26, 2020 12:00 am	<u>Date Received</u> 08/28/2020
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
* MPFOA		0.00		ng/mL		1	EPA 537m	09/02/2020 10:11	09/04/2020 10:11	KT
	Surrogate Recoveries	Result		Acceptance Range			Certifications:			
	Surrogate: M3PFBS	73.4 %		25-150						
	Surrogate: M5PFHxA	78.4 %		25-150						
	Surrogate: M4PFHpA	79.3 %		25-150						
	Surrogate: M3PFHxS	80.8 %		25-150						
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	78.9 %		25-150						
	Surrogate: M6PFDA	82.9 %		25-150						
	Surrogate: M7PFUdA	76.5 %		25-150						
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	56.1 %		25-150						
	Surrogate: M2PFTeDA	25.6 %		10-150						
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	23.3 %	PFSu-L	25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	80.6 %		25-150						
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	63.1 %		25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	71.6 %		10-150						
	Surrogate: d3-N-MeFOSAA	73.3 %		25-150						
	Surrogate: d5-N-EtFOSAA	78.6 %		25-150						
	Surrogate: M2-6:2 FTS	89.4 %		25-150						
	Surrogate: M2-8:2 FTS	94.9 %		25-150						
	Surrogate: M9PFNA	83.3 %		25-150						

APPENDIX C

**New York Works
Former Hettling Farm Site
NYSDEC Site Number E411015
Cover Inspection Form**

Time: _____

Date: _____

Weather Conditions: _____

Were Photographs Taken ?: _____

Inspection Checklist:

A. Soil Cover:

The soil surface of the Site shall be inspected by traversing the area and examining it for the following:

	<u>Yes</u>	<u>No</u>
1. Is there bare ground, or dead or damaged vegetation?	___	___
2. Are there cracks, subsidence, or holes in the ground surface?	___	___
3. Is there evidence of burrowing by animals?	___	___
4. Is there disturbance of the surface material?	___	___
5. Is there any erosion damage to vegetated or cleared areas?	___	___
6. Is there discoloration or evidence of spills on the surface?	___	___
7. Is there other evidence of disturbance to the area?	___	___
8. Is there debris or trash present?	___	___

Comments (*Explanation required for each Yes answer in Section A*):

B. Asphalt and Gravel Cover:

The asphalt and gravel portions of the cover shall be inspected by traversing them and examining them for the following:

	<u>Yes</u>	<u>No</u>
1. Are there cracks or holes in, or subsidence of the surface?	___	___
2. Is there evidence of burrowing by animals?	___	___
3. Is there any erosion or other damage to the surface?	___	___
4. Is there discoloration or evidence of spills on the surface?	___	___
5. Is there debris or trash present?	___	___
6. Is there other evidence of disturbance to the area?	___	___

SITE/PROJECT NAME: _____ PROJECT NUMBER: _____

DATE OF INSPECTION: _____ INSPECTOR: _____

WELL DESIGNATION: _____

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter _____ inches N/A []

Approximate Stickup Height _____ feet N/A []

Integrity of Protective Casing Describe: _____

Protective Casing Material Steel [] Stainless Steel [] Other _____

Protective Casing Width or Dia. _____ inches

Weep Hole in Protective Casing Yes [] No []

Surface Seal/Apron Material Cement [] Bentonite [] Not apparent [] Other _____

Integrity of Surface Seal/Apron Describe: _____

Surface Drainage Away from Wellhead [] Toward Wellhead []

Bollards Present? Yes [] No [] Describe: _____

Well ID. Visible? Yes [] No [] Describe: _____

Lock Present and Functional? Yes [] No [] Describe: _____

Photograph Taken? Photo # Yes [] No [] Describe: _____

Inner Appearance

Integrity of Well Casing Describe: _____

Integrity of Cap Seal Describe: _____

Surface Water in Casing? Yes [] No [] Describe: _____

Well Casing Diameter _____ inches

Well Casing Material PVC [] Steel [] Stainless Steel []

Inner Cap Threaded [] Slip [] Expansion Plug [] None []

Reference/Measuring Point Groove [] Indelible Mark [] None []

Evidence of Double Casing? Yes [] No [] Describe: _____

Downhole

Odor Yes [] No [] Describe: _____

PID Reading _____ ppm

Depth to Water (to top of casing) _____ feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A []

Total Well Depth (to top of casing) _____ feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: _____

Additional Comments:
