



PERIODIC REVIEW REPORT

November 2016 – September 2022

JOHNNY CAKE ROAD FARM
DANUBE, HERKIMER COUNTY, NEW YORK 13407
NYSDEC Site No. 622016
Work Assignment No. D009812-25



Prepared for:



**Division of Environmental
Remediation**
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FEBRUARY 2023

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TRC Project No. 470744



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LIST OF ACRONYMS AND ABBREVIATIONS

AMSL	above mean sea level
COCs	Contaminants of Concern
DCE	cis-1 2-dichloroethene
DER	Division of Environmental Remediation
DTW	Depth to Water
DUSRs	Data Usability Summary Reports
ECs	Engineering Controls
EDD	Electronic Data Deliverable
EE	Environmental Easement
FS	Feasibility Study
ft. bgs	feet below ground surface
ICs	Institutional Controls
ID	Identification
IHWDS	Inactive Hazardous Waste Disposal Site
ND	Not Detected
ng/L	Nanograms per Liter
NYSDEC	New York State Department of Environmental Conservation
PCE	Tetrachloroethene
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonic acid
PRR	Periodic Review Report
PVC	Polyvinyl chloride
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
RI	Remedial Investigation
ROD	Record of Decision
SCG	Standard, Criteria, and Guidance
SCO	Soil Cleanup Objective
SI	Site Investigation
SMP	Site Management Plan
TAL	Target Analyte List
TCE	Trichloroethene
TCL	Target Compound List
TICs	Tentatively Identified Compounds
TOC	Top of Casing
TOGS	NYSDEC Division of Water Technical and Operational Guidance Series
TOR	Top of Riser
TRC	TRC Engineers, Inc.
VOCs	Volatile Organic Compounds
WA	Work Assignment
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency



Executive Summary

Category	Summary/Results
Institutional Controls	<ul style="list-style-type: none"> Site Management Plan (2011) Environmental Easement
Site Classification	Class 4 Inactive Hazardous Waste Disposal Site (IHWDS)
Site Management Plan	Site Management Plan – 2011
Certification/Reporting Period	The Site Management Plan (SMP) requires Site monitoring to be conducted periodically, within 30 days before or after April 1 st of each year, and a Periodic Review Report (PRR) to be produced no later than November 15 th of the same year. The most recent PRR was completed for November 2013 to November 2016. The reporting period for this PRR is November 15, 2016 to September 1, 2022.
Inspection	Frequency
Site Inspection	Periodically, within 30 days before or after April 1 st of each year
Monitoring	Frequency
Groundwater	Periodically, within 30 days before or after April 1 st of each year
Prior PRR/SMR Recommendations	<p>The 2016 PRR made the following recommendations:</p> <ol style="list-style-type: none"> To perform groundwater monitoring every three to five years until cleanup goals have been achieved To revise the groundwater monitoring network to only include monitoring wells MW-1, MW-2R, MW-6R, MW-12A, MW-13, MW-18, and MW-19 To require Site inspections following severe weather events
Site Management Activities	<p>Three Site inspections, one round of groundwater level measurements, and one groundwater sampling event were conducted during this reporting period (2016 – 2022).</p> <ul style="list-style-type: none"> 4/10/2017: Site inspection (AECOM) 05/25/2022: Site inspection 07/12/2022: Groundwater level measurements, Site inspection, and groundwater sampling. Groundwater samples were collected from 8 monitoring wells in the monitoring well network. Samples were submitted for laboratory analysis of VOCs, PFAS, and 1,4-Dioxane.
Significant Findings or Concerns	<ol style="list-style-type: none"> No significant findings were observed at the time.
Recommendations	<ol style="list-style-type: none"> Groundwater monitoring (including hydraulic monitoring/water level measurements) should be performed every three years, or as directed by NYSDEC and NYSDOH, and should include MW-1, MW-2R, MW-6R, MW-12A, MW-13, MW-18, and MW-19. The Site should be mowed at least every two years to prevent overgrowth. Based on recent and historic COC concentrations, monitoring well MW-22 should remain as a contingency well. Site inspections should continue on an annual basis and following any severe weather condition, such as heavy rain, flooding, etc. PRR reporting should be conducted every five years, or as directed by NYSDEC and NYSDOH based on an evaluation of data.



Category	Summary/Results
	6. The SMP should be updated to include the groundwater monitoring well network as an engineering control, and to reflect the revised groundwater monitoring well network, groundwater monitoring schedule and PRR schedule.
Cost Evaluation	The total cost of Site management activities this reporting period was \$15,950. This cost includes engineering (e.g., labor and expense) and subcontractor costs (e.g., laboratory, equipment, rentals, etc.). It should be noted that this total does not include any direct costs incurred by the NYSDEC, or costs incurred by previous consultants (AECOM).



1.0 Introduction

This PRR has been prepared for the Johnny Cake Road Farm Site, located on Johnny Cake Road, Danube, Herkimer County, New York (the Site) and covers the period, November 15, 2016 through September 1, 2022. This PRR was prepared in accordance with New York State Department of Environmental Conservation (NYSDEC) Department of Environmental Remediation (DER) Work Authorization (WA) No. D009812-25 Notice to Proceed dated November 19, 2021, the NYSDEC-approved amended Scope of Work dated July 21, 2022, and NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation (NYSDEC DER-10). TRC began Site management activities for this Site in April 2022. This PRR presents the Site management activities performed by TRC and others during the referenced reporting period. A Site summary and applicable remedial program information are presented below.

Site Information			
Site Name:	Johnny Cake Road Farm	NYSDEC Site No:	622016
Site Location:	Johnny Cake Road, Danube, Herkimer County, NY	Remedial Program:	Inactive Hazardous Waste Disposal Site
Site Type:	Dairy Farm and Illegal Cocaine Manufacturing and Distribution Site	Classification:	04
Parcel Identification(s):	127.002-4-1, Herkimer County Tax Mapping	Parcel Acreage / EE Acreage:	35.5 acres / 3.24 acres
Selected Remedy:	Removal of hazardous materials and on-Site structures, Excavation of contaminated soils	Site COC(s):	<ul style="list-style-type: none"> • Volatile Organic Compounds (VOCs)
Current Remedial Program Phase:	Post Remedial Action Site Monitoring; Site Management	Institutional Controls:	<ul style="list-style-type: none"> • Site Management Plan (2011) • Environmental Easement
Monitoring Locations:	Groundwater Monitoring Wells (11)	Required Reporting:	At a frequency determined by NYSDEC

1.1 Site Location, Ownership, and Description

The Site is located in the Town of Danube, Herkimer County, New York and is identified as Section 127 Subsection 002 Block 4 Lot 1 (i.e., Tax Parcel 127.002-4-1) on the Herkimer County Tax Map. The Site is comprised of 3.24 acres on a larger parcel of 35.5 acres of rural farmland. The Site is on the northern and southern sides of Johnny Cake Road and includes a portion of the Johnny Cake Road right-of-way (ROW). Site location and Site layout maps are provided on **Figure 1** and **Figure 2**, respectively. The Site was previously operated as a dairy farm. In the mid-1980s the Site was used for an illegal cocaine manufacturing and distributing operation. The Site contained a farmhouse, garage, in-ground pool, stable building, and dairy barn, which were removed as part of an interim removal action during the 1990s. The surrounding area consists primarily of active and fallow farmland and rural residences.

1.2 Investigation/Remedial History

The Johnny Cake Road Farm operated as a dairy farm prior to becoming the Site of a cocaine manufacturing and distribution operation in the mid-1980s. Drug production lasted 14 months and in 1987, the United States Marshals Service (USMS) seized the Site as a part of a long-term investigation into the illegal operations. The former dairy farm operated over 377-acres, but completed investigations limited Site contamination to a 3.24-acre Site boundary, as shown on **Figure 2**. Non-impacted portions of the farm were sold off by the USMS.

Significant quantities of hazardous chemicals, specifically chlorinated solvents, were used as part of the drug manufacturing process. Solvents were reportedly dumped in various locations in and around the former farmhouse, including on the dirt floor and in the driveway. Solvents were also dumped into an underground septic tank east of the farmhouse to the point of overflow, which eventually discharged into an adjacent drainage swale. Additionally, an on-Site in-ground swimming pool was used to rinse drug manufacturing equipment. As a result of poor chemical handling practices, impacts to soil and groundwater were identified during investigations.

The Site was subject to several Site Investigations (SIs) between 1990 and 2008 to characterize the nature and extent of contamination. During these SIs, dozens of soil borings were advanced and a total of 23 groundwater monitoring wells were installed. A series of Interim Remedial Measures (IRMs) performed by the United States Environmental Protection Agency (USEPA) removed all on-Site sources of contamination. Source areas included on-Site drums located in the former garage, the overfilled septic tank, and two areas of soil contamination, one near the former farmhouse and septic tank, and the other near the former garage. All on-Site buildings were razed as part of an IRM.

Following the IRM, confirmation soil and groundwater sampling was conducted for four consecutive quarters. These soil and groundwater samples were analyzed for volatile organic compounds (VOCs). Soil analytical results detected a limited amount of surface and subsurface contamination above the unrestricted land use Soil Cleanup Objective (SCO) at the Site, although detections were below residential land use SCOs. Groundwater analytical results detected five (5) chlorinated VOCs (1,2-dichloroethane, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride) above the groundwater Standards, Criteria, and Guidance (SCG).

In 2008, an additional groundwater investigation was completed to establish the extents of remaining groundwater contamination. The results of the 2008 sampling event indicated lower levels of groundwater contamination compared to samples from 2005. In general, tetrachloroethene (PCE) and trichloroethene (TCE) were detected at higher concentrations near the former source areas, while breakdown product, 1,2-dichloroethane, was detected in both source areas and down gradient, north of Johnny Cake Road, indicating that contaminants were naturally attenuating. The investigation concluded that the contaminated groundwater plume followed the overburden groundwater aquifer north from source areas and extended approximately 200 feet north of Johnny Cake Road. Results of the 2008 investigation were considered to be the baseline groundwater conditions for the 2011 Site Management Plan (SMP).

Annual groundwater sampling in 2009 and 2010 confirmed conclusions made in 2008 about remaining contamination. Further reductions in contaminant concentrations were observed in the 2009 and 2010 results. In March 2009, the NYSDEC issued a No Further Action Record of Decision (ROD) with Site Management. Following the ROD, 10 monitoring wells were decommissioned in October 2009. The 2009 ROD contains well documentation for the 13 remaining monitoring wells. In June 2011, a SMP was approved by the NYSDEC. An Environmental Easement for the Site was filed with the Herkimer County Clerk in July 2011.



A detailed Site history, including the dates and descriptions of significant events and a Custodial Record detailing known and available Site reports are included in **Appendix A**. The completed Engineering Control/Institutional Control Certification Form is also included in **Appendix A**.

1.3 Remaining Contamination

Following the IRMs, soils below the residential land use SCOs, but above the unrestricted use SCOs remained at the Site. Exceedances of unrestricted land use SCOs were detected in samples from beneath the former septic tank at a depth of approximately 16 feet below grade. Groundwater contamination is still present at the Site, however analytical data indicates the plume is undergoing degradation, is no longer migrating, either horizontally or vertically, and is not expected to migrate off-Site.

1.4 Regulatory Requirements/Cleanup Goals

The overall remedial requirements for the Site include the following:

- Eliminate, to the extent practicable, ingestion of groundwater impacted by the Site that does not attain NYSDOH drinking water standards.
- Eliminate, to the extent practicable, further off-Site migration of groundwater that does not attain NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Standards and Guidance Values (Class GA Values).
- Eliminate, to the extent practicable, exposure to VOC-impacted soil at the Site.



2.0 Institutional and Engineering Control Plan Compliance

2.1 Institutional Controls

The Johnny Cake Road Farm Site is managed under the New York State Superfund Program. The Site's inclusion on the IHWDS Registry, ROD, EE, and SMP act as the ICs for the Site.

The 2011 EE defines the following for the Site:

- Requires compliance with the approved SMP;
- Limits the property use and development to restricted residential use or commercial and industrial activities;
- Restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and
- Requires the remedial party or Site owner to complete and submit a periodic certification of institutional controls to the NYSDEC.

2.2 Engineering Controls

No ECs were defined for the Site in the 2011 SMP. TRC recommends that the SMP be revised to include the groundwater monitoring well network as an engineering control.



3.0 Monitoring and Sampling Plan Compliance

The June 2011 SMP was prepared to manage the remaining contamination at the Site and to ensure that the remedy remains effective by restricting Site use and Site development. The June 2011 SMP specifies the following Site monitoring and sampling activities:

Summary of SMP Site Monitoring and Sampling Plan Requirements					
June 2011					
Site Management Activity	Frequency	Location		Laboratory Analysis	Completion Date(s)
Site Inspection	Periodically, within 30 days before or after April 1 st each year	Site property and Monitoring wells		Not Applicable	4/10/2017, 5/25/2022, 7/12/2022
Groundwater Sampling*	Periodically, within 30 days before or after April 1 st each year	<ul style="list-style-type: none"> • MW-1 • MW-2R • MW-6R • MW-12A 	<ul style="list-style-type: none"> • MW-13 • MW-18 • MW-19 • MW-22 	<ul style="list-style-type: none"> • VOCs via EPA method 8260 TCL • PFAS 21 compound list via Isotope Dilution • 1,4-Dioxane via EPA Method 8270 SIM 	7/12/2022
Site Inspection Report	Periodically, within 30 days before or after April 1 st each year	Not Applicable		Not Applicable	4/10/2017, 5/25/2022, 7/12/2022
PRR	Periodically, no later than November 15 th of each year	Not Applicable		Not Applicable	Not Applicable

Notes: * The groundwater monitoring wells MW-16, MW-17, MW-21, and MW-23 were decommissioned in 2016, leaving eight wells in the groundwater monitoring network.

3.1 Site Inspection

In April 2017, AECOM conducted a Site inspection in accordance with the June 2011 SMP. In May and July 2022, TRC conducted Site inspections in accordance with the June 2011 SMP. Groundwater monitoring was completed during the July 2022 inspection. The Site inspection includes an evaluation of the current Site use and



condition of the Site monitoring well network. Groundwater sampling logs from the July 2022 sampling event are included as **Appendix C**.

A summary of the Site visits is included below:

Summary of Site Activities and Site Monitoring and Sampling April 2017, May 2022, and July 2022		
Site Management Activity	Summary of Results	Maintenance/Corrective Measure
Site Inspection	<p>In April 2017, AECOM conducted a Site inspection to evaluate Site conditions and current use of the Site. The Site was observed to be vacant with no structures. Two “land for sale” signs were observed along the north side of Johnny Cake Farm Road.</p> <p>In May 2022, TRC conducted a Site inspection to document existing Site conditions and evaluate the need for well access improvements.</p> <p>In July 2022, TRC conducted a Site inspection to document Site conditions and current use of the Site. Vegetation was observed to be high during the inspection, obscuring Site conditions and topography, though tractor tire ruts were visible on the north side of Johnny Cake Road.</p>	Site maintenance in the form of mowing was observed to be needed during the July 2022 Site inspection.
Monitoring Well Network	<p>During the April 2017 inspection, AECOM located and inspected monitoring wells MW-1, MW-2R, MW-4R, MW-6R, MW-12A, MW-13, MW-18, MW-19, and MW-22. All wells were observed in good condition.</p> <p>During the May 2022 inspection, TRC confirmed the location of nine existing monitoring wells. The located wells included MW-1, MW-2R, MW-4R (contingency well), MW-6R, MW-12A, MW-13, MW-18, MW-19, and MW-22. Each well was locked with a pad lock. TRC was unable to open locks with key 2537.</p> <p>During the July 2022 inspection, TRC located the eight existing monitoring wells in the monitoring network (MW-1, MW-2R, MW-6R, MW-12A, MW-13, MW-18, MW-19, and MW-22) and MW-4R, a contingency well not included in the monitoring network. All wells were observed to be in good condition. The old locks were cut and replaced with new locks keyed to 2537.</p>	No routine maintenance or corrective measures needed at this time.
Monitoring Well Gauging	Eight Site monitoring wells (MW-1, MW-2R, MW-6R, MW-12A, MW-13, MW-18, MW-19, and MW-22) were gauged for water levels in July 2022. Depth to water measurements ranged from 0.04 ft (MW-2R) to 9.27 ft (MW-18).	No routine maintenance or corrective measures needed at this time.



Summary of Site Activities and Site Monitoring and Sampling April 2017, May 2022, and July 2022		
Site Management Activity	Summary of Results	Maintenance/Corrective Measure
Groundwater Sampling	During the July 2022 inspection, the eight gauged monitoring wells were purged utilizing low-flow sampling methods. Samples were collected and placed on ice in laboratory supplied bottle ware before being sent to Con-Test/Pace Analytical for analysis of VOCs by USEPA method 8260, PFAS 21 compound list by Isotope Dilution, and 1,4-Dioxane by USEPA method 8270-SIM.	No routine maintenance or corrective measures needed at this time.

Field activity reports and photographic logs from the April 2017, May 2022, and July 2022 inspection activities can be found in **Appendix B**.

3.2 Groundwater Monitoring Summary

3.2.1 Groundwater Gauging

On July 12, 2022, eight wells were gauged for depth to groundwater to evaluate groundwater flow direction. The groundwater gauging and elevation measurements can be found on **Table 1**. Groundwater elevations for the overburden monitoring wells with an interpretation of groundwater flow direction are presented on **Figure 3**. A summary of the Site hydrogeologic information is presented below:

July 2022 Hydrogeologic Summary			
Number of Gauged Wells	Hydrogeologic Units	Hydrogeologic Strata	Monitoring Wells per Unit
8	1	Overburden	8
Overburden Groundwater Elevation Range		Bedrock Groundwater Elevation Range	
Lowest groundwater elevation: 742.7 feet AMSL (MW-22) Highest groundwater elevation: 791.36 feet AMSL (MW-2R)		Not Applicable	
Inferred Overburden Groundwater Flow Direction		Inferred Bedrock Groundwater Flow Direction	
North		Not Applicable	

3.2.2 Groundwater Sampling

TRC collected groundwater samples from eight monitoring wells in the monitoring well network (MW-1, MW-2R, MW-6R, MW-12A, MW-13, MW-18, MW-19, and MW-22) utilizing low-flow sampling techniques following the gauging event on July 12, 2022. All samples, including the Quality Assurance/Quality Control



(QA/QC) samples collected at the frequency specified in TRC’s Generic Quality Assurance Project Plan (QAPP, July 2020), were submitted to Con-Test/Pace Analytical (Pace) for analysis of VOCs by USEPA method 8260, PFAS 21 compound list by Isotope Dilution, and 1,4-Dioxane by USEPA method 8270-SIM.

A summary of the groundwater sampling information and pertinent well details for each well is presented below:

Summary of Groundwater Monitoring Well Details and Sampling Activities						
July 2022						
Well ID	Monitoring Well Details				2022 Groundwater Sampling Event	
	Northing	Easting	Screen Zone (ft. bgs)	Material Screened	DTW (ft. bgs)	SMP Analytes
MW-1	NA	NA	2.0 – 12.0	Overburden	5.64	VOCs, PFAS, and 1,4-Dioxane
MW-2R	NA	NA	3.0 – 23.0	Overburden	0.04	VOCs, PFAS, and 1,4-Dioxane
MW-6R	NA	NA	3.0 – 23.0	Overburden	8.22	VOCs, PFAS, and 1,4-Dioxane
MW-12A	NA	NA	10.0 – 20.0	Overburden	6.11	VOCs, PFAS, and 1,4-Dioxane
MW-13	NA	NA	5.0 – 15.0	Overburden	6.62	VOCs, PFAS, and 1,4-Dioxane
MW-18	15607743.734	1678664.823	15.0 – 25.0	Overburden	9.27	VOCs, PFAS, and 1,4-Dioxane
MW-19	15607691.132	1678557.559	15.0 – 25.0	Overburden	8.53	VOCs, PFAS, and 1,4-Dioxane
MW-22	NA	NA	6.0 – 21.0	Overburden	6.07	VOCs, PFAS, and 1,4-Dioxane

Notes:

NA – Not Available.

Additional monitoring well construction details are included on **Table 1**.

3.2.3 Groundwater Analytical Results

Groundwater analytical data of VOCs, PFAS, and 1,4-Dioxane for the July 2022 sampling events can be found in **Table 4**. The DUSRs can be found in **Appendix D**. Detected compounds exceeding their respective NYSDEC Class GA Values for each well are illustrated on **Figure 4**. A summary of those groundwater analytical results with exceedances is provided below:



Summary of Groundwater Analytical Results				
July 2022				
Constituent	SCG	Concentration Range	Location with Highest Concentration	Frequency Exceeding SCG
VOCs (µg/L)				
cis-1,2-Dichloroethene	5	ND – 640	MW-1	2/8
trans-1,2-Dichloroethene	5	ND – 5.7	MW-1	1/8
Tetrachloroethene	5	ND – 8.1	MW-1	1/8
Trichloroethene	5	ND – 160	MW-1	1/8
Vinyl Chloride	2	ND – 28	MW-1	2/8
PFAS (ng/L)				
Perfluorooctanoic Acid (PFOA)	6.7	ND – 0.72	MW-1	0
Perfluorooctanesulfonic Acid (PFOS)	2.7	ND – 3.0	MW-1	1/8
SVOCs (µg/L)				
1,4-Dioxane	0.35	ND	NA	0

4.0 Cost Summary

The total estimated cost of the Site management activities for 2022 (April 2022 through September 2022) is approximately \$15,950. Site management activities included project management/administration; Site inspection; sampling of eight monitoring wells; analysis of eight samples for TCL VOCs, 1,4-dioxane and PFAS; and preparation of a PRR. The total includes engineering and subcontractor costs, as well as expenses associated with the project. It should be noted that the total does not include direct costs incurred by NYSDEC in support of the project. A summary of the 2022 Site management costs is presented below:

Summary of Site Management Costs April 2022 to September 2022		
Cost Item	Amount Expended	Percent of Total Cost
Engineering Support		
TRC	\$15,460	97%
Expenses		
TRC	\$490.00	3%
Total Cost	\$15,950	----

The following provides a review of each cost item:

- Engineering support includes labor costs associated with project management (e.g., WA Package preparation, monthly invoicing, project scheduling and coordination, etc.), Site inspections, groundwater sampling, and reporting (i.e., Site Inspection Report, DUSR, and PRR).
- Subcontractors include analytical laboratory costs associated with the groundwater sampling event.
- Expense costs include travel, equipment, and supplies in support of the Site inspection, groundwater sampling event, and routine Site maintenance activities.
- Reporting costs include data validation, DUSRs preparation, EDD preparation, and PRR preparation.

5.0 Conclusions and Recommendations

5.1 Conclusions

- Based on groundwater elevations measured during the July 2022 Site visit, groundwater flow in the overburden aquifer is to the north, consistent with historical reporting for the Site.
- Site and groundwater use were consistent with the restrictions set forth in the ROD and Environmental Notice. Groundwater monitoring activities were completed in July 2022 this reporting period. Three Site inspections, one performed by AECOM and two performed by TRC, and subsequent inspection reports were also completed. The ICs operated as intended during this reporting period.
- Very thick vegetation was observed during the July 2022 Site visit, making the location and inspection of several wells difficult.
- Historical groundwater sampling results through July 2022 indicate that, in general, VOC concentrations in the overburden groundwater are decreasing. However, SCGs for VOCs have not been achieved at well MW-1.
- PFAS compounds were only detected in monitoring well (MW-1) with only PFOS exceeding the SCG.
- The remedy continued to be protective of human health and the environment during this reporting period.

5.2 Recommendations

- Groundwater monitoring (including hydraulic monitoring) should be performed every three years, or as directed by NYSDEC and NYSDOH, until adequate attenuation of Site COCs has been achieved. The sampling should include seven wells: MW-1, MW-2R, MW-6R, MW-12A, MW-13, MW-18, and MW-19.
- Water level measurements should be collected at the monitoring wells included in the monitoring well network during the groundwater monitoring events to evaluate the groundwater flow direction.
- TRC recommends that the Site be mowed at a minimum of every two years.
- Based on recent and historic COC concentrations, monitoring well MW-22 should be removed from the monitoring well network, but remain as a contingency well.
- Annual Site inspections should be continued at the Site and should be required to be performed following any severe weather condition, such as heavy rain or flooding.
- PRR reporting should be conducted every five years, or as directed by NYSDEC and NYSDOH based on an evaluation of data.
- The SMP should be updated to include the groundwater monitoring well network as an engineering control, and to reflect the new groundwater monitoring well network, the new groundwater sampling schedule and the PRR schedule.



6.0 Certification of Engineering and Institutional Controls

It should be noted that the six-year reporting period for this PRR does not comply with the SMP requirement of periodic Site monitoring, annually from 2012, with a PRR submitted by November 15th of the same year. However, the December 2016 PRR (approved by the Department) recommended Site monitoring every three to five years and indicated that the due date of the next PRR had not yet been established. Based on these recommendations, the timing of this PRR appears appropriate and the SMP is recommended for revision/ update.

For each institutional or engineering control identified for the Site, I certify that all the following statements are true:

- The institutional and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by DER;
- Nothing has occurred that would impair the ability of such control to protect public health and the environment; and,
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control, beyond the inspection and PRR frequency issue listed above.

TRC Engineers, Inc.

Prepared By: 

Matthew Hoskins, P.G

Project Manager

Reviewed By: 

Kevin D. Sullivan, P.E.

Senior Technical Reviewer



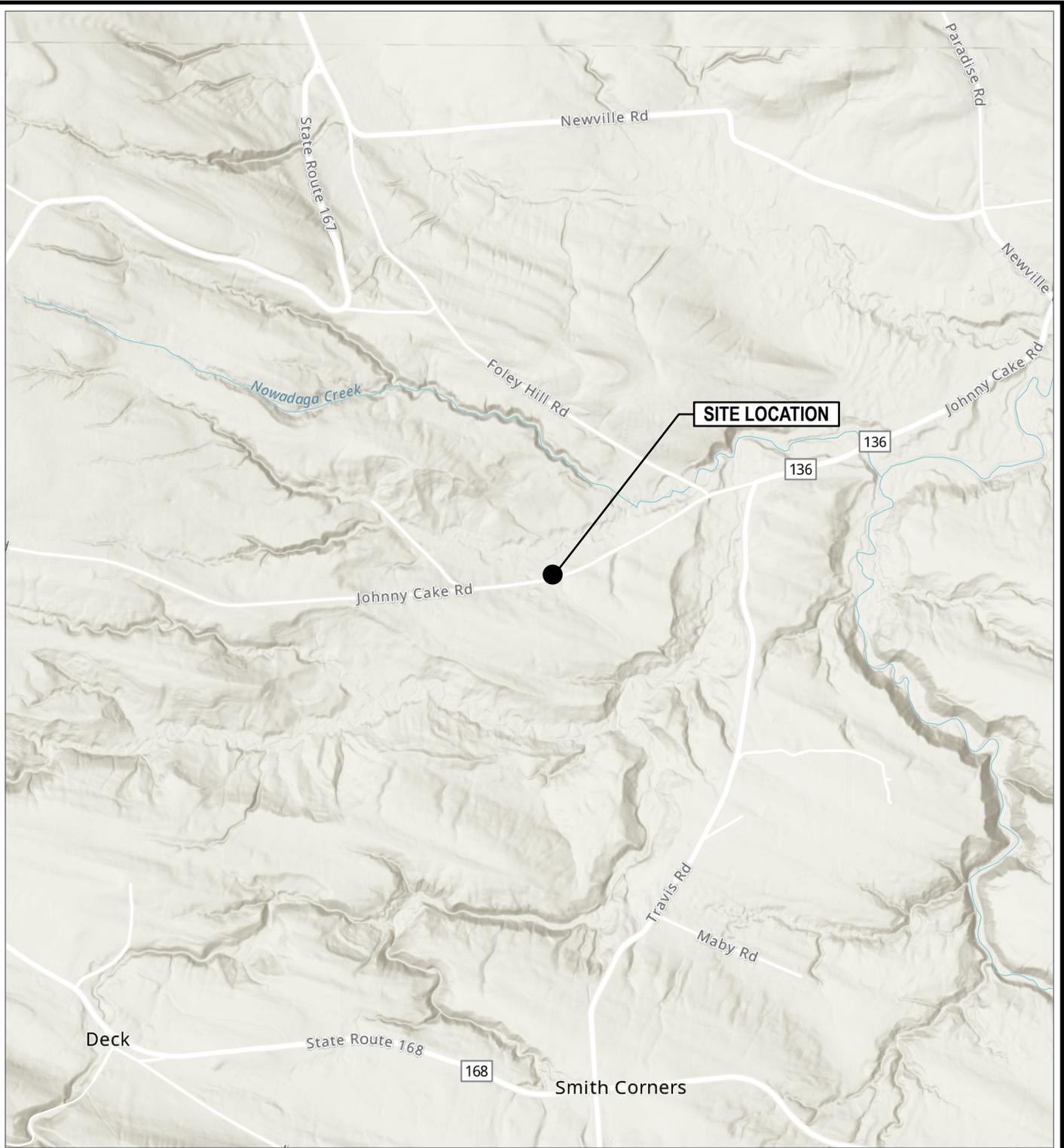
7.0 Future Site Activities

Based on the recommendations in **Section 5.0**, the next inspection should be conducted within 30 days before or after April 1st, 2023 and following severe weather, and the next groundwater sampling event should be conducted within 30 days before or after April 1st, 2025. The next PRR should be submitted by November 15th, 2027.

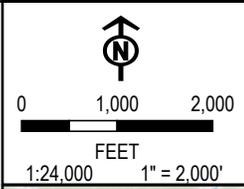


FIGURES

COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK EAST FIPS 3101 FEET, MAP ROTATION: 0
 - SAVED BY: LILL ON 11/3/2022, 13:04:22 PM; FILE PATH: T:\1-PROJECTS\NYSDEC\470744_29_JOHNNYCAKEROADFARMSITE2-APR\2022_PRR\2022_PRR.APPX; LAYOUT NAME: FIGURE 1 - SITE LOCATION



LEGEND
 ● SITE LOCATION



PROJECT:
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 JOHNNY CAKE ROAD FARM SITE - SITE NO. 622016
 JOHNNY CAKE ROAD
 DANUBE, NEW YORK 13407

TITLE:
SITE LOCATION MAP

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 29
CHECKED BY:	T. SHANLEY	FIGURE 1	
APPROVED BY:	M. HOSKINS		
DATE:	NOVEMBER 2022		

BASE MAP: ESRI TOPOGRAPHIC IMAGERY
 DATA SOURCES: TRC



10 Maxwell Drive
 Clifton Park, NY 12065
 Phone: 518-348-1190

FILE: 2022_PRR

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: 0
 -- Saved By: L.LILL on 11/2/2022, 13:10:41 PM; File Path: T:\H-PROJECTS\NYS\DEC\470744_29_JohnnyCakeRoadFarmSite\2-A\PRR\2022_PRR\2022_PRR.aprx; Layout Name: Figure 2 - Site Layout



LEGEND

- APPROXIMATE SITE BOUNDARY
- MONITORING WELL
- DECOMMISSIONED MONITORING WELL (2009)
- DECOMMISSIONED MONITORING WELL (2016)

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
2. BASE MAP FROM GOOGLE EARTH IMAGERY.
3. DATA SOURCES: TRC, SITE MANAGEMENT PLAN DATED JUNE 2011 PREPARED BY NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

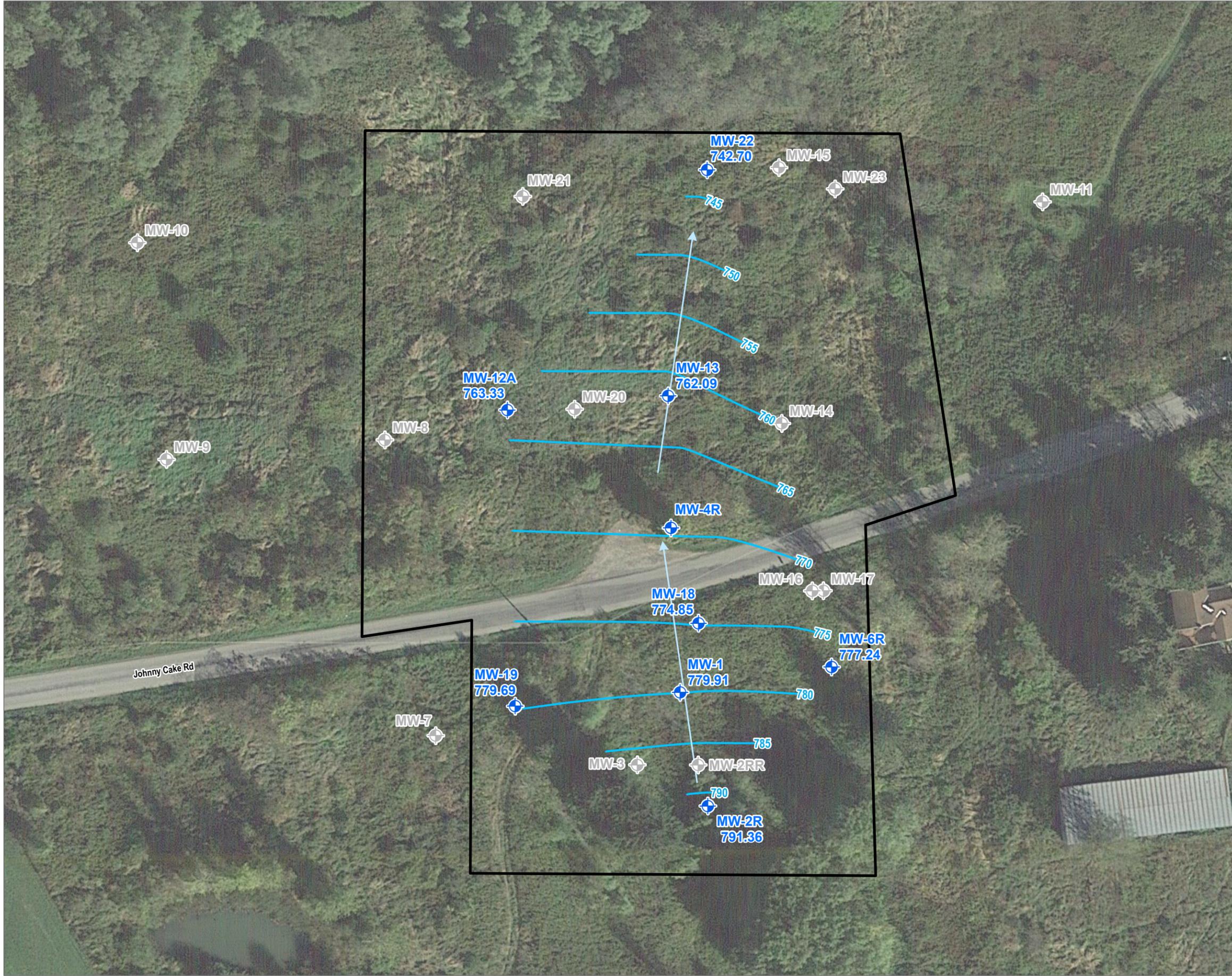


1:720
 1" = 60'



PROJECT: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION JOHNNY CAKE ROAD FARM SITE - SITE NO. 622016 JOHNNY CAKE ROAD DANUBE, NEW YORK 13407	
TITLE: SITE LAYOUT MAP	
DRAWN BY: L. LILL	PROJ. NO.: 470744 TASK 29
CHECKED BY: T. SHANLEY	FIGURE 2
APPROVED BY: M. HOSKINS	
DATE: NOVEMBER 2022	
10 Maxwell Drive Clifton Park, NY 12065 Phone: 518-348-1190	
FILE:	2022_PRR.aprx

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: 0
 -- Saved By: L.LILL on 12/29/2022 08:07:56 AM; File Path: T:\PROJECTS\NYSD\EC\470744_29_JohnnyCakeRoadFarmSite\2-APR\2022_PRR\2022_PRR.aprx; Layout Name: Figure 3 - Overburden Groundwater Surface Elevations July 2022



LEGEND

- APPROXIMATE SITE BOUNDARY
- + EXISTING MONITORING WELL
- + DECOMMISSIONED MONITORING WELL
- GROUNDWATER CONTOUR (5' INTERVALS)
- GROUNDWATER FLOW DIRECTION

- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. POTENTIOMETRIC SURFACE ELEVATIONS WERE COLLECTED ON JULY 12, 2022.
 3. BASE MAP FROM GOOGLE EARTH IMAGERY.
 4. DATA SOURCES: TRC.

↑
N
↓

1:720
 1" = 60'

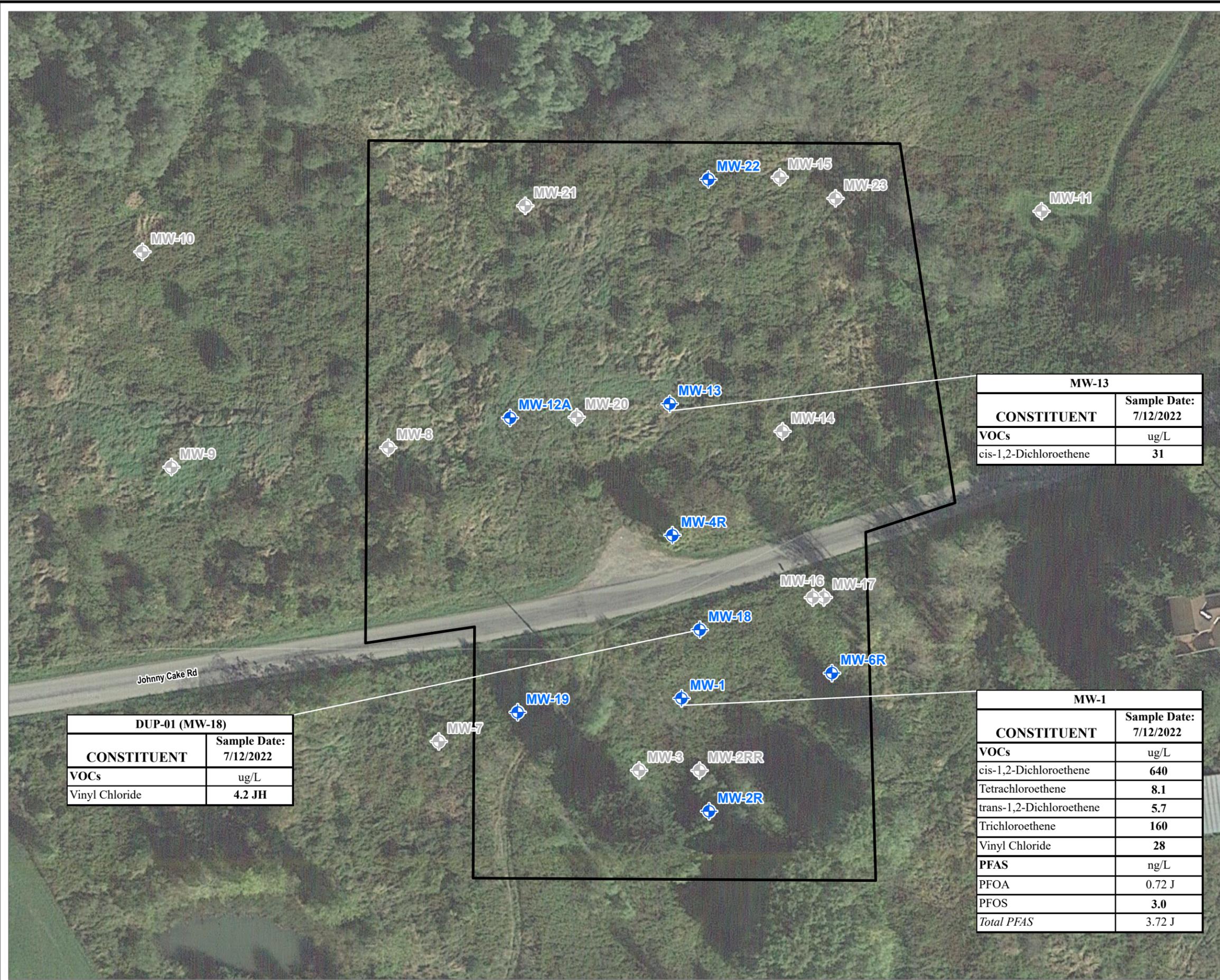
0 30 60 FEET

PROJECT: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION JOHNNY CAKE ROAD FARM SITE - SITE NO. 622016 JOHNNY CAKE ROAD DANUBE, NEW YORK 13407	
TITLE: OVERBURDEN GROUNDWATER SURFACE ELEVATIONS MAP - JULY 2022	
DRAWN BY: L. LILL	PROJ. NO.: 470744 TASK 29
CHECKED BY: T. SHANLEY	FIGURE 3
APPROVED BY: M. HOSKINS	
DATE: DECEMBER 2022	

10 Maxwell Drive
 Clifton Park, NY 12065
 Phone: 518-348-1190

FILE: 2022_PRR.aprx

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: 0
 -- Saved By: L.LILL on 12/29/2022 08:23:50 AM; File Path: T:\PROJECTS\NYSDEC\CIV70744_29_JohnnyCakeRoadFarmSite\2-APR-2022_PRR\2022_PRR.aprx; Layout Name: Figure 4 - Summary of Detected Compounds Exceeding NYSDEC Groundwater Quality



LEGEND

- APPROXIMATE SITE BOUNDARY
- EXISTING MONITORING WELL
- DECOMMISSIONED MONITORING WELL

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
2. VALUES SHOWN IN **BOLD** EXCEEDED THE LISTED CRITERIA.

BASE MAP: GOOGLE EARTH IMAGERY.
 DATA SOURCES: TRC.

ACRONYMS:

ug/L - MICROGRAMS PER LITER
 B - ANALYTE DETECTED IN ASSOCIATED METHOD BLANK
 J - ESTIMATED VALUE
 JH - ESTIMATED VALUE; BIASED HIGH
 PFAS - PER- AND POLYFLUOROALKYL SUBSTANCES
 * - GUIDELINES FOR SAMPLING AND ANALYSIS OF PFAS NYSDEC PART 375 REMEDIAL PROGRAMS, PROPOSED JUNE 2021
 (a) - CRITERIA APPLICABLE TO THE SUM OF THE CIS AND TRANS ISOMERS

MW-13	
CONSTITUENT	Sample Date: 7/12/2022
VOCs	ug/L
cis-1,2-Dichloroethene	31

CONSTITUENT	Class GA Value
VOCs	ug/L
cis-1,2-Dichloroethene	5
Tetrachloroethene	5
trans-1,2-dichloroethene	5
Trichloroethene	5
Vinyl Chloride	0.3

CONSTITUENT	Guidance Value June 2021*
PFAS	ng/L
Perfluorooctanoic acid (PFOA)	6.7
Perfluorooctanesulfonic acid (PFOS)	2.7
Total PFAS	500



1:720
 1" = 60'



DUP-01 (MW-18)	
CONSTITUENT	Sample Date: 7/12/2022
VOCs	ug/L
Vinyl Chloride	4.2 JH

MW-1	
CONSTITUENT	Sample Date: 7/12/2022
VOCs	ug/L
cis-1,2-Dichloroethene	640
Tetrachloroethene	8.1
trans-1,2-Dichloroethene	5.7
Trichloroethene	160
Vinyl Chloride	28
PFAS	ng/L
PFOA	0.72 J
PFOS	3.0
Total PFAS	3.72 J

PROJECT:
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 JOHNNY CAKE ROAD FARM SITE - SITE NO. 622016
 JOHNNY CAKE ROAD
 DANUBE, NEW YORK 13407

TITLE:
**SUMMARY OF DETECTED COMPOUNDS EXCEEDING
 NYSDEC GROUNDWATER QUALITY STANDARDS/GUIDANCE
 JULY 2022**

DRAWN BY: L. LILL PROJ. NO.: 470744 TASK 29

CHECKED BY: T. SHANLEY

APPROVED BY: M. HOSKINS

DATE: DECEMBER 2022

FIGURE 4



10 Maxwell Drive
 Clifton Park, NY 12065
 Phone: 518-348-1190



TABLES

Table 1
New York State Department of Environmental Conservation
Johnny Cake Road Farm Site - Site No. 622016
Town of Danube, New York
Monitoring Well Construction Summary

Well ID	Installation Date	Well Dia. (inches)	Well Material	Total Depth (feet bgs)	Screened Formation	Screen			Elevation (feet AMSL)			Location ¹	
						Top (feet bgs)	Bottom (feet bgs)	Length (feet)	Top of Casing	Screen		Northing (ft)	Easting (ft)
										Top	Bottom		
MW-1	4/19/1990	2	PVC	12	Overburden	2	12	10	785.55	780.55	770.50	NA	NA
MW-2R	7/25/2005	4	PVC	23	Overburden	3	23	20	791.40	786.40	766.40	NA	NA
MW-4R	7/26/2005	4	PVC	23.5	Overburden	3.5	23.5	20	778.99	773.00	753.00	NA	NA
MW-6R	7/25/2005	4	PVC	23	Overburden	3	23	20	785.46	780.10	760.10	NA	NA
MW-12A	5/1/1991	4	PVC	20	Overburden	10	20	10	769.44	757.20	747.20	NA	NA
MW-13	5/1/1991	4	PVC	15	Overburden	5	15	10	768.71	761.60	751.60	NA	NA
MW-18	9/29/2003	4	PVC	25	Overburden	15	25	10	784.12	766.50	756.50	15607743.734	1678664.823
MW-19	9/29/2003	4	PVC	25	Overburden	15	25	10	788.22	770.60	760.60	15607691.132	1678557.559
MW-22	9/30/2008	2	PVC	21	Overburden	6	21	15	748.77	740.30	725.30	NA	NA

Notes:

- AMSL : above mean sea level
- feet bgs : feet below ground surface
- PVC : polyvinyl chloride
- NA : Not Available

Well information from Table 1 - Active Monitoring Well Summary, SMP 2011 by NYSDEC.

¹Universal Transverse Mercator, 18 North, WGS 1984 Datum

Table 2
New York State Department of Environmental Conservation
Johnny Cake Road Farm Site - Site No. 622016
Town of Danube, New York
Summary of Depth to Water Measurements and Groundwater Elevations

Monitoring Well Identification	Screened Formation	Top of Casing Elevation* (feet AMSL)	Gauge Date	Depth to Water (feet below TOC)	Depth to Bottom (feet below TOC)	Groundwater Elevation (feet AMSL)
MW-1	Overburden	785.55	7/12/2022	5.64	9.2	779.91
MW-2R	Overburden	791.40	7/12/2022	0.04	22.3	791.36
MW-6R	Overburden	785.46	7/12/2022	8.22	23	777.24
MW-12A	Overburden	769.44	7/12/2022	6.11	19.8	763.33
MW-13	Overburden	768.71	7/12/2022	6.62	15.3	762.09
MW-18	Overburden	784.12	7/12/2022	9.27	24.4	774.85
MW-19	Overburden	788.22	7/12/2022	8.53	24.9	779.69
MW-22	Overburden	748.77	7/12/2022	6.07	21	742.7

Notes:

AMSL : Above Mean Sea Level

TOC : Top of Casing

Well information from Table 1 - Active Monitoring Well Summary, SMP 2011 by NYSDEC.

Table 3
New York State Department of Environmental Conservation
Johnny Cake Road Farm Site - Site No. 622016
Town of Danube, New York
Summary of Groundwater Sampling Results - July 2022

Sample Location:	MW-1	MW-2R	MW-6R	MW-12A	MW-13	MW-18		MW-19	MW-22	
Sample Name:	MW-1	MW-2R	MW-6R	MW-12A	MW-13	MW-18	DUP-01	MW-19	MW-22	
Lab Sample ID:	22G0742-03	22G0742-07	22G0742-08	22G0742-02	22G0742-09	22G0742-04	22G0742-05	22G0742-06	22G0742-10	
Sample Date:	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	
VOCs	Class GA Values*	Results (µg/L)								
Acetone	50	250 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ
Acrylonitrile	NC	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
tert-Amylmethyl Ether (TAME)	NC	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	1	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromobenzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5	5 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Bromodichloromethane	50	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	50	9.9 J	20 U	20 U						
tert-Butyl Alcohol	NC	100 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
n-Butylbenzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
sec-Butylbenzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylethyl Ether (TBEE)	NC	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Disulfide	60	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	7	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloromethane	5	10 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
2-Chlorotoluene	NC	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Chlorotoluene	NC	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorodibromomethane	50	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-Chloropropane (DBCP)	0.04	25 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
1,2-Dibromoethane	0.0006	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NC	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,4-Dichloro-2-Butene	NC	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dichlorodifluoromethane (Freon 12)	5	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	5	1.8 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene	5	640	1 U	0.36 J	1 U	31	1 U	0.21 J	1 U	1 U
trans-1,2-Dichloroethylene	5	5.7	1 U	1 U	1 U	0.49 J	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropane	NC	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NC	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloropropene	NC	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
cis-1,3-Dichloropropene	0.4(b)	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.4(b)	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethyl Ether	NC	10 U	2 U	1.6 J	2 U	5.5	8.8 JH	29 JH	2 U	2 U
Diisopropyl Ether (DIPE)	NC	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dioxane	0.35**	250 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Ethyl Benzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	0.5	3 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
2-Hexanone (MBK)	50	50 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene (Cumene)	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
p-Isopropyltoluene (p-Cymene)	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	NC	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-Butyl Ether (MTBE)	10	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Cyclohexane	NC	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	NC	50 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10	10 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
n-Propylbenzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1,2-Tetrachloroethane	NC	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethylene	5	8.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrahydrofuran	NC	50 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5	25 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
1,2,4-Trichlorobenzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trichlorobenzene	NC	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene	5	160	1 U	1 U	1 U	0.97 J	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	5	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,3-Trichloropropane	0.04	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	5	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	28	0.33 J	0.95 J	2 U	2 U	1.2 JH	4.2 JH	2 U	2 U
m/p Xylene	5(a)	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	5(a)	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SVOCs										
1,4-Dioxane	0.35**	0.22 U	0.21 UJ	0.21 U	0.21 U	0.23 U	0.19 U	0.21 U	0.22 U	0.19 U
PFAS										
Perfluorobutanoic Acid (PFBA)	NC	1.1 J	1.8 U	2.3	1.4 J	1 J	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorobutanesulfonic Acid (PFBS)	NC	0.4 J	1.8 U	1.8 U	0.45 J	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluoropentanoic Acid (PFPeA)	NC	0.84 J	1.8 U	1.8 U	0.59 J	0.6 J	1.9 U	1.7 U	1.9 U	1.8 U

Table 3
New York State Department of Environmental Conservation
Johnny Cake Road Farm Site - Site No. 622016
Town of Danube, New York
Summary of Groundwater Sampling Results - July 2022

Sample Location:	MW-1	MW-2R	MW-6R	MW-12A	MW-13	MW-18		MW-19	MW-22	
Sample Name:	MW-1	MW-2R	MW-6R	MW-12A	MW-13	MW-18	DUP-01	MW-19	MW-22	
Lab Sample ID:	22G0742-03	22G0742-07	22G0742-08	22G0742-02	22G0742-09	22G0742-04	22G0742-05	22G0742-06	22G0742-10	
Sample Date:	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	7/12/2022	
Perfluorohexanoic Acid (PFHxA)	NC	0.81 J	2.8	0.45 J	1.9 U	0.37 J	1.9 U	1.7 U	1.9 U	1.8 U
11Cl-PF3OUds (F53B Minor)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
9Cl-PF3ONS (F53B Major)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
4,8-dioxa-3H-perfluorononanoic Acid (ADONA)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
HFPO-DA (GenX)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 UJ	1.7 UJ	1.9 U	1.8 U
8:2 Fluorotelomer Sulfonate (8:2 FTS)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorodecanoic Acid (PFDA)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorododecanoic Acid (PFDoA)	NC	1.7 UJ	1.8 U	1.8 UJ	1.9 UJ	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluoroheptanesulfonic Acid (PFHpS)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
N-EtFOSAA	NC	1.7 UJ	1.8 UJ	1.8 UJ	1.9 UJ	1.8 UJ	1.9 UJ	1.7 UJ	1.9 UJ	1.8 UJ
N-MeFOSAA	NC	1.7 UJ	1.8 UJ	1.8 UJ	1.9 UJ	1.8 UJ	1.9 UJ	1.7 UJ	1.9 UJ	1.8 UJ
Perfluorotetradecanoic Acid (PFTeA)	NC	R	1.8 U	1.8 UJ	1.9 UJ	1.8 UJ	1.9 UJ	1.7 UJ	1.9 U	1.8 UJ
Perfluorotridecanoic Acid (PFTriA)	NC	R	1.8 U	1.8 UJ	1.9 UJ	1.8 UJ	1.9 UJ	1.7 UJ	1.9 U	1.8 UJ
4:2 Fluorotelomer Sulfonate (4:2 FTS)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorodecane sulfonic Acid (PFDS)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorooctane Sulfonamide (FOSA)	NC	1.7 UJ	1.8 UJ	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorononane sulfonic Acid (PFNS)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorohexanesulfonamide (FHxSA)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorobutylsulfonamide (FBSA)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorohexanesulfonic Acid (PFHxS)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluoro-3-methoxypropanoic Acid (PFMPA)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluoro(4-methoxybutanoic) Acid (PFMBA)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
6:2 Fluorotelomer Sulfonate (6:2 FTS)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluoropentanesulfonic Acid (PFPeS)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluoroundecanoic Acid (PFUnA)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	NC	1.7 UJ	1.8 UJ	1.8 UJ	1.9 UJ	1.8 UJ	1.9 UJ	1.7 UJ	1.9 UJ	1.8 UJ
Perfluoroheptanoic Acid (PFHpA)	NC	0.4 J	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorooctanoic Acid (PFOA)	6.7**	0.72 J	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorooctanesulfonic Acid (PFOS)	2.7**	3	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U
Perfluorononanoic Acid (PFNA)	NC	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.7 U	1.9 U	1.8 U

Notes:
ng/L - nanograms per liter.
ug/L - micrograms per liter.
J - Estimated value.
JH - Estimated value; biased high.
NA - Sample not analyzed for the listed analyte.
NC - No NYSDEC standards exist for this analyte.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type exceed the listed Guidance value.

VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PFAS - Per- and Polyfluoroalkyl Substances.
* - NYSDEC Ambient Water Quality Standards and Guidance Values
** - Guidelines for Sampling and Analysis of PFAS NYSDEC Part 375 Remedial Programs, proposed June 2021.
for Class GA water, June 1998 with the April 2000 Addendum.
(a) - criteria applicable to xylene (total), the sum of the xylene isomers.
(b) - criteria applicable to the sum of the cis and trans isomers.





APPENIDX A



**CUSTODIAL RECORD
PERTINENT SITE DOCUMENTS
JOHNNY CAKE ROAD FARM (NYSDEC SITE NO. 622016)**

Earth Tech Northeast, Inc., *Site Investigation Report*, Johnny Cake Road Site, February 2009

New York State Department of Environmental Conservation, *Record of Decision*, Johnny Cake Road Farm Site, March 2009

New York State Department of Environmental Conservation, *Site Management Plan*, Johnny Cake Road Farm Site, June 2011

Herkimer County, *Environmental Easement*, Johnny Cake Road Farm Site, executed July 2011

New York State Department of Environmental Conservation, *Certificate of Completion*, Johnny Cake Road Farm Site, September 2011

AECOM, *Periodic Review Report*, Johnny Cake Road Farm Site, October 2013

AECOM, *Periodic Review Report*, Johnny Cake Road Farm Site, December 2016



SITE HISTORY

JOHNNY CAKE ROAD FARM SITE (NYSDEC SITE NO. 622016)

<u>Date</u>	<u>Description</u>
1980s	The Johnny Cake Road Farm operated as a dairy farm before becoming the location of an illegal drug manufacturing operation in the mid-1980s. Significant quantities of chlorinated solvents were used as part of the drug manufacturing operations. Spent solvents were dumped in the vicinity of the former farmhouse building. The in-ground swimming pool was also used to rinse filters used in the drug manufacturing and refining process.
1987	In 1987, the USMS seized the site as part of an investigation which identified the site as involved in the alleged drug manufacturing and distribution operation.
1989	Following seizure of the property, the USMS entered into an inter-agency agreement with the USEPA to investigate and remediate the property in 1989.
1990	The Site is listed by the NYSDEC as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites.
1990s	In the 1990s, the USEPA removed all chemicals left behind from the drug operation and demolished all on-site structures, including the farmhouse, barn, stable building, in-ground pool, and garage.
2005	In 2005, the USEPA conducted an IRM to remove soils impacted with chlorinated solvents.
2008	An October 2008 groundwater investigation concluded that site contamination was limited to 3.24 acres.
2009	In 2009, the NYSDEC issued a No Further Action Record of Decision with Site Management.
2011	A Site Management Plan was approved by the NYSDEC in June 2011. In July 2011, an Environmental Easement containing the 3.24-acre parcel was recorded in Herkimer County.
2013	In October 2013, a PRR was prepared by AECOM for the reporting period November 15, 2012 to November 15, 2013.
2016	In December 2016, a PRR was prepared by AECOM for the reporting period November 15, 2013 to November 15, 2016.



**Enclosure 1
Engineering Controls - Standby Consultant/Contractor Certification Form**



	Site Details	Box 1
Site No. 622016		
Site Name Johnny Cake Road Farm Site		
Site Address: Johnny Cake Road	Zip Code: 13407	
City/Town: Mohawk		
County: Herkimer		
Site Acreage: 3.2		
Reporting Period: November 15, 2016 to September 01, 2022		
		YES NO
1. Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. To your knowledge 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. To your knowledge 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. To your knowledge 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. To your knowledge is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO
		Box 2
	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, 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 contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.		
Signature of Standby Consultant/Contractor	Date	

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
127.002-4-1	Kelly Funk	Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan Building Use Restriction

From ROD:

1) Imposition of an institutional control in the form of an environmental easement that will require (a) limiting the use and development of the property to residential use, which would also allow commercial or industrial uses. Further, due to the site specific nature of the contamination (i.e. VOCs in deep subsurface soil and groundwater) agricultural use will be permitted.; (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) the remedial party or site owner to complete a periodic certification of institutional controls.

The site boundary subject to the environmental easement will be redefined based on the October 2008 groundwater investigation and the February 2009 Site Investigation Report. The redefined site boundary is shown on Figure 7 and will encompass 3.24 acres. This includes land on both the north and south side of Johnny Cake Road in Tax Parcel 127.002-4-1 as well as part of the Johnny Cake Road right-of-way. The site boundary contains the former source areas and the areas of groundwater contamination emanating from these former sources. Portions of Tax Parcel 127.002-4-1 not within the site boundary are not impacted by site contaminants and will not be part of the redefined site subject to institutional controls.

2) Development of a site management plan which will include the following: (a) evaluation of the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified; (b) monitoring of groundwater; (c) restricting use of the site as set forth in the environmental easement; and (d) providing the Herkimer County Highway Department with all relevant reports and data to identify the location and requirements to handle potentially contaminated groundwater in the county right-of-way during future repairs and/or replacements of the section of Johnny Cake Road which runs through the site.

Description of Engineering Controls

None Required

Not Applicable/No EC's

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, including data and material prepared by previous contractors for the current certifying period, if any;

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) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

Signature of Standby Consultant/Contractor

Date

IC/EC CERTIFICATIONS

Signature

I certify that all information in Boxes 2 through 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 Kevin D. Sullivan at TRC Engineers, Inc.
print name

1090 Union Road, Suite 280

West Seneca, NY 14224
(print business address)

I am certifying as a .professional engineer

Signature of Kevin D. Sullivan

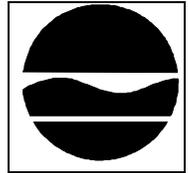


Stamp
(Required for PE)

Date 2/16/23



APPENDIX B



DAILY INSPECTION REPORT

Site Code #: 6-22-016	Date: April 10, 2017	Report #: 2017-1
------------------------------	-----------------------------	-------------------------

Site Name: Johnny Cake Road
Location: Danube, NY
DEC Proj. Mgr.: William Bennett
Consultant Proj. Mgr.: Dino Zack, AECOM
Proj. Contr.: N/A for this task
Site Phone & Fax: N/A

	AM	PM
Weather	Sunny	Sunny
Temperature	50F	70F
Wind Speed & Direction	Calm	Calm

Description of work performed by AECOM this report period:

- AECOM traveled to Herkimer on April 9, 2017 and began the annual site inspection at 08:00hrs on April 10, 2017.
- AECOM project manager conducted the annual Site Inspection as specified in Section 3.3 of the SMP. The following conditions of the SMP were confirmed (also refer to attached photographic report):
 - The site is currently vacant with no active use (with the exception of tractor tracks leading up the hill on the south side of the road between the grove of pine trees and the small pond which is located just off the property to the west to the large crop field).
 - Two “land for sale” signs were observed along the north side of the road, just west of the “pull-off” area.
 - AECOM did not observe any current use of groundwater as a source of potable water at the site.

- There are no structures on the site, and therefore no potential for vapor intrusion.
 - Groundwater monitoring is being completed by AECOM on behalf of the NYSDEC. All groundwater monitoring wells were visually inspected (refer to attached photographic log) and the groundwater elevations were gauged (refer to attached groundwater elevation table).
 - There is no evidence of work by the Herkimer County Highway Department in the county right-of-way which could potentially lead to contact with contaminated groundwater.
 - The NYSDEC's access to the site is not restricted in any way.
- AECOM inspected monitoring wells for the following:
 - Confirm all monitoring wells were properly locked (tested the locks and added lubrication to them as a precautionary measure);
 - Confirmed monitoring well identifications on the outer casing and on the inside of the well lids were legible;
 - Added high-visibility survey ribbon to the protective casing of each well where needed;
 - Completed a well inspection checklist for each monitoring well; and
 - Collected photographs of each monitoring well and the Site in general (refer to attached photo log).

Health & Safety:

Level of protection: AECOM reviewed the project HASP and associated THA's prior to initiating site activities. While on site, AECOM donned Level D PPE (steel toe boots, long sleeve shirt, hi-visible safety vest, safety glasses, and Nitrile gloves). Due to potential tick issues, AECOM taped pant cuffs and shirt sleeves securely around ankles and wrists. In addition, DEET was used on clothing.

AECOM contacted the project director prior to leaving the site.

Is the level of protection in conformance with the approved Health & Safety Plan? **Yes** ~~No~~

List deviations: **None**

Are atmospheric monitoring results acceptable? **Yes** ~~No~~

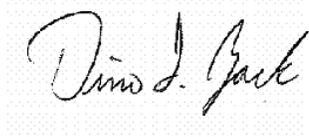
List deviations: None

Site Visitors	Representing	Entered Exclusion Zone
Dino Zack	AECOM	N/A

Site Representative: Dino Zack

Date: April 10, 2017

Representative's signature:

A handwritten signature in black ink that reads "Dino J. Zack". The signature is written in a cursive style and is placed on a light gray, dotted rectangular background.

Well Inspection Checklist

Property:	<u>Jonny Cake Rd</u>	Date:	<u>4/10/2017</u>
Type:	<u>Stickup</u>		
Stickup Height:	<u>3.5 ft</u>	Well Number:	<u>MW-1</u>
As-Built Well Depth:	<u>12 ft</u>	Stickup Material:	<u>PVC</u>
Riser Diameter:	<u>2-inch</u>	Stickup Diameter:	<u>4-inch</u>
Riser Material:	<u>PVC</u>		
Riser Appearance:	<u>Excellent</u>	Inspector:	<u>DLZ</u>
CONDITION			
Signs of Vandalism:	None		
Cannot Locate:	NA		
Locked:	Yes	Lock Replaced:	Lubricated existing lock
Inner Cap:	Yes		
Protective Casing Loose:	No		
Concrete Pad:	No issues		
Soil Erosion:	None		
Ponded Water:	None		
Well Marked:	Yes		
Cannot Identify:	NA		
Depth to water from TOC:	NA		
Depth to bottom from TOC:	NA		
Does well appear:	NA		
Obstruction in well:	NA		
PID reading:	NA		
Active pump in well:	No		
Comments:	Riser repaired in November 2016 in response to artician conditions.		

Well Inspection Checklist

Property:	<u>Jonny Cake Rd</u>	Date:	<u>4/10/2017</u>
Type:	<u>Stickup</u>		
Stickup Height:	<u>3.5 ft</u>	Well Number:	<u>MW-2R</u>
As-Built Well Depth:	<u>23 ft</u>	Stickup Material:	<u>Steel</u>
Riser Diameter:	<u>4-inch</u>	Stickup Diameter:	<u>6-inch</u>
Riser Material:	<u>PVC</u>		
Riser Appearance:	<u>Excellent</u>	Inspector:	<u>DLZ</u>
CONDITION			
Signs of Vandalism:	None		
Cannot Locate:	NA		
Locked:	No	Lock Replaced:	Lubricated existing lock
Inner Cap:	Yes		
Protective Casing Loose:	Yes		
Concrete Pad:	No issues		
Soil Erosion:	None		
Ponded Water:	None		
Well Marked:	Yes		
Cannot Identify:	NA		
Depth to water from TOC:	NA		
Depth to bottom from TOC:	NA		
Does well appear:	NA		
Obstruction in well:	NA		
PID reading:	NA		
Active pump in well:	No		
Comments:			

Well Inspection Checklist

Property:	<u>Jonny Cake Rd</u>	Date:	<u>4/10/2017</u>
Type:	<u>Stickup</u>		
Stickup Height:	<u>2.5 ft</u>	Well Number:	<u>MW-4R</u>
As-Built Well Depth:	<u>23.5 ft</u>	Stickup Material:	<u>Steel</u>
Riser Diameter:	<u>4-inch</u>	Stickup Diameter:	<u>6-inch</u>
Riser Material:	<u>PVC</u>		
Riser Appearance:	<u>Good</u>	Inspector:	<u>DLZ</u>
CONDITION			
Signs of Vandalism:	None		
Cannot Locate:	NA		
Locked:	No	Lock Replaced:	Lubricated existing lock
Inner Cap:	Yes		
Protective Casing Loose:	Yes		
Concrete Pad:	No issues		
Soil Erosion:	None		
Ponded Water:	None		
Well Marked:	Yes		
Cannot Identify:	NA		
Depth to water from TOC:	NA		
Depth to bottom from TOC:	NA		
Does well appear:	NA		
Obstruction in well:	NA		
PID reading:	NA		
Active pump in well:	No		
Comments:			

Well Inspection Checklist

Property:	<u>Jonny Cake Rd</u>	Date:	<u>4/10/2017</u>
Type:	<u>Stickup</u>		
Stickup Height:	<u>3.5 ft</u>	Well Number:	<u>MW-6R</u>
As-Built Well Depth:	<u>23 ft</u>	Stickup Material:	<u>Steel</u>
Riser Diameter:	<u>4-inch</u>	Stickup Diameter:	<u>6-inch</u>
Riser Material:	<u>PVC</u>		
Riser Appearance:	<u>Excellent</u>	Inspector:	<u>DLZ</u>
CONDITION			
Signs of Vandalism:	None		
Cannot Locate:	NA		
Locked:	No	Lock Replaced:	Lubricated existing lock
Inner Cap:	Yes		
Protective Casing Loose:	Yes		
Concrete Pad:	No issues		
Soil Erosion:	None		
Ponded Water:	None		
Well Marked:	Yes		
Cannot Identify:	NA		
Depth to water from TOC:	NA		
Depth to bottom from TOC:	NA		
Does well appear:	NA		
Obstruction in well:	NA		
PID reading:	NA		
Active pump in well:	No		
Comments:			

Well Inspection Checklist

Property:	<u>Jonny Cake Rd</u>	Date:	<u>4/10/2017</u>
Type:	<u>Stickup</u>		
Stickup Height:	<u>3.5 ft</u>	Well Number:	<u>MW-12A</u>
As-Built Well Depth:	<u>20 ft</u>	Stickup Material:	<u>Steel</u>
Riser Diameter:	<u>4-inch</u>	Stickup Diameter:	<u>6-inch</u>
Riser Material:	<u>PVC</u>		
Riser Appearance:	<u>Excellent</u>	Inspector:	<u>DLZ</u>
CONDITION			
Signs of Vandalism:	None		
Cannot Locate:	NA		
Locked:	No	Lock Replaced:	Lubricated existing lock
Inner Cap:	Yes		
Protective Casing Loose:	Yes		
Concrete Pad:	No issues		
Soil Erosion:	None		
Ponded Water:	None		
Well Marked:	Yes		
Cannot Identify:	NA		
Depth to water from TOC:	NA		
Depth to bottom from TOC:	NA		
Does well appear:	NA		
Obstruction in well:	NA		
PID reading:	NA		
Active pump in well:	No		
Comments:			

Well Inspection Checklist

Property:	<u>Jonny Cake Rd</u>	Date:	<u>4/10/2017</u>
Type:	<u>Stickup</u>		
Stickup Height:	<u>3.5 ft</u>	Well Number:	<u>MW-13</u>
As-Built Well Depth:	<u>15 ft</u>	Stickup Material:	<u>Steel</u>
Riser Diameter:	<u>4-inch</u>	Stickup Diameter:	<u>6-inch</u>
Riser Material:	<u>PVC</u>		
Riser Appearance:	<u>Excellent</u>	Inspector:	<u>DLZ</u>
CONDITION			
Signs of Vandalism:	None		
Cannot Locate:	NA		
Locked:	No	Lock Replaced:	Lubricated existing lock
Inner Cap:	Yes		
Protective Casing Loose:	Yes		
Concrete Pad:	No issues		
Soil Erosion:	None		
Ponded Water:	None		
Well Marked:	Yes		
Cannot Identify:	NA		
Depth to water from TOC:	NA		
Depth to bottom from TOC:	NA		
Does well appear:	NA		
Obstruction in well:	NA		
PID reading:	NA		
Active pump in well:	No		
Comments:			

Well Inspection Checklist

Property:	<u>Jonny Cake Rd</u>	Date:	<u>4/10/2017</u>
Type:	<u>Stickup</u>		
Stickup Height:	<u>3.5 ft</u>	Well Number:	<u>MW-18</u>
As-Built Well Depth:	<u>25 ft</u>	Stickup Material:	<u>Steel</u>
Riser Diameter:	<u>4-inch</u>	Stickup Diameter:	<u>6-inch</u>
Riser Material:	<u>PVC</u>		
Riser Appearance:	<u>Excellent</u>	Inspector:	<u>DLZ</u>
CONDITION			
Signs of Vandalism:	None		
Cannot Locate:	NA		
Locked:	No	Lock Replaced:	Lubricated existing lock
Inner Cap:	Yes		
Protective Casing Loose:	Yes		
Concrete Pad:	No issues		
Soil Erosion:	None		
Ponded Water:	None		
Well Marked:	Yes		
Cannot Identify:	NA		
Depth to water from TOC:	NA		
Depth to bottom from TOC:	NA		
Does well appear:	NA		
Obstruction in well:	NA		
PID reading:	NA		
Active pump in well:	No		
Comments:			

Well Inspection Checklist

Property:	<u>Jonny Cake Rd</u>	Date:	<u>4/10/2017</u>
Type:	<u>Stickup</u>		
Stickup Height:	<u>3.5 ft</u>	Well Number:	<u>MW-19</u>
As-Built Well Depth:	<u>25 ft</u>	Stickup Material:	<u>Steel</u>
Riser Diameter:	<u>4-inch</u>	Stickup Diameter:	<u>6-inch</u>
Riser Material:	<u>PVC</u>		
Riser Appearance:	<u>Excellent</u>	Inspector:	<u>DLZ</u>
CONDITION			
Signs of Vandalism:	None		
Cannot Locate:	NA		
Locked:	No	Lock Replaced:	Lubricated existing lock
Inner Cap:	Yes		
Protective Casing Loose:	Yes		
Concrete Pad:	No issues		
Soil Erosion:	None		
Ponded Water:	None		
Well Marked:	Yes		
Cannot Identify:	NA		
Depth to water from TOC:	NA		
Depth to bottom from TOC:	NA		
Does well appear:	NA		
Obstruction in well:	NA		
PID reading:	NA		
Active pump in well:	No		
Comments:			

Well Inspection Checklist

Property:	<u>Jonny Cake Rd</u>	Date:	<u>4/10/2017</u>
Type:	<u>Stickup</u>		
Stickup Height:	<u>3.5 ft</u>	Well Number:	<u>MW-22</u>
As-Built Well Depth:	<u>21 ft</u>	Stickup Material:	<u>Steel</u>
Riser Diameter:	<u>2-inch</u>	Stickup Diameter:	<u>4-inch</u>
Riser Material:	<u>PVC</u>		
Riser Appearance:	<u>Excellent</u>	Inspector:	<u>DLZ</u>
CONDITION			
Signs of Vandalism:	None		
Cannot Locate:	NA		
Locked:	No	Lock Replaced:	Lubricated existing lock
Inner Cap:	Yes		
Protective Casing Loose:	Yes		
Concrete Pad:	No issues		
Soil Erosion:	None		
Ponded Water:	None		
Well Marked:	Yes		
Cannot Identify:	NA		
Depth to water from TOC:	NA		
Depth to bottom from TOC:	NA		
Does well appear:	NA		
Obstruction in well:	NA		
PID reading:	NA		
Active pump in well:	No		
Comments:			

Client Name: NYSDEC

Site Location: Johnny Cake Road Farm
Site, Danube, New York

AECOM Project
#60250163

Photo No. 1	Date: 4/10/17
Direction Photo Taken: View north	
Description: View of MW-1. No issues.	



Photo No. 2	Date: 4/10/17
Direction Photo Taken: View north	
Description: View of MW-2R. Well is artesian. No issues.	



Photo No. 3	Date: 4/10/17
Direction Photo Taken: View north	
Description: View of MW-4R. No issues.	



Photo No. 4	Date: 4/10/17
Direction Photo Taken: View north	
Description: View of MW-6R. No issues.	



Photo No. 5	Date: 4/10/17
Direction Photo Taken: View north	
Description: View of MW-12A. No issues.	



Photo No. 6	Date: 4/10/17
Direction Photo Taken: View north	
Description: View of MW-13. No issues.	



Photo No. 7	Date: 4/10/17
Direction Photo Taken: View south	
Description: View of MW-18. No issues.	



Photo No. 8	Date: 4/10/17
Direction Photo Taken: View north	
Description: View of MW-19. No issues.	



Photo No. 9	Date: 4/10/17	
Direction Photo Taken: View north		
Description: View of MW-22. No issues.		

Photo No. 10	Date: 4/10/17	
Direction Photo Taken: View south		
Description: View of vegetation status (cleared for well access in November 2016). Note MW-22 in foreground.		

Photo No. 11	Date: 4/10/17	
Direction Photo Taken: View south		
Description: General view of site from MW-22.		

Photo No. 12	Date: 4/10/17	
Direction Photo Taken: View west		
Description: General view down Johnny Cake Road from snowplow turn around area.		

Photo No. 13	Date: 4/10/17
Direction Photo Taken: View southeast	
Description: View from Johnny Cake Road of driveway to former house. Note "fresh" tractor ruts leading up driveway, westward to farm field (farm field not in photo).	



Photo No. 14	Date: 4/10/17
Direction Photo Taken: View west	
Description: General view down Johnny Cake Road. Note snowplow turn around area to left.	



Photo No. 15	Date: 4/10/17
Direction Photo Taken: View south	
Description: General view from Johnny Cake Road.	





DATE: Wednesday, May 25, 2022

REPORT NO. 20220525

PAGE NO. 1 OF 2

PROJECT NO. 470744.00029.0000

DAILY FIELD ACTIVITY REPORT

PROJECT	Johnny Cake Road Farm Site	WEATHER	TIME	TEMP.	PRECIP.	WIND (MPH)	WIND (DIR)
LOCATION	Danube, New York	Clear	1300	65°F	None	0-5	WNW
ATTACHMENTS	Photo Log						

SITE CONDITIONS: Dry

WORK GOAL FOR DAY: Locate existing groundwater monitoring wells

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Matthew Hoskins	TRC Engineers, Inc.	1300	1430

EQUIPMENT ON SITE:

TYPE	MODEL	TYPE	MODEL

HEALTH & SAFETY:

PPE REQUIRED: LEVEL D LEVEL C LEVEL B LEVEL A **HASP? YES**

SITE SAFETY OFFICER: Matthew Hoskins

H & S NOTES: Site work performed in Level D PPE



DATE: Wednesday, May 25, 2022

REPORT NO. 20220525

PAGE NO. 2 OF 2

PROJECT NO. 470744.00029.0000

DAILY FIELD ACTIVITY REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

TRC Engineers, Inc. (TRC) was on site to document the existing site conditions and to locate the existing groundwater monitoring wells. While on site, TRC confirmed the location of the eight existing monitoring wells and that walking access to each of the wells is possible. The located wells included MW-1, MW-2R, MW-6, MW-12A, MW-13, MW-18, MW-19 and MW-22. TRC also installed markers at each of the wells and painted the outside of the casings orange to increase their visibility. Each well was observed to be locked with a pad lock. TRC attempted to unlock the wells using key 2537, but this key did not open the locks.

PREPARED BY (OBSERVER):

REVIEWED BY:

PRINT NAME: Matthew Hoskins, P.G.

PRINT NAME:

NYSDEC Johnny Cake Road Farm Site – Site No. 622016

Photograph Log

Date: May 25, 2022



Photo 1: View of the Site on the south side of Johnny Cake Road looking southeast. Well MW-18 can be seen on the right side of the photo.



Photo 2: View of the Site on the south side of Johnny Cake Road looking southwest. Well MW-18 can be seen on the right side of the photo.



Photo 3: View of the Site on the north side of Johnny Cake Road, looking north.



Photo 4: View of MW-1, looking west.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
470744.0002 9.0000	Matthew Hoskins	1 of 3	NYSDEC	Johnny Cake Road Farm Site Danube, NY	

NYSDEC Johnny Cake Road Farm Site – Site No. 622016

Photograph Log

Date: May 25, 2022



Photo 5: Photo of MW-2R, looking southeast.

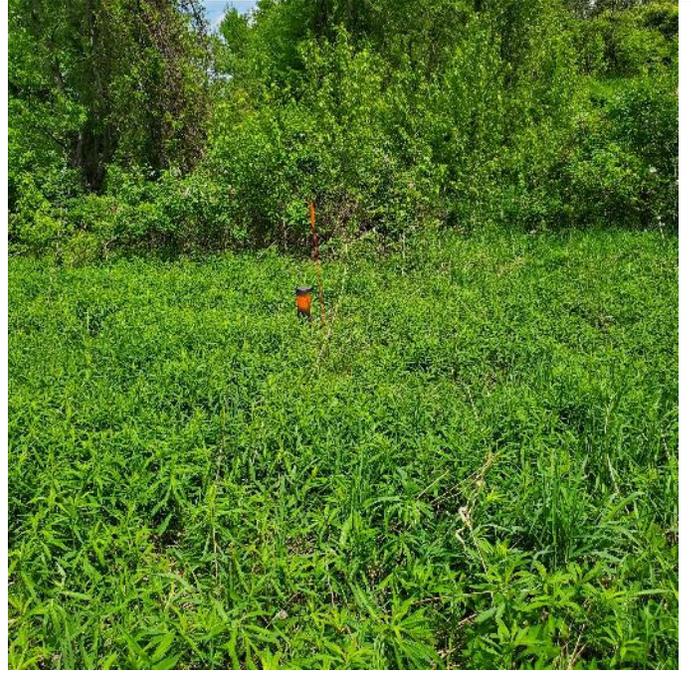


Photo 6: Photo of MW-6R, looking east



Photo 7: Photo of MW-13 looking east.



Photo 8: View of MW-19, looking west.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
470744.0002 9.0000	Matthew Hoskins	2 of 3	NYSDEC	Johnny Cake Road Farm Site Danube, NY	

NYSDEC Johnny Cake Road Farm Site – Site No. 622016

Photograph Log

Date: May 25, 2022



Photo 9: Photo MW-22 looking northwest.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
470744.0002 9.0000	Matthew Hoskins	3 of 3	NYSDEC	Johnny Cake Road Farm Site Danube, NY	

DAILY INSPECTION REPORT

Report No.20220712 Johnny Cake Road Farm Site - NYSDEC Site No. 6-22-016 Date: 7/12/2022

NYSDEC Division of Environmental Remediation		 NEW YORK STATE OF OPPORTUNITY		Department of Environmental Conservation		NYSDEC Contract No. D009812-25 Superintendent: NA NYSDEC PM: Robert Strang Consultant PM: Matthew Hoskins Consultant Site Inspectors: Rich DePolo and Taylor Shanley	
Site Location: Johnny Cake Road Farm Site							
Weather Conditions							
General Description	Partly Sunny	AM	Partly Sunny	PM			
Temperature	65°F	AM	80°F	PM			
Wind	5 – 10 mph NW	AM	10 - 15 mph NW	PM			
Health & Safety							
If any box below is checked “Yes”, provide explanation under “Health & Safety Comments”.							
Were there any changes to the Health & Safety Plan?				*Yes	No X	NA	
Were there any exceedances of the perimeter air monitoring reported on this date?				*Yes	No X	NA	
Were there any nuisance issues reported/observed on this date?				*Yes	No X	NA	
Health & Safety Comments							
Site work performed in Level D PPE.							
Summary of Work Performed		Arrived at site:	9:00	Departed Site:	14:45		
TRC Engineers, Inc. (TRC) performed a site inspection, and groundwater sampling event on Wednesday July 12, 2022, at the Johnny Cake Road Farm Site (Site) located on Johnny Cake Road, in Danube, New York. The objective of the site inspection was to document site conditions, gauge and sample the eight wells on-site. TRC conducted a complete site walk and inspection. All eight wells were located and gauged using a Heron water level meter. During the inspection, it was noted that all of the wells were in good condition, containing locks, and J-plugs. All of the wells had locks that TRC personnel had replaced with 2537 keyed locks, as the prior locks could not be opened by those keys. TRC personnel also used clippers to clear dense vegetation around the wells, as well as create paths to the wells for future access. During well gauging activities, MW-2R was observed to display artisan conditions, with groundwater approximately 3 inches below the casing. All eight wells were purged and sampled using a peristaltic pump for 1,4-Dioxane, PFAS, and Volatile Organic Compounds (VOCs). TRC personnel sampled MW-1, MW-2R, MW-6R, MW-12A, MW-13, MW-18, MW-19, and MW-22. When TRC purged and sampled MW-1, the well was pumped dry, and one of the ambers (1,4-Dioxane) was left empty due to lack of volume. The remaining analyses were collected as specified. For QA/QC purposes, the MS/MSD samples were collected from MW-18, as well as the duplicate and equipment blank samples. TRC demobilized from the site at 14:45.							
Equipment/Material Tracking							
If any box below is checked “Yes”, provide explanation under “Material Tracking Comments”.							
Were there any vehicles which did not display proper D.O.T numbers and placards?				*Yes	No	NA X	
Were there any vehicles which were not tarped?				* Yes	No	NA X	
Were there any vehicles which were not decontaminated prior to exiting the work site?				* Yes	No	NA	
Personnel and Equipment							
Individual	Company	Trade	Total Hours				
Rich DePolo	TRC Companies	Geologist	6				
Taylor Shanley	TRC Companies	Staff Engineer	6				
Matthew Hoskins	TRC Companies	Project Manager	2.5				

DAILY INSPECTION REPORT

Report No.20220712 Johnny Cake Road Farm Site - NYSDEC Site No. 6-22-016 Date: 7/12/2022

Project Schedule Comments
N/A
Issues Pending
N/A
Interaction with Public, Property Owners, Media, etc.
None.

Site Photographs (Descriptions Below)

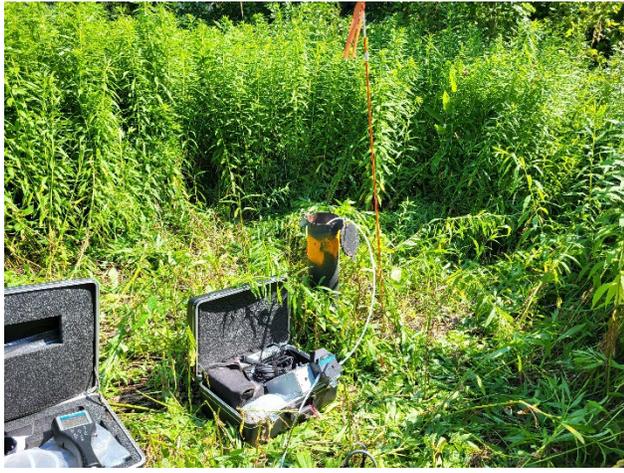


Photo 1 – View of MW-6R during purging and sampling activities, facing east.



Photo 2 – Photograph of MW-2R during sampling activities, note the artisan conditions. Facing north.



Photo 3 – View of MW-19 in an overgrown area of the site, facing northwest.



Photo 4 – View of MW-13 during sampling activities, facing northeast.



Photo 5 – Photograph of MW-22 during sampling activities, facing north.



Photo 6 – Photograph of Johnny Cake Road, facing north.

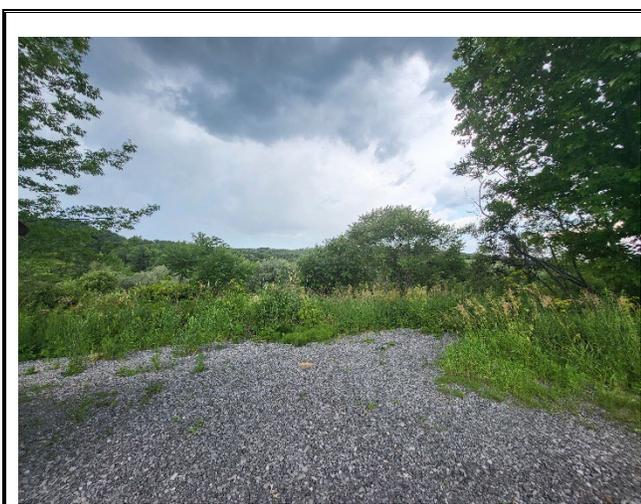


Photo 7 – View of the Johnny Cake Road parking area, facing south



Photo 8 – View of the northern portion of the Johnny Cake Road site, facing north. Arrow is pointing to the MW-12A location.

Comments
MW-1 only contains 1 of the 2 required ambers for 1,4-Dioxane due to well being pumped dry.

Site Inspector(s): Rich DePolo, Taylor Shanley

Date: 7/12/2022

DAILY HEALTH CHECKLIST

Is social distancing being practiced?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the tail gate safety meeting held outdoors?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are remote/call in job meetings being held in lieu of meeting in person where possible?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Were personal protective gloves, masks, and eye protection being used?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are sanitizing wipes, wash stations or spray available?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>Comments:</u>		

REMEDIAL ACTIVITIES AT PROPERTIES

1. Have anyone at this location been tested and confirmed to have COVID-19?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2. Is anyone at this location isolated or quarantined for COVID-19?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. Has anyone at this location had contact with anyone known to have COVID-19 in the past 14 days?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
4. Does anyone at this location have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
5. Does the Department and its contractors have your permission to enter the property at this time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<p>If Yes to <u>any</u> of 1-4 above:</p> <ul style="list-style-type: none"> If it is <u>not</u> critical that service/entry be carried out immediately and can be postponed until the risk of COVID-19 is lower, or can be accomplished remotely/without entry, postpone or conduct service without entry. If it <u>is</u> critical that service/entry be carried out immediately, advise occupants that as a precaution and for our own protection, project personnel will be donning appropriate PPE* (including respiratory protection) - and do so prior to entry. 	Yes <input type="checkbox"/>	No <input type="checkbox"/>

DAILY INSPECTION REPORT

Report No.20220712 Johnny Cake Road Farm Site - NYSDEC Site No. 6-22-016 Date: 7/12/2022

Comments: Not applicable. No remedial activities being performed on-Site.

NUISANCE CHECKLIST

Were there any community complaints related to work on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Were there any odors detected on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Was noise outside specification and/or above background on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Were vibration readings outside specification and/or above background on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Any visible dust observed beyond the work perimeter on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Any visible contrast (turbidity) beyond engineering controls observed on this date?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Was turbidity checked at the outfall(s)?	AM <input type="checkbox"/>	PM <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Were any property owners NOT provided advance notice for work performed on this property on this date?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Was the temporary fabric structure closed at the end of the day?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Has Contractor failed to protect all foundations and structures adjacent to and adjoining the site which are affected by the excavations or other operations connected with performance of the Work?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
If yes, has Contractor been notified?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> Not applicable. No remedial activities being performed on-Site.			

RESILIENCE/GREEN REMEDIATION CHECKLIST

Is the site supplied with green power and is it properly installed and/or maintained?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is the site employing 2007 or newer or retrofitted diesel trucks?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is vehicle idling adequately reduced per 6NYCRR Part 217-3?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is equipment properly maintained and operated by trained personnel?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is work being sequenced to avoid double handling?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Is there an onsite recycling program for CONTRACTOR generated wastes and is it complied with?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are office trailer heating and cooling systems maintained at efficient set points?	AM <input type="checkbox"/>	PM <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are products and materials appropriately certified (e.g., LEED, Energy Star, Sustainable Forestry Initiative®, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

DAILY INSPECTION REPORT

Report No.20220712 Johnny Cake Road Farm Site - NYSDEC Site No. 6-22-016 Date: 7/12/2022

Are resiliency features included in the design or completed remedy properly installed and/or maintained (flood control, storm water controls, erosion measures, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Are green remediation elements included in the design or completed remedy properly installed and/or maintained (e.g., porous pavement, geothermal, variable speed drives, native plantings, natural stream bank restoration, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Are appropriate metrics documented for inclusion on Form A, Summary of Green Remediation Metrics, by the CONTRACTOR?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Has Contractor been notified of any deficiencies?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
<u>Comments:</u> Not applicable. No remedial activities being performed on-Site.			



APPENDIX C

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME NYSDEC SMP A - Johnny Cake Road Farm	
PROJECT NUMBER 470744.0029.0000	
SAMPLE ID MW-1	SAMPLE TIME 12:35

LOCATION ID MW-1	DATE 7/12/2022
START TIME 11:50	END TIME 12:45
SITE NAME/NUMBER 622016	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY

YES	NO	N/A
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CAP	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CASING	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LOCKED	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COLLAR	<input checked="" type="checkbox"/>	<input type="checkbox"/>

INITIAL DTW (BMP) <input type="text" value="5.64"/> FT	FINAL DTW (BMP) <input type="text"/> FT	PROT. CASING STICKUP (AGS) <input type="text"/> FT	TOC/TOR DIFFERENCE <input type="text"/> FT
WELL DEPTH (BMP) <input type="text" value="10"/> FT	SCREEN LENGTH <input type="text"/> FT	PID AMBIENT AIR <input type="text" value="0.0"/> PPM	REFILL TIMER SETTING <input type="text"/> SEC
WATER COLUMN <input type="text" value="4.36"/> FT	DRAWDOWN VOLUME <input type="text"/> GAL <small>(final DTW - initial DTW X well diam. squared X 0.041)</small>	PID WELL MOUTH <input type="text" value="1.3"/> PPM	DISCHARGE TIMER SETTING <input type="text"/> SEC
CALCULATED GAL/VOL <input type="text" value="0.72"/> GAL <small>(column X well diameter squared X 0.041)</small>	TOTAL VOL. PURGED <input type="text" value="3.50"/> GAL <small>(mL per minute X total minutes X 0.00026 gal/mL)</small>	DRAWDOWN/ TOTAL PURGED <input type="text"/>	PRESSURE TO PUMP <input type="text"/> PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
11:50	BEGIN PURGING									
12:00		200	16.01	0.716	6.84	3.22	18.9	53	8	No water level meter available.
12:05		200	16	0.746	6.72	2.43	6.7	46	8	
12:10		200	15.58	0.764	6.69	2.04	6.9	56	8	
12:15		200	15.16	0.763	6.61	1.83	7.9	62	8	
12:20		200	14.59	0.742	6.54	1.66	7.1	65	8	
12:25		200	14.38	0.736	6.48	1.55	5	65	8	
12:30		200	14.33	0.734	6.46	1.49	5.2	63	8	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

14 0.734 6.5 1.5 5.2 6.3

TEMP.: nearest degree (ex. 10.1 = 10)
 COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
 pH: nearest tenth (ex. 5.53 = 5.5)
 DO: nearest tenth (ex. 3.51 = 3.5)
 TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
 ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

<p>TYPE OF PUMP</p> <p><input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER</p> <p><input type="checkbox"/> WATTEKA <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____</p>	<p>DECON FLUIDS USED</p> <p><input type="checkbox"/> LIQUINOX <input checked="" type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input type="checkbox"/> OTHER _____</p>	<p>TUBING/PUMP/BLADDER MATERIALS</p> <p><input checked="" type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____</p>	<p>EQUIPMENT USED</p> <p><input type="checkbox"/> WL METER _____ <input checked="" type="checkbox"/> PID _____ <input checked="" type="checkbox"/> WQ METER _____ <input type="checkbox"/> TURB. METER _____ <input checked="" type="checkbox"/> PUMP _____ <input type="checkbox"/> OTHER _____ <input type="checkbox"/> FILTERS NO. _____ TYPE _____</p>
---	---	--	---

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED _____

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Purged dry, only filled one 1-liter, amber, PFAS and VOCs bottleware

Sampler Signature: Taylor Shanley Print Name: Taylor Shanley

Checked By: Matthew Hoskins Date: 7/12/2022



LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME NYSDEC SMP A - Johnny Cake Road Farm	
PROJECT NUMBER 470744.0029.0000	
SAMPLE ID MW-2R	SAMPLE TIME 11:40

LOCATION ID MW-2R	DATE 7/12/2022
START TIME 10:50	END TIME 11:45
SITE NAME/NUMBER 622016	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY

YES	NO	N/A
X	___	___

INITIAL DTW (BMP) <input type="text" value="0.04"/> FT	FINAL DTW (BMP) <input type="text" value="3.01"/> FT	PROT. CASING STICKUP (AGS) <input type="text" value="2.5"/> FT	TOC/TOR DIFFERENCE <input type="text" value=""/> FT
WELL DEPTH (BMP) <input type="text" value="21.7"/> FT	SCREEN LENGTH <input type="text" value="20"/> FT	PID AMBIENT AIR <input type="text" value="0.0"/> PPM	REFILL TIMER SETTING <input type="text" value=""/> SEC
WATER COLUMN <input type="text" value="21.4"/> FT	DRAWDOWN VOLUME <input type="text" value=""/> GAL <small>(final DTW - initial DTW X well diam. squared X 0.041)</small>	PID WELL MOUTH <input type="text" value="0"/> PPM	DISCHARGE TIMER SETTING <input type="text" value=""/> SEC
CALCULATED GAL/VOL <input type="text" value="14.04"/> GAL <small>(column X well diameter squared X 0.041)</small>	TOTAL VOL. PURGED <input type="text" value="3.50"/> GAL <small>(mL per minute X total minutes X 0.00026 gal/mL)</small>	DRAWDOWN/TOTAL PURGED <input type="text" value=""/> PSI	PRESSURE TO PUMP <input type="text" value=""/> PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
10:50	BEGIN PURGING									
10:55	0.3	200	23.68	0.001	7.72	7.23	648	74	15	
11:00	1.21	200	23.15	0.002	7.71	6.95	388	73	15	
11:05	2.17	150	23.41	0.001	7.61	6.9	249	67	15	
11:10	2.31	150	23.01	0.001	7.6	6.01	182	61	15	
11:15	2.5	150	22.71	0.001	7.49	6.77	176	59	15	
11:20	2.61	150	21.41	0.001	7.59	6.51	89	51	15	
11:25	2.81	150	20.21	0.001	7.55	5.92	65	41	15	
11:30	2.89	150	19.91	0.001	7.51	5.87	61	39	15	
11:35	3.01	150	19.31	0.001	7.48	5.72	57	32	15	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

19 0.001 7.5 5.7 57 32

TEMP.: nearest degree (ex. 10.1 = 10)
 COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
 pH: nearest tenth (ex. 5.53 = 5.5)
 DO: nearest tenth (ex. 3.51 = 3.5)
 TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
 ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

<p>TYPE OF PUMP</p> <p><input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER</p> <p><input type="checkbox"/> WATERA <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER</p>	<p>DECON FLUIDS USED</p> <p><input type="checkbox"/> LIQUINOX <input checked="" type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input type="checkbox"/> OTHER</p>	<p>TUBING/PUMP/BLADDER MATERIALS</p> <p><input checked="" type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER</p>	<p>EQUIPMENT USED</p> <p><input checked="" type="checkbox"/> WL METER <input checked="" type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER <input type="checkbox"/> TURB. METER <input checked="" type="checkbox"/> PUMP <input type="checkbox"/> OTHER <input type="checkbox"/> FILTERS NO. _____ TYPE _____</p>
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ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> See Chain of Custody							
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED _____

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Artesian conditions

Sampler Signature: Rich DePolo Print Name: Rich DePolo

Checked By: Matthew Hoskins Date: 7/12/2022



LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME NYSDEC SMP A - Johnny Cake Road Farm	
PROJECT NUMBER 470744.0029.0000	
SAMPLE ID MW-12A	SAMPLE TIME 13:35

LOCATION ID MW-12A	DATE 7/12/2022
START TIME 13:00	END TIME 13:45
SITE NAME/NUMBER 622016	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY

YES	NO	N/A
CAP	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CASING	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LOCKED	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COLLAR	<input checked="" type="checkbox"/>	<input type="checkbox"/>

INITIAL DTW (BMP) 6.11 FT	FINAL DTW (BMP) _____ FT	PROT. CASING STICKUP (AGS) _____ FT	TOC/TOR DIFFERENCE _____ FT
WELL DEPTH (BMP) 20 FT	SCREEN LENGTH _____ FT	PID AMBIENT AIR 0.0 PPM	REFILL TIMER SETTING _____ SEC
WATER COLUMN 13.89 FT	DRAWDOWN VOLUME _____ GAL	PID WELL MOUTH 0.1 PPM	DISCHARGE TIMER SETTING _____ SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041) 9.11 GAL	TOTAL VOL. PURGED (final DTW - initial DTW X well diam. squared X 0.041) 1.50 GAL	DRAWDOWN/TOTAL PURGED _____	PRESSURE TO PUMP _____ PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
13:00	BEGIN PURGING									
13:10		175	14.07	1.14	6.94	0.8	69.1	243	19	No water level meter available.
13:15		175	14.92	1.15	6.85	0.72	49.9	241	19	
13:20		175	15.03	1.14	6.88	0.67	33.6	242	19	
13:25		175	14.75	1.15	6.94	0.66	26.1	243	19	
13:30		175	15	1.150	6.96	0.62	20.1	242	19	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

15	1.15	7	0.6	20.1	240
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TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

<input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER <input type="checkbox"/> WATERA <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<input type="checkbox"/> LIQUINOX <input checked="" type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<input type="checkbox"/> S. STEEL PUMP MATERIAL <input type="checkbox"/> PVC PUMP MATERIAL <input type="checkbox"/> GEOPROBE SCREEN <input type="checkbox"/> TEFLON BLADDER <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<input type="checkbox"/> WL METER <input checked="" type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER <input type="checkbox"/> TURB. METER <input checked="" type="checkbox"/> PUMP <input type="checkbox"/> OTHER <input type="checkbox"/> FILTERS NO. _____ TYPE _____
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ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED _____

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Taylor Shanley Print Name: Taylor Shanley

Checked By: Matthew Hoskins Date: 7/12/2022



LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME NYSDEC SMP A - Johnny Cake Road Farm	
PROJECT NUMBER 470744.0029.0000	
SAMPLE ID MW-22	SAMPLE TIME 14:15

LOCATION ID MW-22	DATE 7/12/2022
START TIME 13:40	END TIME 14:30
SITE NAME/NUMBER 622016	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____
TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____
MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY
 YES NO N/A
 CAP
 CASING
 LOCKED
 COLLAR

INITIAL DTW (BMP) <input type="text" value="6.07"/> FT	FINAL DTW (BMP) <input type="text" value="6.44"/> FT	PROT. CASING STICKUP (AGS) <input type="text" value="2.5"/> FT	TOC/TOR DIFFERENCE <input type="text" value=""/> FT
WELL DEPTH (BMP) <input type="text" value="21"/> FT	SCREEN LENGTH <input type="text" value="15"/> FT	PID AMBIENT AIR <input type="text" value="0.0"/> PPM	REFILL TIMER SETTING <input type="text" value=""/> SEC
WATER COLUMN <input type="text" value="14.93"/> FT	DRAWDOWN VOLUME <input type="text" value=""/> GAL <small>(final DTW - initial DTW X well diam. squared X 0.041)</small>	PID WELL MOUTH <input type="text" value="0"/> PPM	DISCHARGE TIMER SETTING <input type="text" value=""/> SEC
CALCULATED GAL/VOL <input type="text" value="2.63"/> GAL <small>(column X well diameter squared X 0.041)</small>	TOTAL VOL. PURGED <input type="text" value="3.25"/> GAL <small>(mL per minute X total minutes X 0.00026 gal/mL)</small>	DRAWDOWN/ TOTAL PURGED <input type="text" value=""/> PSI	PRESSURE TO PUMP <input type="text" value=""/> PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
13:40	BEGIN PURGING									
13:45	6.21	250	16.31	0.305	7.98	0.7	0	88	35	
13:50	6.37	250	14.95	0.308	7.91	0.38	0	83	35	
13:55	6.41	250	15.04	0.311	7.79	0.43	4.4	76	35	
14:00	6.43	250	15.06	0.311	7.67	0.65	5.3	69	35	
14:05	6.45	250	15.27	0.311	7.57	0.71	3.3	64	35	
14:10	6.44	250	15.45	0.311	7.48	0.71	2.7	58	35	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

15 0.311 7.5 0.7 2.7 58

TEMP.: nearest degree (ex. 10.1 = 10)
 COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
 pH: nearest tenth (ex. 5.53 = 5.5)
 DO: nearest tenth (ex. 3.51 = 3.5)
 TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
 ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP <input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER <input type="checkbox"/> WATERA <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	DECON FLUIDS USED <input type="checkbox"/> LIQUINOX <input checked="" type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input type="checkbox"/> OTHER	TUBING/PUMP/BLADDER MATERIALS <input checked="" type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	EQUIPMENT USED <input checked="" type="checkbox"/> WL METER <input checked="" type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER <input type="checkbox"/> TURB. METER <input checked="" type="checkbox"/> PUMP <input type="checkbox"/> OTHER <input type="checkbox"/> FILTERS NO. _____ TYPE _____
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ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> See Chain of Custody	_____	_____	_____	_____	_____	_____	_____

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO
 NO-PURGE METHOD UTILIZED YES NO
 If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Rich DePolo Print Name: Rich DePolo

Checked By: Matthew Hoskins Date: 7/12/2022





APPENDIX D

Data Usability Summary Report

Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

Johnny Cake Rd. Farm, Danube, NY
Pace/Con-test SDG#22G0742
October 21, 2022
Sampling date: 7/12/2022

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

Johnny Cake Rd. Farm, Danube, NY
SDG# 22G0742

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for TRC Environmental Corporation, project located at Johnny Cake Rd. Farm, Danube, NY, Pace/Con-test SDG#22G0742 submitted to Vali-Data of WNY, LLC on September 21, 2022. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG), NYSDEC; 'Guidelines for Sampling and Analysis of PFAS'(6/2021) and NYSDEC Analytical Services Protocols. The laboratory performed the analyses using USEPA method Volatile Organics (8260D), Semi-Volatile Organics (8270E) and Perfluorinated Hydrocarbons (SOP 454).

ID	Sample ID	Laboratory ID
1	EB	22G0742-01
2	MW-12A	22G0742-02
3	MW-1	22G0742-03
4	MW-18	22G0742-04
5	DUP-01	22G0742-05
6	MW-19	22G0742-06
7	MW-2R	22G0742-07
8	MW-6R	22G0742-08
9	MW-13	22G0742-09
10	MW-22	22G0742-10
11	FB	22G0742-11

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Surrogate Spike Recoveries
- Method Blank
- Field Duplicate Sample Precision
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Performance Check

Johnny Cake Rd. Farm, Danube, NY

SDG# 22G0742

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use except where qualified below in Laboratory Control Samples, MS/MSD, Initial Calibration and Continuing Calibration.

Sample: DUSR ID#3 was diluted due to high target analyte concentrations.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All holding times were met.

INTERNAL STANDARD (IS)

All criteria were met.

SURROGATE SPIKE RECOVERIES

All criteria were met.

METHOD BLANK

All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met except cis-1,2-Dichloroethene was detected in DUSR ID#5 but was not detected in #4.

LABORATORY CONTROL SAMPLES

All criteria were met except the %Rec of a couple of target analytes was outside QC limits, in B312958-BS1/BSD1 and should be qualified as estimated.

Target Analyte	%Rec LCS	%Rec LCSD	Qualifier	Associated Sample
Acetone	69.4	69.9	UJ	2-10
Chloromethane	39.7	38.4	UJ	2-10

Some target analytes were outside QC limits in the laboratory control sample or the laboratory

Johnny Cake Rd. Farm, Danube, NY

SDG# 22G0742

control sample duplicate but not both, so no further action is required.

MS/MSD

All criteria were met except the %Rec of several target analytes was outside QC limits, in DUSR ID#4MS/MSD and should be qualified as estimated.

Target Analyte	%Rec #4MS	%Rec #4MSD	Qualifier	Associated Sample
Chloromethane	44	44.6	UJ	4, 5
Diethyl ether	296	256	JH	4, 5
Naphthalene	62.7	59.2	UJ	4, 5
1,2,3-Trichlorobenzene	69.1	65.0	UJ	4, 5
Vinyl chloride	145	137	JH	4, 5

Some target analytes were outside QC limits in the matrix spike or the matrix spike duplicate but not both, so no further action is required.

COMPOUND QUANTITATION

All criteria were met.

INITIAL CALIBRATION

All criteria were met except the %D of a couple of target analytes was outside QC limits in the initial calibration verification. These target analytes should be qualified as estimated in the associated blanks, samples and spikes.

ICV ID	Target Analyte	%D	Qualifier	Associated Sample
S049200-ICV1	Bromomethane	-37.4	UJ/J	B312958, 2-10, 4MS/MSD
S049200-ICV1	Chloromethane	-54.5	UJ/J	B312958, 2-10, 4MS/MSD

Alternate forms of regression were performed on target analytes in which the %RSD >20%, with acceptable results.

CONTINUING CALIBRATION

All criteria were met except several target analytes were outside QC limits in the continuing calibrations and should be qualified as estimated in the associated samples, blanks and spikes.

CCal ID	Target Analyte	%D/RRF	Qualifier	Associated Sample
S074061-CCV1	Chloromethane	-63.7	UJ/J	B312958, 2-10, 4MS/MSD
S074061-CCV1	1,2-Dibromo-3-chloropropane	-31.3	UJ/J	B312958, 2-10, 4MS/MSD
S074061-CCV1	Naphthalene	-42.8	UJ/J	B312958, 2-10, 4MS/MSD
S074061-CCV1	1,2,3-Trichlorobenzene	-33.0	UJ/J	B312958, 2-10, 4MS/MSD

Johnny Cake Rd. Farm, Danube, NY

SDG# 22G0742

Some target analytes were outside laboratory QC limits but within NFG QC limits, so no further action is required.

GC/MS PERFORMANCE CHECK

All criteria were met.

SEMIVOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Surrogate Spike Recoveries
- Method Blank
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use except where qualified below in Surrogate Spike Recoveries.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met.

Data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All holding times were met.

INTERNAL STANDARD (IS)

All criteria were met.

SURROGATE SPIKE RECOVERIES

All criteria were met except the %Rec of 1,4-Dioxane-d₈ was outside QC limits low in DUSR ID#7 and should be qualified as estimated. The target analyte in this sample should be qualified as estimated.

METHOD BLANK

All the criteria were met.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met.

LABORATORY CONTROL SAMPLES

All criteria were met.

MS/MSD

No MS/MSD was acquired for this analysis.

COMPOUND QUANTITATION

All criteria were met.

INITIAL CALIBRATION

All criteria were met.

CONTINUING CALIBRATION

All criteria were met.

GC/MS PERFORMANCE CHECK

All criteria were met.

PFAA

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS)
- Blanks
- Field Duplicate Sample Precision

Johnny Cake Rd. Farm, Danube, NY

SDG# 22G0742

- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use except where qualified below in Internal Standard, Laboratory Control Samples, MS/MSD, Compound Quantitation and Continuing Calibration.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All holding times were met.

INTERNAL STANDARD (IS)

All criteria were met except the %Rec of several Internal Standards was outside QC limits and should be qualified as estimated. Target analytes associated with these Internal Standards should be qualified as estimated in the associated samples.

Internal Standard	Qualifier	Associated Sample
M2PFTA	UJ	2, 4, 5, 8-10
MPFDoA	UJ	2, 3, 8
M8FOSA	UJ	3, 7
M2PFTA	R	3

BLANKS

All the criteria were met.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met except 6:2FTS was detected in DUSR ID#5 but was not detected in #4.

LABORATORY CONTROL SAMPLES

All criteria were met except a couple of target analytes were outside the QC limits in B313897-BS1 and should be qualified as estimated.

Target Analyte	%Rec	Qualifier	Associated Sample
NEtFOSAA	131	UJ	1-11
NMeFOSAA	136	UJ	1-11

MS/MSD

All criteria were met except the RPD of HFPO-DA was outside QC limits between DUSR ID#4MS and #4MSD and should be qualified as estimated in DUSR ID#4, #5 and #4MS/MSD.

COMPOUND QUANTITATION

All the criteria were met except a target analyte was outside QC limits in DUSR ID#11. This target analyte should be qualified as undetected at the reporting limit in associated samples in which it was detected below the reporting limit. This target analyte should be qualified as estimated high in associated samples in which it was detected above the reporting limit but below 10x the blank concentration.

Target Analyte	Concentration (ng/L)	Qualifier	Associated Sample
6:2FTS	.39	U at RL	5, 7, 8, 10

INITIAL CALIBRATION

All criteria were met.

Alternate forms of regression were used on all target analytes, with acceptable results.

CONTINUING CALIBRATION

All criteria were met except several target analytes were outside QC limits in the continuing calibrations and should be qualified as estimated in the associated samples, blanks and spikes.

Ccal ID	Target Analyte	%D	Qualifier	Associated Sample
S075549-CCV1	NFDHA	-37.3	UJ/J	B313897, 1-10, 4MS/MSD
S075549-CCV2	NMeFOSAA	30.3	UJ/J	B313897, 1-10, 4MS/MSD
S075549-CCV4	NFDHA	-36.7		11

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SOP-454 PFAS**Qualifications:****R-06**

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:**Hexafluoropropylene oxide dimer :**

B313897-MSD1

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:**M2PFTA**

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22]

M8FOSA

22G0742-03[MW-1], 22G0742-07[MW-2R]

MPFBA

22G0742-08[MW-6R]

MPFDoA

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-08[MW-6R]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**Nonafluoro-3,6-dioxaheptanoic acid**

S075549-CCV1, S075549-CCV4

SW-846 8260D**Qualifications:****L-04**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**Acetone**

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

Chloromethane

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene**

B312958-BSD1

MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene**

B312958-MS1, B312958-MSD1

Chloromethane

B312958-MS1, B312958-MSD1

Naphthalene

B312958-MS1, B312958-MSD1

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MS-12

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:**Diethyl Ether**

B312958-MS1, B312958-MSD1

Vinyl Chloride

B312958-MS1, B312958-MSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DBP)**

B312958-MSD1

Acetone

B312958-MSD1

Methyl Acetate

B312958-MSD1

trans-1,4-Dichloro-2-butene

B312958-MSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

22G0742-03[MW-1]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene**

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

1,2,4-Trichlorobenzene

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

1,2-Dibromo-3-chloropropane (DBP)

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

2-Butanone (MEK)

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

Acetone

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

Chloromethane

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

Methyl Acetate

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

Naphthalene

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

trans-1,4-Dichloro-2-butene

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:**Bromomethane**

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

Chloromethane

22G0742-02[MW-12A], 22G0742-03[MW-1], 22G0742-04[MW-18], 22G0742-05[DUP-01], 22G0742-06[MW-19], 22G0742-07[MW-2R], 22G0742-08[MW-6R], 22G0742-09[MW-13], 22G0742-10[MW-22], B312958-BLK1, B312958-BS1, B312958-BSD1, B312958-MS1, B312958-MSD1, S074061-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: EB

Sample ID: 22G0742-01

Start Date/Time: 7/12/2022 1:50:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:51:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	7/15/22	7/19/22 0:05	cla
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	23.1		15-110				7/19/22 0:05			

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: EB

Sample ID: 22G0742-01

Start Date/Time: 7/12/2022 1:50:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:51:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.9	0.70	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorohexanoic acid (PFHxA)	ND	1.9	0.36	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.9	0.60	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.9	0.36	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorodecanoic acid (PFDA)	ND	1.9	0.46	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.41	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	0.88	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
N-EtFOSAA	ND	1.9	0.59	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
N-MeFOSAA	ND	1.9	0.71	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.9	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorotridecanoic acid (PFTrDA)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.9	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.9	0.39	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.9	0.16	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.9	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.9	0.18	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	0.39	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorooctanoic acid (PFOA)	ND	1.9	0.64	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	0.56	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH
Perfluorononanoic acid (PFNA)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:50	BLH

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-12A

Sample ID: 22G0742-02

Start Date/Time: 7/12/2022 1:35:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:40:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	L-04, V-05	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Bromomethane	ND	5.0	1.5	µg/L	1	V-34	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	L-04, V-05, V-34	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-12A

Sample ID: 22G0742-02

Start Date/Time: 7/12/2022 1:35:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:40:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Naphthalene	ND	2.0	0.24	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 11:43	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		74.6	70-130					7/14/22	11:43	
Toluene-d8		101	70-130					7/14/22	11:43	
4-Bromofluorobenzene		100	70-130					7/14/22	11:43	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-12A

Sample ID: 22G0742-02

Start Date/Time: 7/12/2022 1:35:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:40:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	7/15/22	7/19/22 0:25	cla
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	20.5		15-110				7/19/22 0:25			

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-12A

Sample ID: 22G0742-02

Start Date/Time: 7/12/2022 1:35:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:40:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	1.4	1.9	0.70	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorobutanesulfonic acid (PFBS)	0.45	1.9	0.27	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoropentanoic acid (PFPeA)	0.59	1.9	0.37	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorohexanoic acid (PFHxA)	ND	1.9	0.36	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.9	0.60	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.9	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.23	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorodecanoic acid (PFDA)	ND	1.9	0.46	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.42	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	0.88	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
N-EtFOSAA	ND	1.9	0.59	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
N-MeFOSAA	ND	1.9	0.72	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.9	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorotridecanoic acid (PFTTrDA)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9	0.27	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.9	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.9	0.40	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.9	0.16	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.9	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.9	0.18	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	0.39	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorooctanoic acid (PFOA)	ND	1.9	0.64	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH
Perfluorononanoic acid (PFNA)	ND	1.9	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 19:57	BLH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-1

Sample ID: 22G0742-03

Start Date/Time: 7/12/2022 12:35:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 12:40:00PM

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	10	µg/L	5	L-04, V-05	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Acrylonitrile	ND	25	2.7	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
tert-Amyl Methyl Ether (TAME)	ND	2.5	0.71	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Benzene	ND	5.0	1.0	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Bromobenzene	ND	5.0	0.75	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Bromochloromethane	ND	5.0	1.5	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Bromodichloromethane	ND	2.5	0.90	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Bromoform	ND	5.0	1.9	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Bromomethane	ND	25	7.7	µg/L	5	V-34	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
2-Butanone (MEK)	9.9	100	8.1	µg/L	5	V-05, J	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
tert-Butyl Alcohol (TBA)	ND	100	23	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
n-Butylbenzene	ND	5.0	0.76	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
sec-Butylbenzene	ND	5.0	0.55	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
tert-Butylbenzene	ND	5.0	0.64	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	0.74	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Carbon Disulfide	ND	25	7.2	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Carbon Tetrachloride	ND	25	0.82	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Chlorobenzene	ND	5.0	0.53	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Chlorodibromomethane	ND	2.5	1.1	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Chloroethane	ND	10	1.6	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Chloroform	ND	10	0.84	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Chloromethane	ND	10	2.6	µg/L	5	L-04, V-05, V-34	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
2-Chlorotoluene	ND	5.0	0.57	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
4-Chlorotoluene	ND	5.0	0.59	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	4.0	µg/L	5	V-05	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,2-Dibromoethane (EDB)	ND	2.5	0.85	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Dibromomethane	ND	5.0	1.8	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,2-Dichlorobenzene	ND	5.0	0.61	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,3-Dichlorobenzene	ND	5.0	0.59	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,4-Dichlorobenzene	ND	5.0	0.65	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
trans-1,4-Dichloro-2-butene	ND	10	8.1	µg/L	5	V-05	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	0.96	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,1-Dichloroethane	ND	5.0	0.71	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,2-Dichloroethane	ND	5.0	1.5	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,1-Dichloroethylene	1.8	5.0	0.71	µg/L	5	J	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
cis-1,2-Dichloroethylene	640	5.0	0.73	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
trans-1,2-Dichloroethylene	5.7	5.0	0.84	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,2-Dichloropropane	ND	5.0	0.91	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,3-Dichloropropane	ND	2.5	0.65	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
2,2-Dichloropropane	ND	5.0	1.6	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,1-Dichloropropene	ND	10	0.75	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
cis-1,3-Dichloropropene	ND	2.5	0.79	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
trans-1,3-Dichloropropene	ND	2.5	0.84	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Diethyl Ether	ND	10	0.91	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-1

Sample ID: 22G0742-03

Start Date/Time: 7/12/2022 12:35:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 12:40:00PM

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	0.64	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,4-Dioxane	ND	250	100	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Ethylbenzene	ND	5.0	1.1	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Hexachlorobutadiene	ND	3.0	2.3	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
2-Hexanone (MBK)	ND	50	5.6	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Isopropylbenzene (Cumene)	ND	5.0	0.54	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
p-Isopropyltoluene (p-Cymene)	ND	5.0	0.49	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Methyl Acetate	ND	5.0	2.3	µg/L	5	V-05	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	0.86	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Methyl Cyclohexane	ND	5.0	1.2	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Methylene Chloride	ND	25	1.2	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	6.4	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Naphthalene	ND	10	1.2	µg/L	5	V-05	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
n-Propylbenzene	ND	5.0	0.43	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Styrene	ND	5.0	0.53	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,1,1,2-Tetrachloroethane	ND	5.0	0.89	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,1,2,2-Tetrachloroethane	ND	2.5	0.63	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Tetrachloroethylene	8.1	5.0	0.94	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Tetrahydrofuran	ND	50	2.5	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Toluene	ND	5.0	1.1	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,2,3-Trichlorobenzene	ND	25	1.5	µg/L	5	V-05	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,2,4-Trichlorobenzene	ND	5.0	1.2	µg/L	5	V-05	SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,3,5-Trichlorobenzene	ND	5.0	1.1	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,1,1-Trichloroethane	ND	5.0	0.84	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,1,2-Trichloroethane	ND	5.0	0.91	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Trichloroethylene	160	5.0	0.95	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Trichlorofluoromethane (Freon 11)	ND	10	0.88	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,2,3-Trichloropropane	ND	10	1.4	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	1.1	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,2,4-Trimethylbenzene	ND	5.0	0.99	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
1,3,5-Trimethylbenzene	ND	5.0	0.57	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Vinyl Chloride	28	10	1.0	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
m+p Xylene	ND	10	2.3	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
o-Xylene	ND	5.0	1.1	µg/L	5		SW-846 8260D	7/14/22	7/14/22 15:13	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		75.9	70-130					7/14/22	15:13	
Toluene-d8		97.6	70-130					7/14/22	15:13	
4-Bromofluorobenzene		101	70-130					7/14/22	15:13	

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-1

Sample ID: 22G0742-03

Start Date/Time: 7/12/2022 12:35:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 12:40:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.22	0.035	µg/L	1		SW-846 8270E	7/15/22	7/19/22 0:44	cla
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	20.1		15-110				7/19/22 0:44			

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-1

Sample ID: 22G0742-03

Start Date/Time: 7/12/2022 12:35:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 12:40:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	1.1	1.7	0.63	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorobutanesulfonic acid (PFBS)	0.40	1.7	0.24	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoropentanoic acid (PFPeA)	0.84	1.7	0.33	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorohexanoic acid (PFHxA)	0.81	1.7	0.32	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.7	0.54	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.7	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.7	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.7	0.20	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.7	0.51	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorodecanoic acid (PFDA)	ND	1.7	0.41	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.7	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.7	0.20	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.7	0.79	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
N-EtFOSAA	ND	1.7	0.53	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
N-MeFOSAA	ND	1.7	0.64	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.7	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorotridecanoic acid (PFTTrDA)	ND	1.7	0.23	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.7	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.7	0.27	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.7	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.7	0.14	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.7	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.7	0.16	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.7	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.7	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.7	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.7	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.7	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.7	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.7	0.23	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluoroheptanoic acid (PFHpA)	0.40	1.7	0.29	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorooctanoic acid (PFOA)	0.72	1.7	0.57	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorooctanesulfonic acid (PFOS)	3.0	1.7	0.51	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH
Perfluorononanoic acid (PFNA)	ND	1.7	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:05	BLH

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-18

Sample ID: 22G0742-04

Start Date/Time: 7/12/2022 11:00:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 11:05:00AM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	L-04, V-05	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Bromomethane	ND	5.0	1.5	µg/L	1	V-34	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	L-04, V-05, V-34	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Diethyl Ether	8.8	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-18

Sample ID: 22G0742-04

Start Date/Time: 7/12/2022 11:00:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 11:05:00AM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Naphthalene	ND	2.0	0.24	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Vinyl Chloride	1.2	2.0	0.21	µg/L	1	J	SW-846 8260D	7/14/22	7/14/22 12:09	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:09	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		76.6	70-130					7/14/22	12:09	
Toluene-d8		100	70-130					7/14/22	12:09	
4-Bromofluorobenzene		100	70-130					7/14/22	12:09	

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-18

Sample ID: 22G0742-04

Start Date/Time: 7/12/2022 11:00:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 11:05:00AM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.19	0.032	µg/L	1		SW-846 8270E	7/15/22	7/19/22 1:04	cla
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	18.0		15-110				7/19/22 1:04			

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-18

Sample ID: 22G0742-04

Start Date/Time: 7/12/2022 11:00:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 11:05:00AM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.9	0.70	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	0.27	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorohexanoic acid (PFHxA)	ND	1.9	0.36	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.9	0.61	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.9	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.23	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorodecanoic acid (PFDA)	ND	1.9	0.46	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.42	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	0.89	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
N-EtFOSAA	ND	1.9	0.60	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
N-MeFOSAA	ND	1.9	0.72	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.9	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorotridecanoic acid (PFTTrDA)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9	0.27	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.9	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.9	0.40	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.9	0.16	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.9	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.9	0.18	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	0.39	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.9	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorooctanoic acid (PFOA)	ND	1.9	0.64	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH
Perfluorononanoic acid (PFNA)	ND	1.9	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:12	BLH

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: DUP-01

Sample ID: 22G0742-05

Start Date/Time: 7/12/2022 7:00:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 7:05:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	L-04, V-05	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Bromomethane	ND	5.0	1.5	µg/L	1	V-34	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	L-04, V-05, V-34	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
cis-1,2-Dichloroethylene	0.21	1.0	0.15	µg/L	1	J	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Diethyl Ether	29	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: DUP-01

Sample ID: 22G0742-05

Start Date/Time: 7/12/2022 7:00:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 7:05:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Naphthalene	ND	2.0	0.24	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Vinyl Chloride	4.2	2.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 12:36	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		76.8	70-130					7/14/22	12:36	
Toluene-d8		102	70-130					7/14/22	12:36	
4-Bromofluorobenzene		102	70-130					7/14/22	12:36	

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: DUP-01
Sample ID: 22G0742-05

Start Date/Time: 7/12/2022 7:00:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 7:05:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	7/15/22	7/19/22 1:23	cla
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	21.2		15-110						7/19/22 1:23	

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: DUP-01

Sample ID: 22G0742-05

Start Date/Time: 7/12/2022 7:00:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 7:05:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.7	0.64	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorobutanesulfonic acid (PFBS)	ND	1.7	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoropentanoic acid (PFPeA)	ND	1.7	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorohexanoic acid (PFHxA)	ND	1.7	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.7	0.55	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.7	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.7	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.7	0.21	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.7	0.52	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorodecanoic acid (PFDA)	ND	1.7	0.42	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.7	0.38	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.7	0.20	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.7	0.81	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
N-EtFOSAA	ND	1.7	0.54	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
N-MeFOSAA	ND	1.7	0.65	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.7	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorotridecanoic acid (PFTTrDA)	ND	1.7	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.7	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.7	0.28	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.7	0.36	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.7	0.14	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.7	0.27	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.7	0.16	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.7	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.7	0.36	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.7	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	0.52	1.7	0.31	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.7	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.7	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.7	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.7	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorooctanoic acid (PFOA)	ND	1.7	0.59	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.7	0.52	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH
Perfluorononanoic acid (PFNA)	ND	1.7	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:19	BLH

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-19

Sample ID: 22G0742-06

Start Date/Time: 7/12/2022 12:20:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 12:25:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	L-04, V-05	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Bromomethane	ND	5.0	1.5	µg/L	1	V-34	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	L-04, V-05, V-34	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-19

Sample ID: 22G0742-06

Start Date/Time: 7/12/2022 12:20:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 12:25:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Naphthalene	ND	2.0	0.24	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:02	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		77.3	70-130					7/14/22	13:02	
Toluene-d8		99.0	70-130					7/14/22	13:02	
4-Bromofluorobenzene		99.9	70-130					7/14/22	13:02	

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-19

Sample ID: 22G0742-06

Start Date/Time: 7/12/2022 12:20:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 12:25:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.22	0.035	µg/L	1		SW-846 8270E	7/15/22	7/19/22 8:24	cla
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	19.2		15-110				7/19/22 8:24			

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-19

Sample ID: 22G0742-06

Start Date/Time: 7/12/2022 12:20:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 12:25:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.9	0.69	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorohexanoic acid (PFHxA)	ND	1.9	0.36	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.9	0.60	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.9	0.36	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorodecanoic acid (PFDA)	ND	1.9	0.46	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.41	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	0.88	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
N-EtFOSAA	ND	1.9	0.59	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
N-MeFOSAA	ND	1.9	0.71	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.9	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorotridecanoic acid (PFTTrDA)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.9	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.9	0.39	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.9	0.16	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.9	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.9	0.18	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	0.39	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorooctanoic acid (PFOA)	ND	1.9	0.64	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	0.56	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH
Perfluorononanoic acid (PFNA)	ND	1.9	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:26	BLH

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-2R

Sample ID: 22G0742-07

Start Date/Time: 7/12/2022 11:40:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 11:45:00AM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	L-04, V-05	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Bromomethane	ND	5.0	1.5	µg/L	1	V-34	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	L-04, V-05, V-34	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-2R

Sample ID: 22G0742-07

Start Date/Time: 7/12/2022 11:40:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 11:45:00AM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Naphthalene	ND	2.0	0.24	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Vinyl Chloride	0.33	2.0	0.21	µg/L	1	J	SW-846 8260D	7/14/22	7/14/22 13:28	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:28	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		76.8	70-130						7/14/22 13:28	
Toluene-d8		100	70-130						7/14/22 13:28	
4-Bromofluorobenzene		99.1	70-130						7/14/22 13:28	

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-2R
Sample ID: 22G0742-07

Start Date/Time: 7/12/2022 11:40:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 11:45:00AM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	7/15/22	7/19/22 8:44	cla
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	7/19/22	7/22/22 18:31	SPF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	22.5		15-110				7/22/22 18:31			
1,4-Dioxane-d8	9.37 *		15-110				7/19/22 8:44			

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-2R

Sample ID: 22G0742-07

Start Date/Time: 7/12/2022 11:40:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 11:45:00AM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.8	0.65	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoropentanoic acid (PFPeA)	ND	1.8	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorohexanoic acid (PFHxA)	2.8	1.8	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.56	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	0.21	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8	0.54	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorodecanoic acid (PFDA)	ND	1.8	0.43	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.39	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.20	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8	0.83	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
N-EtFOSAA	ND	1.8	0.55	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
N-MeFOSAA	ND	1.8	0.67	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.8	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorotridecanoic acid (PFTTrDA)	ND	1.8	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.8	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.8	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.8	0.15	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.8	0.27	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.8	0.17	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	0.76	1.8	0.32	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8	0.23	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.24	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.8	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorooctanoic acid (PFOA)	ND	1.8	0.60	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.8	0.53	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH
Perfluorononanoic acid (PFNA)	ND	1.8	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:33	BLH

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-6R

Sample ID: 22G0742-08

Start Date/Time: 7/12/2022 1:50:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:55:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	L-04, V-05	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Bromomethane	ND	5.0	1.5	µg/L	1	V-34	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	L-04, V-05, V-34	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
cis-1,2-Dichloroethylene	0.36	1.0	0.15	µg/L	1	J	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Diethyl Ether	1.6	2.0	0.18	µg/L	1	J	SW-846 8260D	7/14/22	7/14/22 13:54	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-6R

Sample ID: 22G0742-08

Start Date/Time: 7/12/2022 1:50:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:55:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Naphthalene	ND	2.0	0.24	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Vinyl Chloride	0.95	2.0	0.21	µg/L	1	J	SW-846 8260D	7/14/22	7/14/22 13:54	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 13:54	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		78.7	70-130					7/14/22	13:54	
Toluene-d8		101	70-130					7/14/22	13:54	
4-Bromofluorobenzene		101	70-130					7/14/22	13:54	

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-6R
Sample ID: 22G0742-08

Start Date/Time: 7/12/2022 1:50:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:55:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	7/15/22	7/19/22 9:03	cla
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	21.7		15-110				7/19/22 9:03			

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-6R

Sample ID: 22G0742-08

Start Date/Time: 7/12/2022 1:50:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:55:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.3	1.8	0.67	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoropentanoic acid (PFPeA)	ND	1.8	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorohexanoic acid (PFHxA)	0.45	1.8	0.35	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.58	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8	0.55	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorodecanoic acid (PFDA)	ND	1.8	0.44	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.40	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.21	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8	0.85	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
N-EtFOSAA	ND	1.8	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
N-MeFOSAA	ND	1.8	0.69	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.8	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorotridecanoic acid (PFTrDA)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.8	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.8	0.38	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.8	0.15	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.8	0.28	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.8	0.17	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8	0.38	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	0.63	1.8	0.33	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8	0.23	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorooctanoic acid (PFOA)	ND	1.8	0.62	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.8	0.54	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH
Perfluorononanoic acid (PFNA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:41	BLH

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-13

Sample ID: 22G0742-09

Start Date/Time: 7/12/2022 1:20:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:25:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	L-04, V-05	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Bromomethane	ND	5.0	1.5	µg/L	1	V-34	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	L-04, V-05, V-34	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
cis-1,2-Dichloroethylene	31	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
trans-1,2-Dichloroethylene	0.49	1.0	0.17	µg/L	1	J	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Diethyl Ether	5.5	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-13

Sample ID: 22G0742-09

Start Date/Time: 7/12/2022 1:20:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:25:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Naphthalene	ND	2.0	0.24	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Trichloroethylene	0.97	1.0	0.19	µg/L	1	J	SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:21	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		80.1	70-130					7/14/22	14:21	
Toluene-d8		99.0	70-130					7/14/22	14:21	
4-Bromofluorobenzene		100	70-130					7/14/22	14:21	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-13

Sample ID: 22G0742-09

Start Date/Time: 7/12/2022 1:20:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:25:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.23	0.037	µg/L	1		SW-846 8270E	7/15/22	7/19/22 9:23	cla
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	21.0		15-110				7/19/22 9:23			

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-13

Sample ID: 22G0742-09

Start Date/Time: 7/12/2022 1:20:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 1:25:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	1.0	1.8	0.67	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoropentanoic acid (PFPeA)	0.60	1.8	0.36	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorohexanoic acid (PFHxA)	0.37	1.8	0.35	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.58	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.32	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	0.22	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8	0.55	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorodecanoic acid (PFDA)	ND	1.8	0.44	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.40	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.21	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8	0.85	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
N-EtFOSAA	ND	1.8	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
N-MeFOSAA	ND	1.8	0.69	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.8	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorotridecanoic acid (PFTTrDA)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8	0.26	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.8	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.8	0.38	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.8	0.15	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.8	0.28	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.8	0.17	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8	0.38	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8	0.23	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorooctanoic acid (PFOA)	ND	1.8	0.62	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.8	0.55	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH
Perfluorononanoic acid (PFNA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:48	BLH

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-22

Sample ID: 22G0742-10

Start Date/Time: 7/12/2022 2:15:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 2:20:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	L-04, V-05	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Bromomethane	ND	5.0	1.5	µg/L	1	V-34	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	L-04, V-05, V-34	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-22

Sample ID: 22G0742-10

Start Date/Time: 7/12/2022 2:15:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 2:20:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Naphthalene	ND	2.0	0.24	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1	V-05	SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	7/14/22	7/14/22 14:47	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		78.2	70-130					7/14/22	14:47	
Toluene-d8		100	70-130					7/14/22	14:47	
4-Bromofluorobenzene		99.8	70-130					7/14/22	14:47	

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-22

Sample ID: 22G0742-10

Start Date/Time: 7/12/2022 2:15:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 2:20:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.19	0.031	µg/L	1		SW-846 8270E	7/15/22	7/19/22 9:42	cla
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	18.0		15-110				7/19/22 9:42			

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Project Location: Johnny Cake Rd Farm, Danube, N

Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: MW-22

Sample ID: 22G0742-10

Start Date/Time: 7/12/2022 2:15:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 2:20:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.8	0.67	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoropentanoic acid (PFPeA)	ND	1.8	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorohexanoic acid (PFHxA)	ND	1.8	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	0.21	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8	0.54	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorodecanoic acid (PFDA)	ND	1.8	0.44	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.40	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.21	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8	0.84	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
N-EtFOSAA	ND	1.8	0.56	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
N-MeFOSAA	ND	1.8	0.68	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.8	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorotridecanoic acid (PFTTrDA)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.8	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.8	0.38	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.8	0.15	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.8	0.28	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.8	0.17	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	0.33	1.8	0.33	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8	0.23	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorooctanoic acid (PFOA)	ND	1.8	0.61	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.8	0.54	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH
Perfluorononanoic acid (PFNA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 20:55	BLH

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Project Location: Johnny Cake Rd Farm, Danube, N Sample Description:

Work Order: 22G0742

Date Received: 7/13/2022

Field Sample #: FB

Sample ID: 22G0742-11

Start Date/Time: 7/12/2022 2:00:00PM

Sample Matrix: Ground Water

Stop Date/Time: 7/12/2022 2:01:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.8	0.67	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoropentanoic acid (PFPeA)	ND	1.8	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorohexanoic acid (PFHxA)	ND	1.8	0.34	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.57	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.35	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	0.21	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8	0.54	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorodecanoic acid (PFDA)	ND	1.8	0.44	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.39	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.21	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8	0.84	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
N-EtFOSAA	ND	1.8	0.56	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
N-MeFOSAA	ND	1.8	0.68	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.8	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorotridecanoic acid (PFTTrDA)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorodecanesulfonic acid (PFDS)	ND	1.8	0.29	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorooctanesulfonamide (FOSA)	ND	1.8	0.38	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorononanesulfonic acid (PFNS)	ND	1.8	0.15	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.8	0.28	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.8	0.17	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	0.30	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8	0.37	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
6:2 Fluorotelomersulfonic acid (6:2FTS A)	0.39	1.8	0.33	ng/L	1	J	SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8	0.23	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.33	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.25	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorooctanoic acid (PFOA)	ND	1.8	0.61	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.8	0.54	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH
Perfluorononanoic acid (PFNA)	ND	1.8	0.31	ng/L	1		SOP-454 PFAS	7/29/22	8/16/22 21:17	BLH

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-18

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton Par	Project:	Johnny Cake Road Farm - CO SMPA0001
Matrix:	Water	Analysis:	SW-846 8260D
Batch:	B312958	Preparation:	SW-846 5030B
% Solids:		Laboratory ID:	B312958-MS1
Initial/Final:	5 mL / 5 mL	Sample Lab ID:	22G0742-04
Column:			

ANALYTE	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC.	QC LIMITS REC.
Acetone	100	ND	72.2	72.2	70 - 130
Acrylonitrile	10.0	ND	10.2	102	70 - 130
tert-Amyl Methyl Ether (TAME)	10.0	ND	10.4	104	70 - 130
Benzene	10.0	ND	10.9	109	70 - 130
Bromobenzene	10.0	ND	11.2	112	70 - 130
Bromochloromethane	10.0	ND	11.8	118	70 - 130
Bromodichloromethane	10.0	ND	10.5	105	70 - 130
Bromoform	10.0	ND	10.0	100	70 - 130
Bromomethane	10.0	ND	10.5	105	70 - 130
2-Butanone (MEK)	100	ND	82.6	82.6	70 - 130
tert-Butyl Alcohol (TBA)	100	ND	84.6	84.6	70 - 130
n-Butylbenzene	10.0	ND	8.90	89.0	70 - 130
sec-Butylbenzene	10.0	ND	9.77	97.7	70 - 130
tert-Butylbenzene	10.0	ND	10.4	104	70 - 130
tert-Butyl Ethyl Ether (TBEE)	10.0	ND	10.0	100	70 - 130
Carbon Disulfide	100	ND	110	110	70 - 130
Carbon Tetrachloride	10.0	ND	10.4	104	70 - 130
Chlorobenzene	10.0	ND	10.9	109	70 - 130
Chlorodibromomethane	10.0	ND	10.7	107	70 - 130
Chloroethane	10.0	ND	10.8	108	70 - 130
Chloroform	10.0	ND	10.2	102	70 - 130
Chloromethane	10.0	ND	4.40	44.0	* 70 - 130
2-Chlorotoluene	10.0	ND	10.8	108	70 - 130
4-Chlorotoluene	10.0	ND	11.0	110	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	10.0	ND	7.44	74.4	70 - 130
1,2-Dibromoethane (EDB)	10.0	ND	11.2	112	70 - 130
Dibromomethane	10.0	ND	11.3	113	70 - 130
1,2-Dichlorobenzene	10.0	ND	9.15	91.5	70 - 130
1,3-Dichlorobenzene	10.0	ND	9.43	94.3	70 - 130
1,4-Dichlorobenzene	10.0	ND	9.29	92.9	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-18

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton Par Project: Johnny Cake Road Farm - CO SMPA0001
 Matrix: Water Analysis: SW-846 8260D
 Batch: B312958 Preparation: SW-846 5030B
 % Solids: Laboratory ID: B312958-MS1
 Initial/Final: 5 mL / 5 mL Sample Lab ID: 22G0742-04
 Column:

ANALYTE	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC.	QC LIMITS REC.
trans-1,4-Dichloro-2-butene	10.0	ND	7.49	74.9	70 - 130
Dichlorodifluoromethane (Freon 12)	10.0	ND	9.87	98.7	70 - 130
1,1-Dichloroethane	10.0	ND	11.4	114	70 - 130
1,2-Dichloroethane	10.0	ND	10.9	109	70 - 130
1,1-Dichloroethylene	10.0	ND	10.3	103	70 - 130
cis-1,2-Dichloroethylene	10.0	ND	11.0	110	70 - 130
trans-1,2-Dichloroethylene	10.0	ND	11.5	115	70 - 130
1,2-Dichloropropane	10.0	ND	12.7	127	70 - 130
1,3-Dichloropropane	10.0	ND	12.0	120	70 - 130
2,2-Dichloropropane	10.0	ND	8.17	81.7	70 - 130
1,1-Dichloropropene	10.0	ND	11.4	114	70 - 130
cis-1,3-Dichloropropene	10.0	ND	10.2	102	70 - 130
trans-1,3-Dichloropropene	10.0	ND	9.81	98.1	70 - 130
Diethyl Ether	10.0	8.76	38.4	296	* 70 - 130
Diisopropyl Ether (DIPE)	10.0	ND	9.62	96.2	70 - 130
1,4-Dioxane	100	ND	107	107	70 - 130
Ethylbenzene	10.0	ND	11.0	110	70 - 130
Hexachlorobutadiene	10.0	ND	9.30	93.0	70 - 130
2-Hexanone (MBK)	100	ND	97.1	97.1	70 - 130
Isopropylbenzene (Cumene)	10.0	ND	11.5	115	70 - 130
p-Isopropyltoluene (p-Cymene)	10.0	ND	10.0	100	70 - 130
Methyl Acetate	10.0	ND	7.24	72.4	70 - 130
Methyl tert-Butyl Ether (MTBE)	10.0	ND	10.2	102	70 - 130
Methyl Cyclohexane	10.0	ND	11.0	110	70 - 130
Methylene Chloride	10.0	ND	9.93	99.3	70 - 130
4-Methyl-2-pentanone (MIBK)	100	ND	102	102	70 - 130
Naphthalene	10.0	ND	6.27	62.7	* 70 - 130
n-Propylbenzene	10.0	ND	11.0	110	70 - 130
Styrene	10.0	ND	11.2	112	70 - 130
1,1,1,2-Tetrachloroethane	10.0	ND	11.2	112	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-18

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton Par	Project:	Johnny Cake Road Farm - CO SMPA0001
Matrix:	Water	Analysis:	SW-846 8260D
Batch:	B312958	Preparation:	SW-846 5030B
% Solids:		Laboratory ID:	B312958-MS1
Initial/Final:	5 mL / 5 mL	Sample Lab ID:	22G0742-04
Column:			

ANALYTE	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC.	QC LIMITS REC.
1,1,2,2-Tetrachloroethane	10.0	ND	10.8	108	70 - 130
Tetrachloroethylene	10.0	ND	12.9	129	70 - 130
Tetrahydrofuran	10.0	ND	9.66	96.6	70 - 130
Toluene	10.0	ND	11.9	119	70 - 130
1,2,3-Trichlorobenzene	10.0	ND	6.91	69.1	* 70 - 130
1,2,4-Trichlorobenzene	10.0	ND	8.15	81.5	70 - 130
1,3,5-Trichlorobenzene	10.0	ND	8.71	87.1	70 - 130
1,1,1-Trichloroethane	10.0	ND	10.4	104	70 - 130
1,1,2-Trichloroethane	10.0	ND	12.0	120	70 - 130
Trichloroethylene	10.0	ND	12.8	128	70 - 130
Trichlorofluoromethane (Freon 11)	10.0	ND	9.29	92.9	70 - 130
1,2,3-Trichloropropane	10.0	ND	11.5	115	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	ND	11.0	110	70 - 130
1,2,4-Trimethylbenzene	10.0	ND	9.72	97.2	70 - 130
1,3,5-Trimethylbenzene	10.0	ND	11.5	115	70 - 130
Vinyl Chloride	10.0	1.17	15.7	145	* 70 - 130
m+p Xylene	20.0	ND	22.9	115	70 - 130
o-Xylene	10.0	ND	11.0	110	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-18

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton Par	Project:	Johnny Cake Road Farm - CO SMPA0001
Matrix:	Water	Analysis:	SW-846 8260D
Batch:	B312958	Preparation:	SW-846 5030B
% Solids:		Laboratory ID:	B312958-MSD1
Initial/Final:	5 mL / 5 mL	Sample Lab ID:	22G0742-04
Column:			

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #	% RPD	QC LIMITS	
					RPD	REC.
Acetone	100	68.9	68.9 *	4.75	30	70 - 130
Acrylonitrile	10.0	9.89	98.9	3.57	30	70 - 130
tert-Amyl Methyl Ether (TAME)	10.0	9.72	97.2	6.95	30	70 - 130
Benzene	10.0	10.3	103	5.38	30	70 - 130
Bromobenzene	10.0	10.4	104	7.14	30	70 - 130
Bromochloromethane	10.0	11.2	112	4.95	30	70 - 130
Bromodichloromethane	10.0	10.2	102	3.18	30	70 - 130
Bromoform	10.0	9.75	97.5	2.53	30	70 - 130
Bromomethane	10.0	10.2	102	3.58	30	70 - 130
2-Butanone (MEK)	100	81.8	81.8	0.912	30	70 - 130
tert-Butyl Alcohol (TBA)	100	81.6	81.6	3.50	30	70 - 130
n-Butylbenzene	10.0	8.29	82.9	7.10	30	70 - 130
sec-Butylbenzene	10.0	9.24	92.4	5.58	30	70 - 130
tert-Butylbenzene	10.0	9.76	97.6	6.73	30	70 - 130
tert-Butyl Ethyl Ether (TBEE)	10.0	9.41	94.1	6.48	30	70 - 130
Carbon Disulfide	100	102	102	6.79	30	70 - 130
Carbon Tetrachloride	10.0	10.1	101	3.61	30	70 - 130
Chlorobenzene	10.0	10.1	101	7.41	30	70 - 130
Chlorodibromomethane	10.0	10.2	102	5.26	30	70 - 130
Chloroethane	10.0	10.4	104	3.67	30	70 - 130
Chloroform	10.0	9.45	94.5	8.02	30	70 - 130
Chloromethane	10.0	4.46	44.6 *	1.35	30	70 - 130
2-Chlorotoluene	10.0	10.2	102	4.96	30	70 - 130
4-Chlorotoluene	10.0	10.3	103	6.86	30	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	10.0	6.62	66.2 *	11.7	30	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.7	107	4.55	30	70 - 130
Dibromomethane	10.0	10.7	107	5.53	30	70 - 130
1,2-Dichlorobenzene	10.0	8.53	85.3	7.01	30	70 - 130
1,3-Dichlorobenzene	10.0	8.73	87.3	7.71	30	70 - 130
1,4-Dichlorobenzene	10.0	8.76	87.6	5.87	30	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-18

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton Par Project: Johnny Cake Road Farm - CO SMPA0001
 Matrix: Water Analysis: SW-846 8260D
 Batch: B312958 Preparation: SW-846 5030B
 % Solids: Laboratory ID: B312958-MSD1
 Initial/Final: 5 mL / 5 mL Sample Lab ID: 22G0742-04
 Column:

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD		QC LIMITS		
			% REC. #	% RPD	RPD	REC.	
trans-1,4-Dichloro-2-butene	10.0	6.17	61.7	*	19.3	30	70 - 130
Dichlorodifluoromethane (Freon 12)	10.0	10.3	103		4.17	30	70 - 130
1,1-Dichloroethane	10.0	10.5	105		8.16	30	70 - 130
1,2-Dichloroethane	10.0	10.5	105		4.30	30	70 - 130
1,1-Dichloroethylene	10.0	9.70	97.0		6.39	30	70 - 130
cis-1,2-Dichloroethylene	10.0	10.1	101		8.17	30	70 - 130
trans-1,2-Dichloroethylene	10.0	10.6	106		7.98	30	70 - 130
1,2-Dichloropropane	10.0	11.7	117		8.69	30	70 - 130
1,3-Dichloropropane	10.0	11.0	110		8.28	30	70 - 130
2,2-Dichloropropane	10.0	7.79	77.9		4.76	30	70 - 130
1,1-Dichloropropene	10.0	10.5	105		8.23	30	70 - 130
cis-1,3-Dichloropropene	10.0	9.54	95.4		6.69	30	70 - 130
trans-1,3-Dichloropropene	10.0	9.05	90.5		8.06	30	70 - 130
Diethyl Ether	10.0	34.4	256	*	10.8	30	70 - 130
Diisopropyl Ether (DIPE)	10.0	9.17	91.7		4.79	30	70 - 130
1,4-Dioxane	100	104	104		3.37	30	70 - 130
Ethylbenzene	10.0	10.2	102		7.06	30	70 - 130
Hexachlorobutadiene	10.0	8.21	82.1		12.5	30	70 - 130
2-Hexanone (MBK)	100	92.5	92.5		4.94	30	70 - 130
Isopropylbenzene (Cumene)	10.0	10.7	107		6.92	30	70 - 130
p-Isopropyltoluene (p-Cymene)	10.0	9.40	94.0		6.39	30	70 - 130
Methyl Acetate	10.0	6.68	66.8	*	8.05	30	70 - 130
Methyl tert-Butyl Ether (MTBE)	10.0	9.47	94.7		7.23	30	70 - 130
Methyl Cyclohexane	10.0	11.0	110		0.273	30	70 - 130
Methylene Chloride	10.0	9.40	94.0		5.48	30	70 - 130
4-Methyl-2-pentanone (MIBK)	100	95.7	95.7		6.07	30	70 - 130
Naphthalene	10.0	5.92	59.2	*	5.74	30	70 - 130
n-Propylbenzene	10.0	10.2	102		6.99	30	70 - 130
Styrene	10.0	10.5	105		6.82	30	70 - 130
1,1,1,2-Tetrachloroethane	10.0	10.5	105		6.83	30	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-18

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton Par Project: Johnny Cake Road Farm - CO SMPA0001
 Matrix: Water Analysis: SW-846 8260D
 Batch: B312958 Preparation: SW-846 5030B
 % Solids: Laboratory ID: B312958-MSD1
 Initial/Final: 5 mL / 5 mL Sample Lab ID: 22G0742-04
 Column:

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #	% RPD	QC LIMITS	
					RPD	REC.
1,1,2,2-Tetrachloroethane	10.0	9.98	99.8	8.35	30	70 - 130
Tetrachloroethylene	10.0	11.6	116	10.5	30	70 - 130
Tetrahydrofuran	10.0	9.06	90.6	6.41	30	70 - 130
Toluene	10.0	11.0	110	8.20	30	70 - 130
1,2,3-Trichlorobenzene	10.0	6.50	65.0 *	6.11	30	70 - 130
1,2,4-Trichlorobenzene	10.0	7.65	76.5	6.33	30	70 - 130
1,3,5-Trichlorobenzene	10.0	8.12	81.2	7.01	30	70 - 130
1,1,1-Trichloroethane	10.0	9.86	98.6	5.33	30	70 - 130
1,1,2-Trichloroethane	10.0	11.0	110	7.99	30	70 - 130
Trichloroethylene	10.0	11.7	117	8.50	30	70 - 130
Trichlorofluoromethane (Freon 11)	10.0	8.08	80.8	13.9	30	70 - 130
1,2,3-Trichloropropane	10.0	10.3	103	11.2	30	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	10.7	107	2.31	30	70 - 130
1,2,4-Trimethylbenzene	10.0	9.17	91.7	5.82	30	70 - 130
1,3,5-Trimethylbenzene	10.0	10.6	106	8.35	30	70 - 130
Vinyl Chloride	10.0	14.8	137 *	5.63	30	70 - 130
m+p Xylene	20.0	21.1	106	8.31	20	70 - 130
o-Xylene	10.0	10.4	104	6.35	30	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton Par Project:		Johnny Cake Road Farm - CO SMPA0001
Matrix:	Water	Preparation:	SW-846 5030B
Batch:	B312958	Laboratory ID:	B312958-BS1
Column:		Initial/Final:	5 mL / 5 mL

ANALYTE	SPIKE ADDED (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC.	QC LIMITS REC.
Acetone	100	69.4	69.4 *	70 - 160
Acrylonitrile	10.0	9.84	98.4	70 - 130
tert-Amyl Methyl Ether (TAME)	10.0	9.99	99.9	70 - 130
Benzene	10.0	9.92	99.2	70 - 130
Bromobenzene	10.0	10.7	107	70 - 130
Bromochloromethane	10.0	11.4	114	70 - 130
Bromodichloromethane	10.0	10.4	104	70 - 130
Bromoform	10.0	10.5	105	70 - 130
Bromomethane	10.0	12.7	127	40 - 160
2-Butanone (MEK)	100	81.8	81.8	40 - 160
tert-Butyl Alcohol (TBA)	100	81.9	81.9	40 - 160
n-Butylbenzene	10.0	8.83	88.3	70 - 130
sec-Butylbenzene	10.0	9.25	92.5	70 - 130
tert-Butylbenzene	10.0	9.89	98.9	70 - 130
tert-Butyl Ethyl Ether (TBEE)	10.0	9.65	96.5	70 - 130
Carbon Disulfide	100	102	102	70 - 130
Carbon Tetrachloride	10.0	9.78	97.8	70 - 130
Chlorobenzene	10.0	10.3	103	70 - 130
Chlorodibromomethane	10.0	10.7	107	70 - 130
Chloroethane	10.0	9.99	99.9	70 - 130
Chloroform	10.0	9.38	93.8	70 - 130
Chloromethane	10.0	3.97	39.7 *	40 - 160
2-Chlorotoluene	10.0	10.5	105	70 - 130
4-Chlorotoluene	10.0	10.6	106	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	10.0	7.64	76.4	70 - 130
1,2-Dibromoethane (EDB)	10.0	11.1	111	70 - 130
Dibromomethane	10.0	10.9	109	70 - 130
1,2-Dichlorobenzene	10.0	8.94	89.4	70 - 130
1,3-Dichlorobenzene	10.0	9.34	93.4	70 - 130
1,4-Dichlorobenzene	10.0	9.15	91.5	70 - 130
trans-1,4-Dichloro-2-butene	10.0	7.60	76.0	70 - 130
Dichlorodifluoromethane (Freon 12)	10.0	9.24	92.4	40 - 160
1,1-Dichloroethane	10.0	10.3	103	70 - 130
1,2-Dichloroethane	10.0	10.5	105	70 - 130
1,1-Dichloroethylene	10.0	9.20	92.0	70 - 130
cis-1,2-Dichloroethylene	10.0	9.99	99.9	70 - 130
trans-1,2-Dichloroethylene	10.0	10.6	106	70 - 130

INITIAL CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton	Project:	Johnny Cake Road Farm - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2000186
Lab File ID:	B2016126.D	Calibration Date:	06/09/20 08:37
Sequence:	S049200	Injection Date:	06/09/20
Lab Sample ID:	S049200-ICV1	Injection Time:	16:18

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR		% DIFF / DRIFT	
		STD	ICV	ICAL	ICV	MIN (#)	ICV
Acetone	A	100	100	0.212736	0.213172		0.2
Acrolein	A	100	82.7	0.1434461	0.1186746		-17.3
Acrylonitrile	A	10.0	10.7	0.2344508	0.2507107		6.9
tert-Amyl Methyl Ether (TAME)	A	10.0	10.3	1.258459	1.297587		3.1
Benzene	A	10.0	10.1	1.817602	1.832744		0.8
Bromobenzene	A	10.0	10.6	0.9779525	1.039776		6.3
Bromochloromethane	A	10.0	11.8	0.1959787	0.2323267		18.5
Bromodichloromethane	A	10.0	10.5	0.3852316	0.4060808		5.4
Bromoform	A	10.0	10.6	0.3779343	0.4016114		6.3
Bromomethane	A	10.0	6.26	0.1593963	6.229073E-02		-37.4
2-Butanone (MEK)	A	100	93.9	0.331706	0.3115421		-6.1
tert-Butyl Alcohol (TBA)	A	100	96.6	7.471108E-02	7.215554E-02		-3.4
n-Butylbenzene	A	10.0	10.8	2.3317	2.525129		8.3
sec-Butylbenzene	A	10.0	10.8	2.877135	3.111776		8.2
tert-Butylbenzene	A	10.0	10.5	1.923578	2.016612		4.8
tert-Butyl Ethyl Ether (TBEE)	A	10.0	9.64	1.728532	1.666182		-3.6
Carbon Disulfide	A	10.0	9.69	1.270917	1.231		-3.1
Carbon Tetrachloride	A	10.0	10.2	0.6823544	0.6994125		2.5
Chlorobenzene	A	10.0	10.4	1.528388	1.591275		4.1
Chlorodibromomethane	A	10.0	10.5	0.2959761	0.3106779		5.0
Chloroethane	A	10.0	9.26	0.383947	0.3556763		-7.4
Chloroform	A	10.0	10.3	0.8443192	0.868722		2.9
Chloromethane	A	10.0	4.55	1.874805	0.8532125		-54.5
2-Chlorotoluene	A	10.0	10.0	1.924599	1.93471		0.5
4-Chlorotoluene	A	10.0	10.5	2.239113	2.360383		5.4
Cyclohexane	A	10.0	10.9	1.143235	1.250142		9.4
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	11.0	0.1356244	0.1489875		9.9
1,2-Dibromoethane (EDB)	A	10.0	10.8	0.2715879	0.2943118		8.4
Dibromomethane	A	10.0	11.6	0.1743876	0.2025813		16.2

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton	Project:	Johnny Cake Road Farm - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2000186
Lab File ID:	B22V19501.D	Calibration Date:	06/09/20 08:37
Sequence:	S074061	Injection Date:	07/14/22
Lab Sample ID:	S074061-CCV1	Injection Time:	09:06

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR		% DIFF / DRIFT			
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Acetone	A	100	66.9	0.212736	0.142414		-33.1	20	*
Acrylonitrile	A	10.0	9.90	0.2344508	0.232203		-1.0	20	
tert-Amyl Methyl Ether (TAME)	A	10.0	9.41	1.258459	1.184403		-5.9	20	
Benzene	A	10.0	9.64	1.817602	1.751967		-3.6	20	
Bromobenzene	A	10.0	10.1	0.9779525	0.9834968		0.6	20	
Bromochloromethane	A	10.0	11.1	0.1959787	0.2168847		10.7	20	
Bromodichloromethane	A	10.0	9.85	0.3852316	0.3795668		-1.5	20	
Bromoform	A	10.0	9.54	0.3779343	0.360462		-4.6	20	
Bromomethane	L	10.0	9.83	0.1593963	0.1336515		-1.7	20	
2-Butanone (MEK)	A	100	78.3	0.331706	0.2597724		-21.7	20	*
tert-Butyl Alcohol (TBA)	A	100	80.1	7.471108E-02	5.982361E-02		-19.9	20	
n-Butylbenzene	A	10.0	8.37	2.3317	1.952487		-16.3	20	
sec-Butylbenzene	A	10.0	8.96	2.877135	2.576739		-10.4	20	
tert-Butylbenzene	A	10.0	9.59	1.923578	1.845649		-4.1	20	
tert-Butyl Ethyl Ether (TBEE)	A	10.0	9.03	1.728532	1.561255		-9.7	20	
Carbon Disulfide	A	100	98.5	1.270917	1.251565		-1.5	20	
Carbon Tetrachloride	A	10.0	9.35	0.6823544	0.6378709		-6.5	20	
Chlorobenzene	A	10.0	9.81	1.528388	1.500063		-1.9	20	
Chlorodibromomethane	A	10.0	9.93	0.2959761	0.2938894		-0.7	20	
Chloroethane	A	10.0	9.50	0.383947	0.3648547		-5.0	20	
Chloroform	A	10.0	9.07	0.8443192	0.7657736		-9.3	20	
Chloromethane	A	10.0	3.63	1.874805	0.6807194		-63.7	20	*
2-Chlorotoluene	A	10.0	9.90	1.924599	1.905263		-1.0	20	
4-Chlorotoluene	A	10.0	9.91	2.239113	2.220024		-0.9	20	
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	6.87	0.1356244	9.315648E-02		-31.3	20	*
1,2-Dibromoethane (EDB)	A	10.0	10.2	0.2715879	0.2781467		2.4	20	
Dibromomethane	A	10.0	10.4	0.1743876	0.1815514		4.1	20	
1,2-Dichlorobenzene	A	10.0	8.55	1.208544	1.033646		-14.5	20	
1,3-Dichlorobenzene	A	10.0	8.79	1.264831	1.111166		-12.1	20	

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton	Project:	Johnny Cake Road Farm - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2000186
Lab File ID:	B22V19501.D	Calibration Date:	06/09/20 08:37
Sequence:	S074061	Injection Date:	07/14/22
Lab Sample ID:	S074061-CCV1	Injection Time:	09:06

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR		% DIFF / DRIFT		
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	10.0	8.68	1.312218	1.139157		-13.2	20
trans-1,4-Dichloro-2-butene	A	10.0	6.80	0.2572224	0.1749787		-32.0	20 *
Dichlorodifluoromethane (Freon 12)	A	10.0	8.95	0.6171461	0.5522811		-10.5	20
1,1-Dichloroethane	A	10.0	9.73	0.9362647	0.911137		-2.7	20
1,2-Dichloroethane	A	10.0	10.1	0.4811448	0.4875774		1.3	20
1,1-Dichloroethylene	A	10.0	9.02	0.800166	0.7219967		-9.8	20
cis-1,2-Dichloroethylene	A	10.0	9.61	0.9006016	0.8653963		-3.9	20
trans-1,2-Dichloroethylene	A	10.0	10.2	0.7592057	0.7737006		1.9	20
1,2-Dichloropropane	A	10.0	11.4	0.3251199	0.3710363		14.1	20
1,3-Dichloropropane	A	10.0	10.8	0.4460151	0.4821309		8.1	20
2,2-Dichloropropane	A	10.0	9.28	0.7280207	0.6755776		-7.2	20
1,1-Dichloropropene	A	10.0	9.92	0.6557042	0.6502613		-0.8	20
cis-1,3-Dichloropropene	A	10.0	9.86	0.4691948	0.4626327		-1.4	20
trans-1,3-Dichloropropene	A	10.0	9.23	0.4126462	0.3808849		-7.7	20
Diethyl Ether	A	10.0	8.53	0.4047476	0.3452516		-14.7	20
Diisopropyl Ether (DIPE)	A	10.0	8.78	2.047278	1.797672		-12.2	20
1,4-Dioxane	L	100	106	3.769316E-03	3.825014E-03		6.2	20
Ethylbenzene	A	10.0	10.0	2.669341	2.668331		-0.04	20
Hexachlorobutadiene	A	10.0	8.98	0.415325	0.3728103		-10.2	20
2-Hexanone (MBK)	A	100	92.9	0.3332371	0.3095476		-7.1	20
Isopropylbenzene (Cumene)	A	10.0	10.3	2.703899	2.785179		3.0	20
p-Isopropyltoluene (p-Cymene)	A	10.0	9.37	2.418484	2.266623		-6.3	20
Methyl Acetate	A	10.0	7.94	0.6735391	0.534499		-20.6	20 *
Methyl tert-Butyl Ether (MTBE)	A	10.0	9.32	1.233356	1.149482		-6.8	20
Methyl Cyclohexane	A	10.0	10.8	0.5150882	0.5543038		7.6	20
Methylene Chloride	A	10.0	8.99	0.8731688	0.7851625		-10.1	20
4-Methyl-2-pentanone (MIBK)	A	100	96.0	0.4448133	0.4268074		-4.0	20
Naphthalene	A	10.0	5.72	2.051598	1.173897		-42.8	20 *
n-Propylbenzene	A	10.0	9.96	3.359447	3.345438		-0.4	20

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton	Project:	Johnny Cake Road Farm - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2000186
Lab File ID:	B22V19501.D	Calibration Date:	06/09/20 08:37
Sequence:	S074061	Injection Date:	07/14/22
Lab Sample ID:	S074061-CCV1	Injection Time:	09:06

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Styrene	A	10.0	10.4	1.644621	1.703626		3.6	20
1,1,1,2-Tetrachloroethane	A	10.0	10.1	0.5105569	0.5172356		1.3	20
1,1,2,2-Tetrachloroethane	A	10.0	9.62	0.7048981	0.6777758		-3.8	20
Tetrachloroethylene	A	10.0	11.7	0.252829	0.2966749		17.3	20
Tetrahydrofuran	A	10.0	8.81	0.2085948	0.1837128		-11.9	20
Toluene	A	10.0	10.6	1.27443	1.356736		6.5	20
1,2,3-Trichlorobenzene	A	10.0	6.70	0.7546459	0.5055749		-33.0	20 *
1,2,4-Trichlorobenzene	A	10.0	7.89	0.8051003	0.6349835		-21.1	20 *
1,3,5-Trichlorobenzene	A	10.0	8.46	0.9189832	0.7773735		-15.4	20
1,1,1-Trichloroethane	A	10.0	9.29	0.7575683	0.7034648		-7.1	20
1,1,2-Trichloroethane	A	10.0	10.6	0.244339	0.2580268		5.6	20
Trichloroethylene	A	10.0	11.1	0.2912573	0.3228133		10.8	20
Trichlorofluoromethane (Freon 11)	A	10.0	8.05	0.7942548	0.6391921		-19.5	20
1,2,3-Trichloropropane	A	10.0	10.1	0.1936737	0.1960297		1.2	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	10.2	0.3852846	0.3932061		2.1	20
1,2,4-Trimethylbenzene	A	10.0	9.11	2.233447	2.033621		-8.9	20
1,3,5-Trimethylbenzene	A	10.0	10.4	2.295931	2.384289		3.8	20
Vinyl Chloride	A	10.0	9.59	0.7004293	0.6716141		-4.1	20
m+p Xylene	A	20.0	20.5	2.091175	2.139587		2.3	20
o-Xylene	A	10.0	9.95	2.147289	2.136322		-0.5	20
1,2-Dichloroethane-d4	A	25.0	18.7	0.7730529	0.5776974		-25.3	
Toluene-d8	A	25.0	25.0	1.254031	1.25355		-0.04	
4-Bromofluorobenzene	A	25.0	25.3	0.9311152	0.9413613		1.1	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

SYSTEM MONITORING COMPOUND SUMMARY

SW-846 8270E

Laboratory:	Pace New England	SDG:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton Pa	Project:	Johnny Cake Road Farm - CO SMPA0001
Matrix:	Water	Instrument:	GCMSSV6

1,4-Dioxane-
d8

22G0742-07	9.37*
22G0742-07RE1	22.5
B313315-BLK1	20.9
B313315-BS1	25.2
B313315-BSD1	23.8

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-18

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton Par	Project:	Johnny Cake Road Farm - CO SMPA0001
Matrix:	Water	Analysis:	SOP-454 PFAS
Batch:	B313897	Preparation:	SOP 454-PFAAS
% Solids:		Laboratory ID:	B313897-MS1
Initial/Final:	266.18 mL / 1 mL	Sample Lab ID:	22G0742-04
Column:			

ANALYTE	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC.	QC LIMITS REC.
Perfluorobutanoic acid (PFBA)	9.39	ND	9.58	102	73 - 129
Perfluorobutanesulfonic acid (PFBS)	8.31	ND	7.89	94.9	72 - 130
Perfluoropentanoic acid (PFPeA)	9.39	ND	9.30	99.1	72 - 129
Perfluorohexanoic acid (PFHxA)	9.39	ND	8.90	94.7	72 - 129
11Cl-PF3OUdS (F53B Major)	8.85	ND	6.92	78.2	50 - 150
9Cl-PF3ONS (F53B Minor)	8.75	ND	7.79	89.0	50 - 150
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	8.85	ND	8.05	91.0	50 - 150
Hexafluoropropylene oxide dimer acid (HFPO-DA)	9.39	ND	13.4	143	50 - 150
8:2 Fluorotelomersulfonic acid (8:2FTS A)	9.02	ND	8.81	97.7	67 - 138
Perfluorodecanoic acid (PFDA)	9.39	ND	10.5	112	71 - 129
Perfluorododecanoic acid (PFDoA)	9.39	ND	9.13	97.2	72 - 134
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	8.36	ND	7.20	86.1	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	8.97	ND	8.21	91.6	69 - 134
N-EtFOSAA	9.39	ND	11.2	119	61 - 135
N-MeFOSAA	9.39	ND	10.7	114	65 - 136
Perfluorotetradecanoic acid (PFTA)	9.39	ND	9.39	100	71 - 132
Perfluorotridecanoic acid (PFTTrDA)	9.39	ND	9.38	99.9	65 - 144
4:2 Fluorotelomersulfonic acid (4:2FTS A)	8.78	ND	8.45	96.2	63 - 143
Perfluorodecanesulfonic acid (PFDS)	9.06	ND	7.69	84.8	53 - 142
Perfluorooctanesulfonamide (FOSA)	9.39	ND	9.24	98.4	67 - 137
Perfluorononanesulfonic acid (PFNS)	9.02	ND	8.42	93.4	69 - 127
Perfluoro-1-hexanesulfonamide (FHxSA)	9.39	ND	8.69	92.6	50 - 150

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-18

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton Par	Project:	Johnny Cake Road Farm - CO SMPA0001
Matrix:	Water	Analysis:	SOP-454 PFAS
Batch:	B313897	Preparation:	SOP 454-PFAAS
% Solids:		Laboratory ID:	B313897-MSD1
Initial/Final:	292.69 mL / 1 mL	Sample Lab ID:	22G0742-04
Column:			

ANALYTE	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC. #	% RPD	QC LIMITS	
					RPD	REC.
Perfluorobutanoic acid (PFBA)	8.54	9.03	106	5.98	30	73 - 129
Perfluorobutanesulfonic acid (PFBS)	7.56	7.63	101	3.29	30	72 - 130
Perfluoropentanoic acid (PFPeA)	8.54	8.81	103	5.49	30	72 - 129
Perfluorohexanoic acid (PFHxA)	8.54	8.72	102	2.05	30	72 - 129
11CI-PF3OUdS (F53B Major)	8.05	7.33	91.1	5.80	30	50 - 150
9CI-PF3ONS (F53B Minor)	7.96	7.46	93.7	4.43	30	50 - 150
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	8.05	7.84	97.4	2.74	30	50 - 150
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.54	8.24	96.5	47.6 *	30	50 - 150
8:2 Fluorotelomersulfonic acid (8:2FTS A)	8.20	9.61	117	8.63	30	67 - 138
Perfluorodecanoic acid (PFDA)	8.54	9.15	107	13.5	30	71 - 129
Perfluorododecanoic acid (PFDoA)	8.54	10.0	118	9.50	30	72 - 134
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	7.60	6.93	91.1	3.78	30	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	8.16	8.09	99.2	1.48	30	69 - 134
N-EtFOSAA	8.54	11.2	131	0.242	30	61 - 135
N-MeFOSAA	8.54	11.5	134	6.66	30	65 - 136
Perfluorotetradecanoic acid (PFTA)	8.54	8.98	105	4.52	30	71 - 132
Perfluorotridecanoic acid (PFTTrDA)	8.54	10.1	118	7.50	30	65 - 144
4:2 Fluorotelomersulfonic acid (4:2FTS A)	7.99	8.04	101	4.96	30	63 - 143
Perfluorodecanesulfonic acid (PFDS)	8.24	7.06	85.7	8.51	30	53 - 142
Perfluorooctanesulfonamide (FOSA)	8.54	9.46	111	2.37	30	67 - 137
Perfluorononanesulfonic acid (PFNS)	8.20	8.29	101	1.64	30	69 - 127
Perfluoro-1-hexanesulfonamide (FHxSA)	8.54	7.96	93.2	8.76	30	50 - 150

LCS / LCS DUPLICATE RECOVERY

SOP-454 PFAS

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton Par Project: Johnny Cake Road Farm - CO SMPA0001
 Matrix: Water Preparation: SOP 454-PFAAS
 Batch: B313897 Laboratory ID: B313897-BS1
 Column: Initial/Final: 278.46 mL / 1 mL

ANALYTE	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC.	QC LIMITS REC.
Perfluorobutanoic acid (PFBA)	8.98	9.81	109	73 - 129
Perfluorobutanesulfonic acid (PFBS)	7.95	7.95	100	72 - 130
Perfluoropentanoic acid (PFPeA)	8.98	9.72	108	72 - 129
Perfluorohexanoic acid (PFHxA)	8.98	9.24	103	72 - 129
11CI-PF3OUdS (F53B Major)	8.46	6.96	82.3	50 - 150
9CI-PF3ONS (F53B Minor)	8.37	7.89	94.3	50 - 150
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	8.46	8.31	98.3	50 - 150
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.98	11.0	122	50 - 150
8:2 Fluorotelomersulfonic acid (8:2FTS A)	8.62	9.47	110	67 - 138
Perfluorodecanoic acid (PFDA)	8.98	8.75	97.4	71 - 129
Perfluorododecanoic acid (PFDoA)	8.98	9.26	103	72 - 134
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	7.99	7.32	91.7	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	8.57	7.93	92.5	69 - 134
N-EtFOSAA	8.98	11.8	131	61 - 135
N-MeFOSAA	8.98	12.2	136	65 - 136
Perfluorotetradecanoic acid (PFTA)	8.98	8.85	98.5	71 - 132
Perfluorotridecanoic acid (PFTrDA)	8.98	9.74	109	65 - 144
4:2 Fluorotelomersulfonic acid (4:2FTS A)	8.39	8.45	101	63 - 143
Perfluorodecanesulfonic acid (PFDS)	8.66	8.23	95.0	53 - 142
Perfluorooctanesulfonamide (FOSA)	8.98	9.88	110	67 - 137
Perfluorononanesulfonic acid (PFNS)	8.62	8.48	98.4	69 - 127
Perfluoro-1-hexanesulfonamide (FHxSA)	8.98	9.51	106	50 - 150
Perfluoro-1-butanesulfonamide (FBSA)	8.98	8.34	92.9	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	8.21	8.41	102	68 - 131
Perfluoro-4-oxapentanoic acid (PFMPA)	8.98	8.26	92.0	50 - 150
Perfluoro-5-oxahexanoic acid (PFMBA)	8.98	8.58	95.5	50 - 150
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.53	9.31	109	64 - 140
Perfluoropentanesulfonic acid (PFPeS)	8.44	8.72	103	71 - 127
Perfluoroundecanoic acid (PFUnA)	8.98	10.1	112	69 - 133
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.98	7.09	79.0	50 - 150
Perfluoroheptanoic acid (PFHpA)	8.98	9.18	102	72 - 130
Perfluorooctanoic acid (PFOA)	8.98	9.16	102	71 - 133
Perfluorooctanesulfonic acid (PFOS)	8.30	8.13	98.0	65 - 140
Perfluorononanoic acid (PFNA)	8.98	8.32	92.7	69 - 130

CONTINUING CALIBRATION VERIFICATION
SOP-454 PFAS

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton	Project:	Johnny Cake Road Farm - CO SMPA0001
Instrument ID:	QQQ4	Calibration:	2200528
Lab File ID:	CCV1081622.d	Calibration Date:	08/15/22 00:00
Sequence:	S075549	Injection Date:	08/16/22
Lab Sample ID:	S075549-CCV1	Injection Time:	12:06

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR		% DIFF / DRIFT		LIMIT (#)
		STD	CCV	ICAL	CCV	MIN (#)	CCV	
Perfluoro-1-butanefluoramide (FBSA)	L	500	370	0.3405795	0.2740737		-26.0	30
Perfluorohexanesulfonic acid (PFHxS)	Q	457	382	1.065941	0.9281006		-16.4	30
Perfluoro-4-oxapentanoic acid (PFMPA)	Q	500	401	0.6442997	0.5298962		-19.8	30
Perfluoro-5-oxahexanoic acid (PFMBA)	Q	500	412	0.7476264	0.631708		-17.6	30
6:2 Fluorotelomersulfonic acid (6:2FTS A)	Q	476	471	1.213907	1.385189		-1.0	30
Perfluoropentanesulfonic acid (PFPeS)	Q	470	395	0.9812257	0.8392207		-16.0	30
Perfluoroundecanoic acid (PFUnA)	Q	500	409	0.9772038	0.7888136		-18.3	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	L	500	313	0.4261357	0.3028567		-37.3	30 *
Perfluoroheptanoic acid (PFHpA)	Q	500	425	1.042239	0.8626054		-15.0	30
Perfluorooctanoic acid (PFOA)	Q	500	389	1.044207	0.8289175		-22.3	30
Perfluorooctanesulfonic acid (PFOS)	Q	464	426	1.073044	0.98092		-8.2	30
Perfluorononanoic acid (PFNA)	Q	500	395	1.065815	0.8825007		-21.0	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION VERIFICATION
SOP-454 PFAS

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton	Project:	Johnny Cake Road Farm - CO SMPA0001
Instrument ID:	QQQ4	Calibration:	2200528
Lab File ID:	CCV5081622.d	Calibration Date:	08/15/22 00:00
Sequence:	S075549	Injection Date:	08/16/22
Lab Sample ID:	S075549-CCV2	Injection Time:	19:14

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF. / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Perfluorobutanoic acid (PFBA)	Q	2500	2690	0.9089874	0.9934636		7.6	30
Perfluorobutanesulfonic acid (PFBS)	Q	2220	2330	1.160151	1.243499		4.8	30
Perfluoropentanoic acid (PFPeA)	Q	2500	2710	0.9435209	1.038246		8.5	30
Perfluorohexanoic acid (PFHxA)	Q	2500	2620	0.8329092	0.885085		4.8	30
11CI-PF3OUdS (F53B Major)	Q	2360	2480	2.473223	2.558951		5.2	30
9CI-PF3ONS (F53B Minor)	Q	2330	2770	5.599917	6.251404		18.7	30
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	Q	2360	2300	1.72401	1.643437		-2.3	30
Hexafluoropropylene oxide dimer acid (HFPO-DA)	Q	2500	2860	0.1482114	0.1587054		14.4	30
8:2 Fluorotelomersulfonic acid (8:2FTS A)	Q	2400	2910	0.8795662	1.161801		21.4	30
Perfluorodecanoic acid (PFDA)	Q	2500	2480	1.078138	1.061178		-0.6	30
Perfluorododecanoic acid (PFDoA)	Q	2500	2850	1.029629	1.169264		13.9	30
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	Q	2220	2360	5.192205	5.706255		6.1	30
Perfluoroheptanesulfonic acid (PFHpS)	Q	2380	2770	0.256731	0.3060363		16.5	30
N-EtFOSAA	Q	2500	3010	0.9818496	1.164763		20.4	30
N-MeFOSAA	L	2500	3260	0.9926741	1.358967		30.3	30 *
Perfluorotetradecanoic acid (PFTA)	Q	2500	2550	1.025078	1.058476		1.9	30
Perfluorotridecanoic acid (PFTrDA)	Q	2500	2760	1.143954	1.275432		10.6	30
4:2 Fluorotelomersulfonic acid (4:2FTS A)	Q	2340	2380	1.178913	1.302927		1.9	30
Perfluorodecanesulfonic acid (PFDS)	L	2410	2700	0.71646	0.8425131		12.1	30
Perfluorooctanesulfonamide (FOSA)	Q	2500	2950	0.7922607	0.9387805		18.2	30
Perfluorononanesulfonic acid (PFNS)	Q	2400	2600	0.3779127	0.4110708		8.5	30
Perfluoro-1-hexanesulfonamide (FHxSA)	Q	2500	2520	0.4202459	0.431393		0.7	30

CONTINUING CALIBRATION VERIFICATION
SOP-454 PFAS

Laboratory:	Pace New England	Work Order:	22G0742
Client:	NYDEC_TRC Environmental Corporation- Clifton	Project:	Johnny Cake Road Farm - CO SMPA0001
Instrument ID:	QQQ4	Calibration:	2200528
Lab File ID:	CCVA081622.d	Calibration Date:	08/15/22 00:00
Sequence:	S075549	Injection Date:	08/16/22
Lab Sample ID:	S075549-CCV4	Injection Time:	22:15

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Perfluoro-1-butanefluorobutanesulfonamide (FBSA)	L	500	371	0.3405795	0.2744968		-25.9	30
Perfluorohexanesulfonic acid (PFHxS)	Q	457	355	1.065941	0.8620821		-22.4	30
Perfluoro-4-oxapentanoic acid (PFMPA)	Q	500	405	0.6442997	0.5343894		-19.1	30
Perfluoro-5-oxahexanoic acid (PFMBA)	Q	500	406	0.7476264	0.6219142		-18.9	30
6:2 Fluorotelomersulfonic acid (6:2FTS A)	Q	476	390	1.213907	1.147204		-18.1	30
Perfluoropentanesulfonic acid (PFPeS)	Q	470	376	0.9812257	0.799861		-20.0	30
Perfluoroundecanoic acid (PFUnA)	Q	500	431	0.9772038	0.8318294		-13.8	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	L	500	317	0.4261357	0.3061597		-36.7	30 *
Perfluoroheptanoic acid (PFHpA)	Q	500	419	1.042239	0.8499644		-16.2	30
Perfluorooctanoic acid (PFOA)	Q	500	474	1.044207	1.011849		-5.1	30
Perfluorooctanesulfonic acid (PFOS)	Q	464	378	1.073044	0.8711264		-18.5	30
Perfluorononanoic acid (PFNA)	Q	500	411	1.065815	0.9182426		-17.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton P. Project: Johnny Cake Road Farm - CO SMPA0001
 Sequence: S075549 Instrument: QQQ4
 Calibration: 2200528

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MW-12A (22G0742-02)			<i>Lab File ID: 22G0742-02.d</i>		<i>Analyzed: 08/16/22 19:57</i>				
M8FOSA	236257	3.988583	254339	3.988583	93	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	197996.8	2.472183	145773	2.472183	136	50 - 150	0.0000	+/-0.50	
M2PFFTA	252797.2	4.3297	1085599	4.337833	23	50 - 150	-0.0081	+/-0.50	*
M2-8:2FTS	136710	3.802817	120042	3.802817	114	50 - 150	0.0000	+/-0.50	
MPFBA	241514.8	1.066783	404626	1.066783	60	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	81421.06	2.81475	130072	2.814767	63	50 - 150	0.0000	+/-0.50	
M6PFDA	519031.9	3.803333	594046	3.803333	87	50 - 150	0.0000	+/-0.50	
M3PFBS	116918.5	1.8701	116837	1.878383	100	50 - 150	-0.0083	+/-0.50	
M7PFUnA	603329.1	3.95405	816126	3.95405	74	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	118287.4	3.4453	78918	3.4453	150	50 - 150	0.0000	+/-0.50	
M5PFPeA	355783.4	1.698283	388788	1.706567	92	50 - 150	-0.0083	+/-0.50	
M5PFHxA	733563.2	2.555917	743215	2.555917	99	50 - 150	0.0000	+/-0.50	
M3PFHxS	103399.3	3.2019	103125	3.210267	100	50 - 150	-0.0084	+/-0.50	
M4PFHpA	850276.1	3.1708	888651	3.1708	96	50 - 150	0.0000	+/-0.50	
M8PFOA	766779.6	3.453833	791558	3.453833	97	50 - 150	0.0000	+/-0.50	
M8PFOS	86556.02	3.644183	97029	3.644183	89	50 - 150	0.0000	+/-0.50	
M9PFNA	547206.5	3.645217	539989	3.645233	101	50 - 150	0.0000	+/-0.50	
MPFDoA	375014	4.088666	897306	4.088666	42	50 - 150	0.0000	+/-0.50	*
d5-NEtFOSAA	149081.2	3.961517	203643	3.961517	73	50 - 150	0.0000	+/-0.50	
d3-NMeFOSAA	185842.3	3.881767	231513	3.881767	80	50 - 150	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton P. Project: Johnny Cake Road Farm - CO SMPA0001
 Sequence: S075549 Instrument: QQQ4
 Calibration: 2200528

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MW-1 (22G0742-03)			<i>Lab File ID: 22G0742-03.d</i>		<i>Analyzed: 08/16/22 20:05</i>				
M8FOSA	120644.5	3.988583	254339	3.988583	47	50 - 150	0.0000	+/-0.50	*
M2-4:2FTS	131234.5	2.472183	145773	2.472183	90	50 - 150	0.0000	+/-0.50	
M2PFTA	62956.03	4.337817	1085599	4.337833	06	50 - 150	0.0000	+/-0.50	*
M2-8:2FTS	98945.7	3.8028	120042	3.802817	82	50 - 150	0.0000	+/-0.50	
MPFBA	214016.7	1.066783	404626	1.066783	53	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	86369.08	2.81475	130072	2.814767	66	50 - 150	0.0000	+/-0.50	
M6PFDA	407223.9	3.803317	594046	3.803333	69	50 - 150	0.0000	+/-0.50	
M3PFBS	98662.66	1.878383	116837	1.878383	84	50 - 150	0.0000	+/-0.50	
M7PFUnA	447519.2	3.95405	816126	3.95405	55	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	73141.46	3.4453	78918	3.4453	93	50 - 150	0.0000	+/-0.50	
M5PFPeA	311889.1	1.706567	388788	1.706567	80	50 - 150	0.0000	+/-0.50	
M5PFHxA	630323.9	2.555917	743215	2.555917	85	50 - 150	0.0000	+/-0.50	
M3PFHxS	88749.97	3.21025	103125	3.210267	86	50 - 150	0.0000	+/-0.50	
M4PFHpA	742859.9	3.170783	888651	3.1708	84	50 - 150	0.0000	+/-0.50	
M8PFOA	649575.8	3.453817	791558	3.453833	82	50 - 150	0.0000	+/-0.50	
M8PFOS	67428.69	3.644183	97029	3.644183	69	50 - 150	0.0000	+/-0.50	
M9PFNA	451276	3.645217	539989	3.645233	84	50 - 150	0.0000	+/-0.50	
MPFDoA	310302.1	4.088666	897306	4.088666	35	50 - 150	0.0000	+/-0.50	*
d5-NEtFOSAA	124045.9	3.953517	203643	3.961517	61	50 - 150	-0.0080	+/-0.50	
d3-NMeFOSAA	146640.3	3.881767	231513	3.881767	63	50 - 150	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton P. Project: Johnny Cake Road Farm - CO SMPA0001
 Sequence: S075549 Instrument: QQQ4
 Calibration: 2200528

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MW-18 (22G0742-04)			<i>Lab File ID: 22G0742-04.d</i>		<i>Analyzed: 08/16/22 20:12</i>				
M8FOSA	156453.8	3.988583	254339	3.988583	62	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	97539.38	2.472183	145773	2.472183	67	50 - 150	0.0000	+/-0.50	
M2PFTA	474221.2	4.337817	1085599	4.337833	44	50 - 150	0.0000	+/-0.50	*
M2-8:2FTS	71683.67	3.8028	120042	3.802817	60	50 - 150	0.0000	+/-0.50	
MPFBA	271738.2	1.066783	404626	1.066783	67	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	94271.05	2.81475	130072	2.814767	72	50 - 150	0.0000	+/-0.50	
M6PFDA	365592.8	3.803317	594046	3.803333	62	50 - 150	0.0000	+/-0.50	
M3PFBS	87799.48	1.878383	116837	1.878383	75	50 - 150	0.0000	+/-0.50	
M7PFUnA	455486.7	3.954033	816126	3.95405	56	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	43057.21	3.445283	78918	3.4453	55	50 - 150	0.0000	+/-0.50	
M5PFPeA	286351.5	1.706567	388788	1.706567	74	50 - 150	0.0000	+/-0.50	
M5PFHxA	546183.4	2.555917	743215	2.555917	73	50 - 150	0.0000	+/-0.50	
M3PFHxS	66763.55	3.21025	103125	3.210267	65	50 - 150	0.0000	+/-0.50	
M4PFHpA	602071.3	3.170783	888651	3.1708	68	50 - 150	0.0000	+/-0.50	
M8PFOA	442546.7	3.453817	791558	3.453833	56	50 - 150	0.0000	+/-0.50	
M8PFOS	58492.1	3.644167	97029	3.644183	60	50 - 150	0.0000	+/-0.50	
M9PFNA	318450.1	3.6452	539989	3.645233	59	50 - 150	0.0000	+/-0.50	
MPFDoA	488775.5	4.088666	897306	4.088666	54	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	118939.2	3.953517	203643	3.961517	58	50 - 150	-0.0080	+/-0.50	
d3-NMeFOSAA	127586.9	3.881767	231513	3.881767	55	50 - 150	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton P. Project: Johnny Cake Road Farm - CO SMPA0001
 Sequence: S075549 Instrument: QQQ4
 Calibration: 2200528

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
DUP-01 (22G0742-05)			<i>Lab File ID: 22G0742-05.d</i>			<i>Analyzed: 08/16/22 20:19</i>			
M8FOSA	146865.3	3.988583	254339	3.988583	58	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	96036.25	2.472183	145773	2.472183	66	50 - 150	0.0000	+/-0.50	
M2PFTA	429019.1	4.337817	1085599	4.337833	40	50 - 150	0.0000	+/-0.50	*
M2-8:2FTS	70733.2	3.8028	120042	3.802817	59	50 - 150	0.0000	+/-0.50	
MPFBA	258103.1	1.066783	404626	1.066783	64	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	86840.06	2.822933	130072	2.814767	67	50 - 150	0.0082	+/-0.50	
M6PFDA	353769.7	3.803317	594046	3.803333	60	50 - 150	0.0000	+/-0.50	
M3PFBS	88931.08	1.878383	116837	1.878383	76	50 - 150	0.0000	+/-0.50	
M7PFUnA	460043.1	3.954033	816126	3.95405	56	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	40425.25	3.4453	78918	3.4453	51	50 - 150	0.0000	+/-0.50	
M5PFPeA	285896.4	1.706567	388788	1.706567	74	50 - 150	0.0000	+/-0.50	
M5PFHxA	558127.8	2.564133	743215	2.555917	75	50 - 150	0.0082	+/-0.50	
M3PFHxS	65551.64	3.21025	103125	3.210267	64	50 - 150	0.0000	+/-0.50	
M4PFHpA	575436.6	3.170783	888651	3.1708	65	50 - 150	0.0000	+/-0.50	
M8PFOA	489506.6	3.453817	791558	3.453833	62	50 - 150	0.0000	+/-0.50	
M8PFOS	50236.86	3.652167	97029	3.644183	52	50 - 150	0.0080	+/-0.50	
M9PFNA	310782.3	3.645217	539989	3.645233	58	50 - 150	0.0000	+/-0.50	
MPFDoA	463003.9	4.08865	897306	4.088666	52	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	110157.2	3.953517	203643	3.961517	54	50 - 150	-0.0080	+/-0.50	
d3-NMeFOSAA	132725.1	3.881767	231513	3.881767	57	50 - 150	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton P. Project: Johnny Cake Road Farm - CO SMPA0001
 Sequence: S075549 Instrument: QQQ4
 Calibration: 2200528

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MW-2R (22G0742-07)			<i>Lab File ID: 22G0742-07.d</i>		<i>Analyzed: 08/16/22 20:33</i>				
M8FOSA	107822.9	3.988567	254339	3.988583	42	50 - 150	0.0000	+/-0.50	*
M2-4:2FTS	102386.1	2.472183	145773	2.472183	70	50 - 150	0.0000	+/-0.50	
M2PFFTA	563379.8	4.329683	1085599	4.337833	52	50 - 150	-0.0081	+/-0.50	
M2-8:2FTS	79251.96	3.8028	120042	3.802817	66	50 - 150	0.0000	+/-0.50	
MPFBA	295944.2	1.066783	404626	1.066783	73	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	88260.21	2.81475	130072	2.814767	68	50 - 150	0.0000	+/-0.50	
M6PFDA	397708.6	3.803317	594046	3.803333	67	50 - 150	0.0000	+/-0.50	
M3PFBS	102859.9	1.878383	116837	1.878383	88	50 - 150	0.0000	+/-0.50	
M7PFUnA	511298.6	3.946033	816126	3.95405	63	50 - 150	-0.0080	+/-0.50	
M2-6:2FTS	48883.87	3.4373	78918	3.4453	62	50 - 150	-0.0080	+/-0.50	
M5PFPeA	329152.5	1.706567	388788	1.706567	85	50 - 150	0.0000	+/-0.50	
M5PFHxA	632881.8	2.555917	743215	2.555917	85	50 - 150	0.0000	+/-0.50	
M3PFHxS	74859.95	3.201883	103125	3.210267	73	50 - 150	-0.0084	+/-0.50	
M4PFHpA	669544.9	3.170783	888651	3.1708	75	50 - 150	0.0000	+/-0.50	
M8PFOA	515551.4	3.453817	791558	3.453833	65	50 - 150	0.0000	+/-0.50	
M8PFOS	65889.51	3.644167	97029	3.644183	68	50 - 150	0.0000	+/-0.50	
M9PFNA	353274.1	3.6452	539989	3.645233	65	50 - 150	0.0000	+/-0.50	
MPFDoA	520492.9	4.08865	897306	4.088666	58	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	127320.1	3.9535	203643	3.961517	63	50 - 150	-0.0080	+/-0.50	
d3-NMeFOSAA	142496.4	3.873767	231513	3.881767	62	50 - 150	-0.0080	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton P. Project: Johnny Cake Road Farm - CO SMPA0001
 Sequence: S075549 Instrument: QQQ4
 Calibration: 2200528

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MW-6R (22G0742-08)			<i>Lab File ID: 22G0742-08.d</i>		<i>Analyzed: 08/16/22 20:41</i>				
M8FOSA	131210.5	3.988583	254339	3.988583	52	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	105072.2	2.463983	145773	2.472183	72	50 - 150	-0.0082	+/-0.50	
M2PFTA	360885.9	4.3297	1085599	4.337833	33	50 - 150	-0.0081	+/-0.50	*
M2-8:2FTS	88611.34	3.802817	120042	3.802817	74	50 - 150	0.0000	+/-0.50	
MPFBA	201941.9	1.066783	404626	1.066783	50	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	91377.3	2.806583	130072	2.814767	70	50 - 150	-0.0082	+/-0.50	
M6PFDA	372140.1	3.803333	594046	3.803333	63	50 - 150	0.0000	+/-0.50	
M3PFBS	88770.02	1.8701	116837	1.878383	76	50 - 150	-0.0083	+/-0.50	
M7PFUnA	436686.8	3.94605	816126	3.95405	54	50 - 150	-0.0080	+/-0.50	
M2-6:2FTS	50936.74	3.437317	78918	3.4453	65	50 - 150	-0.0080	+/-0.50	
M5PFPeA	276225.3	1.698283	388788	1.706567	71	50 - 150	-0.0083	+/-0.50	
M5PFHxA	548739.6	2.5477	743215	2.555917	74	50 - 150	-0.0082	+/-0.50	
M3PFHxS	68005.86	3.2019	103125	3.210267	66	50 - 150	-0.0084	+/-0.50	
M4PFHpA	620444.4	3.1708	888651	3.1708	70	50 - 150	0.0000	+/-0.50	
M8PFOA	502882.4	3.453833	791558	3.453833	64	50 - 150	0.0000	+/-0.50	
M8PFOS	58168.18	3.644183	97029	3.644183	60	50 - 150	0.0000	+/-0.50	
M9PFNA	302645.9	3.645217	539989	3.645233	56	50 - 150	0.0000	+/-0.50	
MPFDoA	421718	4.088683	897306	4.088666	47	50 - 150	0.0000	+/-0.50	*
d5-NEtFOSAA	117478.1	3.953517	203643	3.961517	58	50 - 150	-0.0080	+/-0.50	
d3-NMeFOSAA	127276.3	3.873783	231513	3.881767	55	50 - 150	-0.0080	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton P. Project: Johnny Cake Road Farm - CO SMPA0001
 Sequence: S075549 Instrument: QQQ4
 Calibration: 2200528

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MW-13 (22G0742-09)			<i>Lab File ID: 22G0742-09.d</i>		<i>Analyzed: 08/16/22 20:48</i>				
M8FOSA	141677.8	3.988583	254339	3.988583	56	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	94711.89	2.463967	145773	2.472183	65	50 - 150	-0.0082	+/-0.50	
M2PFTA	474264.9	4.3297	1085599	4.337833	44	50 - 150	-0.0081	+/-0.50	*
M2-8:2FTS	76931.63	3.802817	120042	3.802817	64	50 - 150	0.0000	+/-0.50	
MPFBA	220985.5	1.066783	404626	1.066783	55	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	93625.04	2.806567	130072	2.814767	72	50 - 150	-0.0082	+/-0.50	
M6PFDA	408567.9	3.803333	594046	3.803333	69	50 - 150	0.0000	+/-0.50	
M3PFBS	92931.87	1.8701	116837	1.878383	80	50 - 150	-0.0083	+/-0.50	
M7PFUnA	517094.4	3.94605	816126	3.95405	63	50 - 150	-0.0080	+/-0.50	
M2-6:2FTS	46371.9	3.4373	78918	3.4453	59	50 - 150	-0.0080	+/-0.50	
M5PFPeA	292723.2	1.698283	388788	1.706567	75	50 - 150	-0.0083	+/-0.50	
M5PFHxA	585456	2.5477	743215	2.555917	79	50 - 150	-0.0082	+/-0.50	
M3PFHxS	71540.9	3.2019	103125	3.210267	69	50 - 150	-0.0084	+/-0.50	
M4PFHpA	637870.6	3.170783	888651	3.1708	72	50 - 150	0.0000	+/-0.50	
M8PFOA	519119.9	3.453817	791558	3.453833	66	50 - 150	0.0000	+/-0.50	
M8PFOS	61384.2	3.644183	97029	3.644183	63	50 - 150	0.0000	+/-0.50	
M9PFNA	349033.8	3.645217	539989	3.645233	65	50 - 150	0.0000	+/-0.50	
MPFDoA	513211.3	4.088666	897306	4.088666	57	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	120233.2	3.953517	203643	3.961517	59	50 - 150	-0.0080	+/-0.50	
d3-NMeFOSAA	144593.5	3.873783	231513	3.881767	62	50 - 150	-0.0080	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory: Pace New England Work Order: 22G0742
 Client: NYDEC_TRC Environmental Corporation- Clifton P. Project: Johnny Cake Road Farm - CO SMPA0001
 Sequence: S075549 Instrument: QQQ4
 Calibration: 2200528

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MW-22 (22G0742-10)			<i>Lab File ID: 22G0742-10.d</i>			<i>Analyzed: 08/16/22 20:55</i>			
M8FOSA	153931.1	3.988567	254339	3.988583	61	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	103440.1	2.472183	145773	2.472183	71	50 - 150	0.0000	+/-0.50	
M2PFTA	460500.3	4.329683	1085599	4.337833	42	50 - 150	-0.0081	+/-0.50	*
M2-8:2FTS	79290.75	3.8028	120042	3.802817	66	50 - 150	0.0000	+/-0.50	
MPFBA	292794.2	1.066783	404626	1.066783	72	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	116049.4	2.81475	130072	2.814767	89	50 - 150	0.0000	+/-0.50	
M6PFDA	397713.5	3.803317	594046	3.803333	67	50 - 150	0.0000	+/-0.50	
M3PFBS	98028.36	1.878383	116837	1.878383	84	50 - 150	0.0000	+/-0.50	
M7PFUnA	517951	3.946033	816126	3.95405	63	50 - 150	-0.0080	+/-0.50	
M2-6:2FTS	48174.71	3.4373	78918	3.4453	61	50 - 150	-0.0080	+/-0.50	
M5PFPeA	319219.8	1.706567	388788	1.706567	82	50 - 150	0.0000	+/-0.50	
M5PFHxA	601273.8	2.555917	743215	2.555917	81	50 - 150	0.0000	+/-0.50	
M3PFHxS	71688.73	3.201883	103125	3.210267	70	50 - 150	-0.0084	+/-0.50	
M4PFHpA	664217.5	3.170783	888651	3.1708	75	50 - 150	0.0000	+/-0.50	
M8PFOA	520721.7	3.453817	791558	3.453833	66	50 - 150	0.0000	+/-0.50	
M8PFOS	58235.04	3.644167	97029	3.644183	60	50 - 150	0.0000	+/-0.50	
M9PFNA	349623.9	3.6452	539989	3.645233	65	50 - 150	0.0000	+/-0.50	
MPFDoA	502669.8	4.08865	897306	4.088666	56	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	124623.2	3.9535	203643	3.961517	61	50 - 150	-0.0080	+/-0.50	
d3-NMeFOSAA	143188.7	3.873767	231513	3.881767	62	50 - 150	-0.0080	+/-0.50	