FINAL

POST MITIGATION PERFORMANCE SAMPLING REPORT
DEFENSE FUEL SUPPORT POINT VERONA
NYSDEC SITE CODE 633086

VERONA, NEW YORK

PREPARED FOR:

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FINAL
POST MITIGATION PERFORMANCE SAMPLING REPORT
DEFENSE FUEL SUPPORT POINT VERONA

TITLE PAGE

Eric Blomberg, PG
Senior Hydrogeologist

Date: 10-28-22

I, Eric Blomberg, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report (Post Mitigation Performance Sampling Report) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Edward Kurja, PE (MA ENV)
Project Manager

Date: 10-28-22

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Abbreviations/Acronyms

AFFF	Aqueous Film Forming Foam
ASTs	Aboveground Storage Tanks
bgs	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DFSP	Defense Fuel Support Point
DLA-E	Defense Logistics Agency - Energy
DoD	Department of Defense
EDR	Environmental Database Report
HAL	Health Advisory Level
IRM	Interim Remedial Measure
ND	Not Detected
ng/L	Nanograms Per Liter
NYSDEC	New York State Department of Environmental Conservation
PFAS	Per and Polyfluoroalkyl
PFOA	Perfluoro-octanoic Acid
PFOS	Perfluoro-octane Sulfonate
QC	Quality Control
RSL	Regional Screening Level
TK&K	TK&K Services
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
µg/kg	Micrograms Per Kilogram

1.0 INTRODUCTION

This Post Mitigation Performance Sampling Report has been prepared by TK&K Services (TK&K) on behalf of the Defense Logistics Agency – Energy (DLA-E) for the former Defense Fuel Support Point (DFSP) Verona (the Site) Verona, New York (see **Figure 1**). This report describes the groundwater sampling event performed from April 26 through April 28, 2021, for per- and polyfluoroalkyl substances (PFAS), specifically perfluoro-octanoic acid (PFOA) and perfluoro-octane sulfonate (PFOS), at the Site (see **Figure 2**).

The objective of this Post Mitigation Performance Sampling Report is to satisfy the request of the New York State Department of Environmental Conservation (NYSDEC) presented in a letter dated September 4, 2019 (see **Appendix A**), to investigate the extent of groundwater contamination and determine if it is impacting Stony Creek.

1.1 Site Background

DFSP Verona was constructed in 1959 as a fuel storage and transfer facility on previously undeveloped land. Historically, there have been four field constructed Aboveground Storage Tanks (ASTs) on Site that covered a significant portion of the DFSP Verona service facility (Tanks 1, 2, 3, and 4). Each of the four ASTs, the fuel loading rack, and the fuel pump house were connected to an automated firefighting foam system. DLA-E has identified that Aqueous film forming foam (AFFF) was stored and used at the DFSP from the mid-1980s through 2017. Fueling operations ceased at the facility as of September 2014 and DLA-E permanently closed the DFSP in August 2017. AFFF decommissioning activities were documented in the *DFSP Verona Aqueous Firefighting Foam System Closure Report*, TK&K Services (November 2017).

The presence of PFAS in soil and groundwater at the Site is directly related to the storage and use of AFFF. Historically, 55-gallon drums containing AFFF concentrate were used to fill two 200-gallon bladder tanks located in the Fire Foam Pump Building, which were integral to the fire suppression system. In the event of a fire, AFFF would be combined with water in the AFFF pumphouse piping before application to the fire. AFFF concentrate onsite was tested annually and if found to be degraded, it was removed and resupplied by the vendor. As part of the decommissioning of DFSP Verona, all bulk fuel storage vessels and piping have been closed and the facility no longer needs an automated fire suppression system for the fuel system. Site work to remove the AFFF foam product material and residue was performed in August 2017.

There have been two reported historical releases of AFFF at DFSP Verona. Sometime between 1988 and 1993, lightening tripped the photonic eye on Tank 1 and AFFF was released into Tank 1, and subsequently drained into Berm 1. Tank 1 was emptied through fuel separators to remove water and AFFF. Residual dike water and AFFF liquid was recovered

by vacuum truck for off-site disposal. Another AFFF release occurred in 2003 onto the concrete truck pad during a lightning event which tripped a sensor. Reportedly, AFFF was not recovered, and the liquid evaporated on the pad.

In addition to the noted releases above, periodic testing of the AFFF system by charging lines and draining the system to low point drains or the ground surface surrounding the AFFF pump house was common and may have been a significant source for releasing PFAS to the environment.

In November 2016, the Department of Defense (DoD) initiated an evaluation of the Site's drinking water for PFOA and PFOS due to prior storage and use of AFFF on site. Sampling drinking water at locations with AFFF storage has become common at DoD facilities in recent years to identify exposures to PFAS contamination. DFSP Verona groundwater is not a source of potable water or irrigation at the Site. The source of municipal water is Glenmore Reservoir on Florence Creek, located twenty miles from the facility. A drinking water sample was obtained by TK&K from the first spigot after the municipal supply line enters DFSP Verona's administrative building and analyzed via United States Environmental Protection Agency (USEPA) Method 537 for the determination of 14 PFAS compounds in drinking water. All results were below detectable laboratory limits for PFOA and PFOS at 9 and 15 nanograms per liter (ng/l), respectively. The drinking water results were provided in a report entitled *Analytical Report for Perfluorinated Compounds Sampling in Drinking Water DFSP Verona*, TK&K Services (December 2016).

In June and July 2017, DLA-E collected groundwater samples from several site monitoring wells and one soil sample near the former SPDES discharge point for the oil/water separator for laboratory analysis of PFAS. Laboratory results indicated groundwater from monitoring wells at the facility were impacted by PFAS. The highest concentrations of PFAS in groundwater were detected in monitoring wells MW-10R (1,300 nanograms per Liter (ng/L) of PFOS and 62 ng/L of PFOA) and MW-27 (670 ng/L PFOS and 16 ng/L PFOA). Both wells are located downgradient of the loading rack. PFAS concentrations were detected further downgradient in wells MW-5 (6.2 ng/L of PFOS and 92 ng/L of PFOA) and MW-9 (190 ng/L of PFOS and 18 ng/L of PFOA), located near the western fence line. PFAS concentrations diminished upgradient of the loading rack at well MW-24 (61 ng/L of PFOS and 1.8 ng/L of PFOA), but increased significantly in the furthest upgradient well, MW-13 (1,000 ng/L PFOS and 15 ng/L of PFOA). The soil sample collected to evaluate the potential for the facility's storm water to contact and transport PFAS (VER-SED-01) contained 6.2 micrograms per kilogram (µg/kg) of PFOS indicating that water passing through the storm water system likely contacted PFAS although it does not appear to be a significant ongoing transport mechanism. The results of groundwater and soil testing were provided in a report entitled DFSP *Verona PFAS Groundwater Sampling Report*, TK&K Services, (September 2017).

The NYSDEC was notified by DLA-E of the findings of the Site investigation for PFAS. NYSDEC opened Spill Number 17-08575 in response and conducted State-led private well sampling in the surrounding community for PFAS in groundwater. TK&K obtained laboratory results but no narrative report of the NYSDEC private well sampling results. Using online imaging, TK&K mapped locations of the samples collected using addresses provided on the laboratory chain of custody. Laboratory results indicated there were no impacts of PFAS or PFOA detected above the NYDEC groundwater quality standard of 10 nanograms per liter (ng/L). Of the eight private wells sampled, only one sample, located on New York Route 31 (approximately 2,400 feet to the northwest of the Site and across Stony Creek), had a detection of PFOA at 5.8 ng/L. All other private well results were Not Detected (ND) for PFAS.

A Site Characterization Work Plan for the investigation of PFAS was submitted to the NYSDEC and approved via a call with TK&K personnel on December 3, 2018. During that call, the NYSDEC requested that monitoring well (MW-10R) be re-sampled during the site characterization field work to confirm the concentration from the summer 2017 sampling event.

The Site Characterization was performed in December 2018 and January 2019 and the results were documented in the *Final Site Characterization Report*, TK&K Services, (July 2019). Fourteen of sixteen soil samples contained PFAS with the highest concentrations in soil sample SSPFAS-33 (0-2 ft.) and surface sample SSPFAS-38 (0-6 in.). These samples contained PFOS above the RSL at 185 and 184 ug/kg, respectively. SSPFAS-33 was collected adjacent to the pump house floor drain discharge pipe which daylights outside of the facility fence line. This area could have been exposed to AFFF during testing, cleaning, or refilling activities inside the AFFF Pump House. Sample SSPFAS-38 was collected immediately below the low point drain discharge pipe on the west exterior side of the AFFF pump house. This area would have received AFFF after system testing or any time system piping was charged and subsequently drained back to the AFFF pump house. Both samples have PFAS concentrations above the USEPA Regional Screening Level (RSL) calculated residential exposure limit of 126 ug/kg (185 ug/kg PFOS in SSPFAS-33 and 184 ug/kg PFOS in SSPFAS-38, respectively).

The groundwater sampling event performed in January 2019 confirmed that eight of the thirteen monitoring wells sampled had combined PFOA/PFOS concentrations which exceeded the USEPA's Health Advisory Level (HAL) of 70 ng/L. The highest concentration of combined PFOA/PFOS was detected in monitoring well MW-33, which is in an area that accepts floor drain effluent from the AFFF Pump House. The elevated levels of PFAS in groundwater may have been related to the PFAS releases in soil near the AFFF pump house where the impacted soil was acting as a continuing source of PFAS contamination.

Other findings of the January 2019 sampling event confirmed the general groundwater flow direction as northwest toward Stony Creek. Migration of PFAS in groundwater in unconsolidated material from DFSP Verona is toward the northwest and Stony Creek.

The *Final Site Characterization Report*, TK&K Services, (July 2019) was approved by the NYSDEC in a letter to DLA-E dated September 4, 2019 (see **Appendix A**). The letter indicated that subsequent investigations should be performed to investigate the extent of soil and groundwater contamination and determine if groundwater contamination is impacting Stony Creek.

In October and November 2020, an Interim Remedial Measure (IRM) was performed by DLA-E to reduce soil with PFAS concentrations above the calculated USEPA RSL of 126 ug/kg for residential exposure in the area north of the AFFF pump house. This impacted soil may have been a source of contamination to groundwater. Approximately 1,213 tons of PFAS impacted soil was excavated and properly disposed off-site. IRM activities were documented in a *Draft Interim Remedial Measure Report* by TK&K Services (April 2021) that has been submitted to the NYSDEC.

Analytical results from additional soil, sediment, surface water samples, in addition to groundwater samples from four monitoring events (November 2019, January 2020, July 2020, and October 2020) were summarized in the *Draft Supplemental Characterization Report*, TK&K Services, (April 2021). This report concluded that soil had been delineated up to the RSL of 126 ug/mg; PFAS in groundwater was adequately delineated and dissipated in the wetlands northwest of the Site prior to Stony Creek; and PFAS compounds in the surface water and sediment of Stony Creek were from sources located upstream of the Site. This report has been submitted to the NYSDEC.

Further evaluation and cleanup (if necessary) of this site will occur under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process in accordance with the Department of Defense Remediation Plan for Cleanup of Water Impacted with Perflourooctane Sulfonate or Perfluorooctanoic Acid, submitted to Congress in June 2020. Please see the attached letter from the Assistant Secretary of the Air Force (Installations, Environment and Energy to Senator Shaheen regarding a site in New Hampshire (**Appendix B**). The Air Force also owns DFSP Verona, and DLA-E is responsible for environmental closure of the site. DLA-E will continue to coordinate actions at the site with NYSDEC.

The following sections of this report summarize the semi-annual groundwater sampling event, which was performed from April 26 to April 28, 2021.

1.2 Surficial Geology & Hydrogeology

Soil classification performed by TK&K during this Site Characterization confirmed that there

are three glacially derived unconsolidated units of variable composition, thickness, and extent at DFSP Verona. The first unit occurs across most of the site and consists of silt and clay with a trace of sand and gravel (glacial till). The second unit occurs predominantly in the southern half of the site and consists of silt, clay, sand, and trace amounts of gravel. The third unit is highly variable in extent and consists of sand and gravel (glacial outwash).

Underlying the unconsolidated glacial deposits is gray shale (bedrock) of the Clinton Group which is a fine-grained rock characterized by low permeability and low groundwater yield. Bedrock at the Site is usually highly weathered for the upper few feet; below the weathered zone is massive shale with minimal fracturing. Bedrock was encountered at 20 feet below ground surface (bgs). in the southern part of the site and within a few feet of the surface within the wetlands of Stony Creek. Per the Remedial Investigation Report by Engineering-Science, Inc., (January 1995), three bedrock monitoring wells (MW-20D, MW-21D, and MW-22D) were to be installed in 1994 to determine if facility-related contaminants were infiltrating the shallow bedrock. However, during the installation of MW-21D, no groundwater was encountered in bedrock at 90 feet below grade (70 feet into bedrock). Due to the lack of groundwater, no samples were available for analysis and bedrock monitoring wells MW-20D and MW-21D were abandoned by grouting with a bentonite and cement mixture. The data indicates that the transport of PFAS compounds via bedrock groundwater is not expected at this Site.

Groundwater contour maps have been prepared from elevation data collected from on-site monitoring wells during previous sampling events. Historically, the direction of groundwater flow in the overburden aquifer is generally to the northwest toward Stony Creek. Minor variances to the groundwater flow direction occur on Site, likely due to man-made surface features (tank berms, swales, and impervious surfaces) and subsurface utility lines. Stony Creek is classified as Class C by the NYSDEC, with best uses listed as fishing and is considered suitable for propagation and primary and secondary contact recreation.

1.3 Aquifer Classification

NYSDEC categorizes aquifer classification into two types, Primary Water Supply Aquifers and Principal Aquifers. Primary Water Supply Aquifers are defined as highly productive aquifers presently utilized as sources of water supply by major municipal systems. Principal aquifers are defined as aquifers known to be highly productive or consist of geology that suggests an abundant potential water supply but are not intensively used by major municipal systems at the present time. The NYSDEC Aquifer Mapping Program does not provide the aquifer type utilized by the town of Verona and the area is shown as unmapped according to the United States Geological Survey (USGS) New York Aquifer Viewer online resource.

Regionally, the principal supply of groundwater in Oneida County occurs in glacial outwash deposits. Only about one third of county residents rely on groundwater and those residents are

primarily in the western part of the County. According to the October 2018 Environmental Baseline Survey (TK&K), ten water supply wells were identified in the Environmental Database Report (EDR) within one mile of DFSP Verona including one public water supply well. There are no water supply wells on DFSP Verona, and the property is supplied with potable water from the Verona Water Authority.

2.0 GROUNDWATER MONITORING EVENT

TK&K performed groundwater sampling in accordance with the NYDEC approved *DFSP Verona Site Characterization Work Plan* (October 2019) and *DFSP Verona Supplemental Site Characterization Work Plan* (June 2020). Following the release of *NYSDEC's Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)* (October 2020), groundwater results were compared with the NYSDEC screening level value of 10 ng/L for PFOA or PFOS in addition to the USEPA's HAL of 70 ng/L.

2.1 Groundwater Sampling Activities

Groundwater sampling activities were conducted from April 26 through April 28, 2021. Prior to purging and sampling groundwater, water levels were measured from all available monitoring wells. Water level measurements and elevations are included in **Table 1**, and a groundwater elevation contour map is included (see **Figure 3)** from groundwater measurements collected on April 27 and 28, 2021.

During the April 2021 sampling event, groundwater samples were collected to further assess PFAS distribution in groundwater. Samples were collected from monitoring wells MW-2R, MW-5, MW-13, MW-29, MW-30, MW-32, MW-33R, MW-35, MW-36, MW-38, MW-39, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-47, MW-48, MW-51, MW-53, MW-54, MW-55, MW-56, MW-58, and MW-60. Sampling was performed using USEPA Region I *Low-Stress Purging/Sampling for the Collection of Groundwater Samples from Monitoring Wells* (EPASOP-GW 001). Sample collection followed PFAS-specific protocols to prevent cross contamination, per the Site Characterization Work Plan (November 2018). A peristaltic pump with new silicon and HDPE tubing for each well was used to collect one groundwater sample from each monitoring well plus two duplicate samples and one equipment blank was collected for quality control (QC). Low-flow groundwater sampling logs for each monitoring well are provided in **Appendix C**. All samples were collected in pre-cleaned and preserved bottle ware that was provided by the laboratory and packed in ice with a chain of custody record for transportation to SGS's Orlando, FL laboratory for PFAS analysis by USEPA Method 537 Modified.

2.2 Groundwater Sampling Results

A total of 27 groundwater samples were collected during this event. Monitoring well MW-59 was dry and MW-61 and MW-62 were in the standing water of the wetlands and subsequently were not sampled. All samples contained detectable concentrations of PFAS except for MW-

35. Of the monitoring wells with detectable PFAS concentrations, 22 monitoring wells had samples exceeding NYSDEC's groundwater screening level of 10 ng/L (MW-2R, MW-5, MW-13, MW-30, MW-32, MW-33R, MW-36, MW-38, MW-39, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-47, MW-48, MW-51, MW-55, MW-56, MW-58). Groundwater samples from wells MW-2R, MW-5, MW-13, MW-30, MW-32, MW-33R, MW-36, MW-38, MW-39, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-47, MW-51, and MW-56 were above the USEPA's HAL of 70 ng/L. The two monitoring wells with the highest PFOS and PFOA concentrations were MW-36 (PFOA at 146 ng/L and PFOS at 14,700 ng/L) and MW-46 (PFOA at 202 ng/L and PFOS at 14,000 ng/L).

The laboratory results of the April 2021 groundwater sampling event are summarized on **Table 2** and depicted on **Figure 4**. Laboratory reports are included in **Appendix D.**

The QC samples for groundwater indicate that sampling and analytical procedures were not compromised during this sampling event. The results for duplicate samples MW-33R (D) and MW-36 (D) were consistent with samples from MW-33R and MW-36. The equipment blank sample contained no detectable PFAS compounds, indicating no cross-contamination from sampling equipment occurred between samples. A Data Usability Summary Report (DUSR) was not prepared as additional soil sampling events are planned. A DUSR will be prepared and included as an Appendix to the report that contains all samples for final delineation.

3.0 CONCLUSIONS

Based on the results of the groundwater sampling event performed in April 2021, the following conclusions can be made:

- During the semi-annual groundwater monitoring event in April 2021, a total of 27 groundwater samples were collected from monitoring wells for analysis of PFAS compounds.
- The two monitoring wells with the highest PFOS and PFOA concentrations were MW-36 (PFOA at 146 ng/L and PFOS at 14,700 ng/L) and MW-46 (PFOA at 202 ng/L and PFOS at 14,000 ng/L).
- Monitoring well MW-33R rebounded to 599 µg/L following the source removal in October 2020 but remains below the pre-IRM event level of 4,730 ng/L (November 2019).
- The PFAS levels in groundwater at DFSP Verona have been delineated to the NYSDEC screening level of 10 ng/L. PFAS compounds from the Site migrate to the northwest and dissipate in the wetlands prior to Stony Creek.
- It should be noted that at the time of laboratory analysis, no federally approved analytical sampling methods for PFAS in groundwater, surface water, soil and

sediment were available. NYSDEC's Sampling, Analysis, and Assessment of Per and Polyfluoroalkyl Substances (October 2000) does provide screening levels for water. Therefore, there is only a presumption that PFAS may exceed NYSDEC's screening levels.

4.0 REFERENCES

TK&K Services. Analytical Report for Perfluorinated Compounds Sampling in Drinking Water DFSP Verona, New York. December 2016.

TK&K Services. DFSP Verona PFC Groundwater Sampling Report. September 2017.

TK&K Services. DFSP Verona Aqueous Firefighting Foam System Closure Report. November 2017.

USEPA. 2018. Regional Screening Levels, RSL User's Guide, and RSL Calculator. May 2018.

TK&K Services. DFSP Verona Site Characterization Work Plan. November 2018.

TK&K Services. DFSP Verona Supplemental Site Characterization Work Plan. October 2019.

TK&K Services. DFSP Verona Supplemental Site Assessment Work Plan. June 2020.

TK&K Services. Draft Supplemental Site Characterization Report. April 2021.

NYSDEC's Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS). October 2020.

Figures

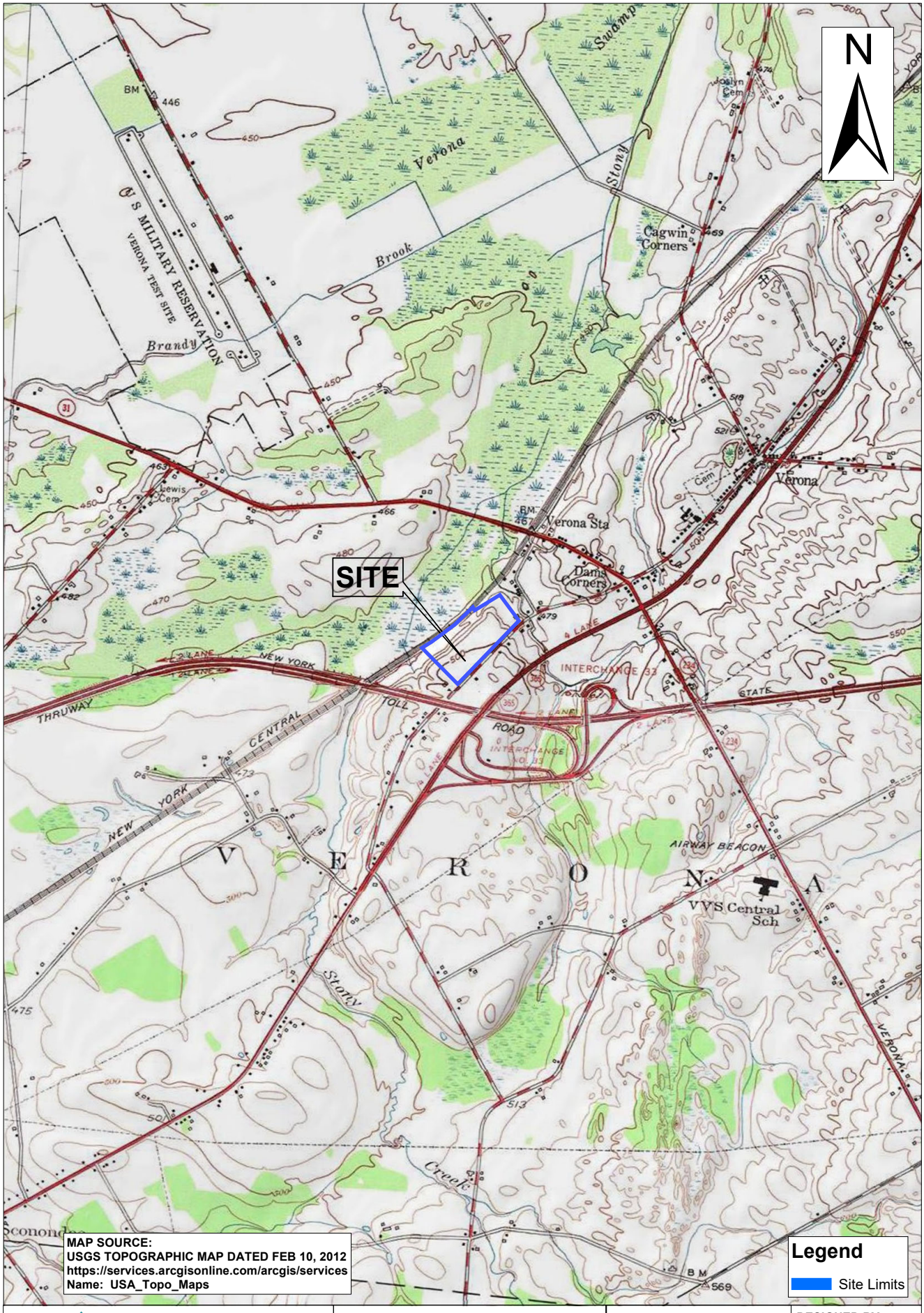

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FIGURE 1
SITE LOCUS MAP

POST MITIGATION
PERFORMANCE
SAMPLING REPORT

DESIGNED BY: SC
CHECKED BY: EK
APPROVED BY: EK
DRAWN BY: SC
SCALE: AS SHOWN
DATE: 6/14/2021

PROJECT No.: 14003

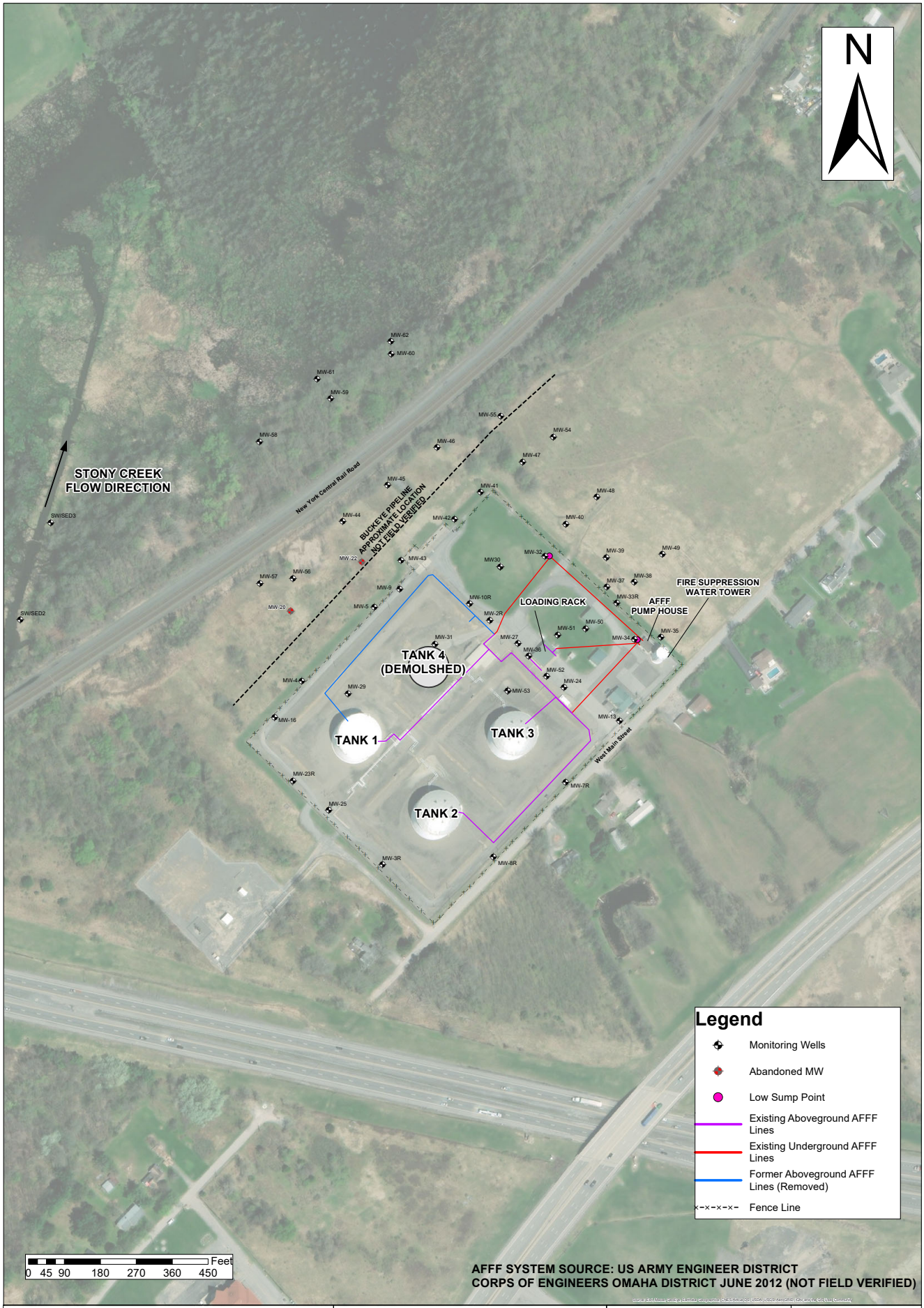

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FIGURE 2
SITE PLAN

POST MITIGATION
PERFORMANCE
SAMPLING REPORT

DESIGNED BY: CP
CHECKED BY: EB
APPROVED BY: EB
DRAWN BY: CP
SCALE: AS SHOWN
DATE: 6/14/2021

PROJECT No.: 14003

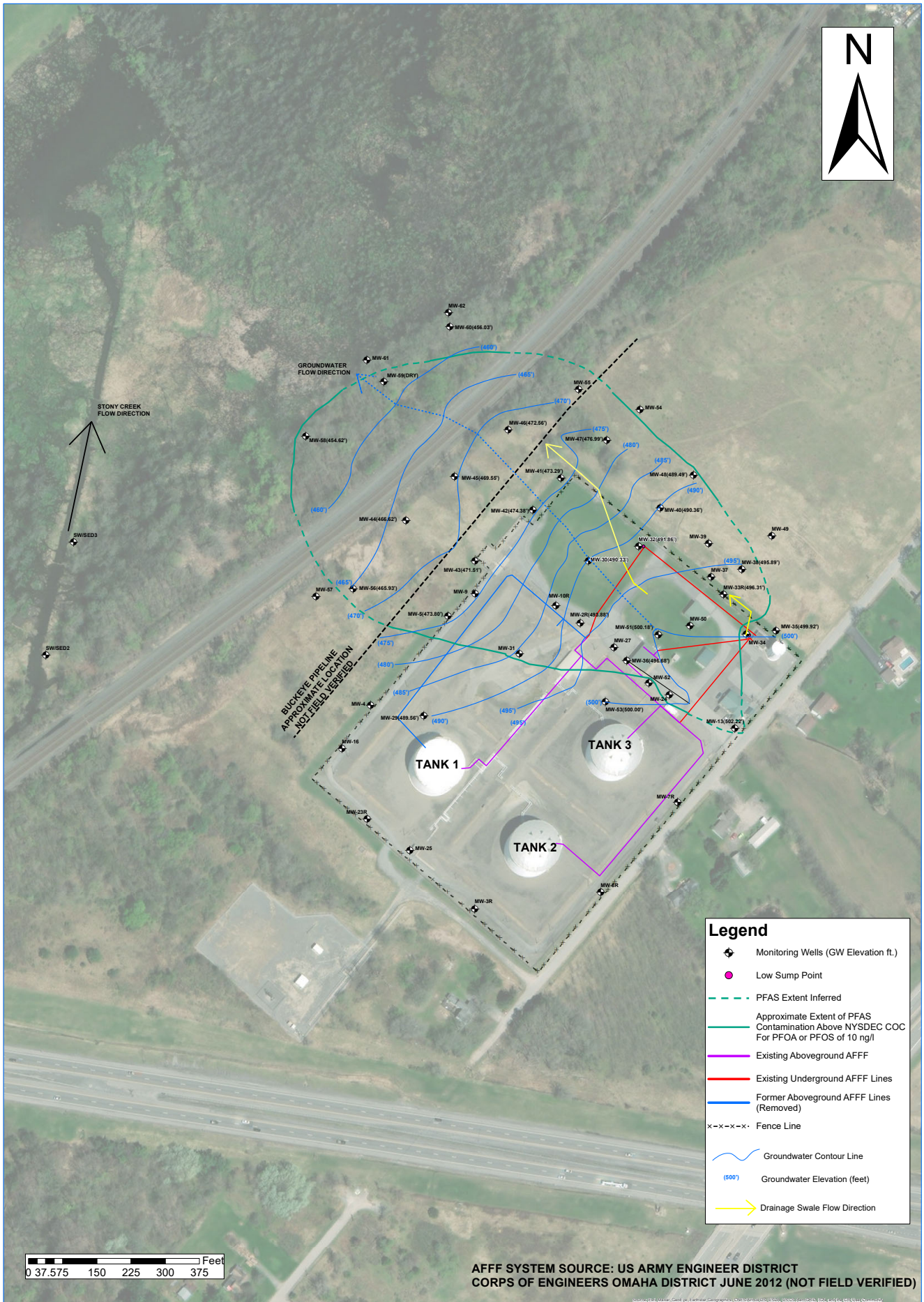

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FIGURE 3

GROUNDWATER ELEVATION CONTOUR MAP
04-2021

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SCALE: AS SHOWN
DATE: 06/14/2021

PROJECT No.:
14003

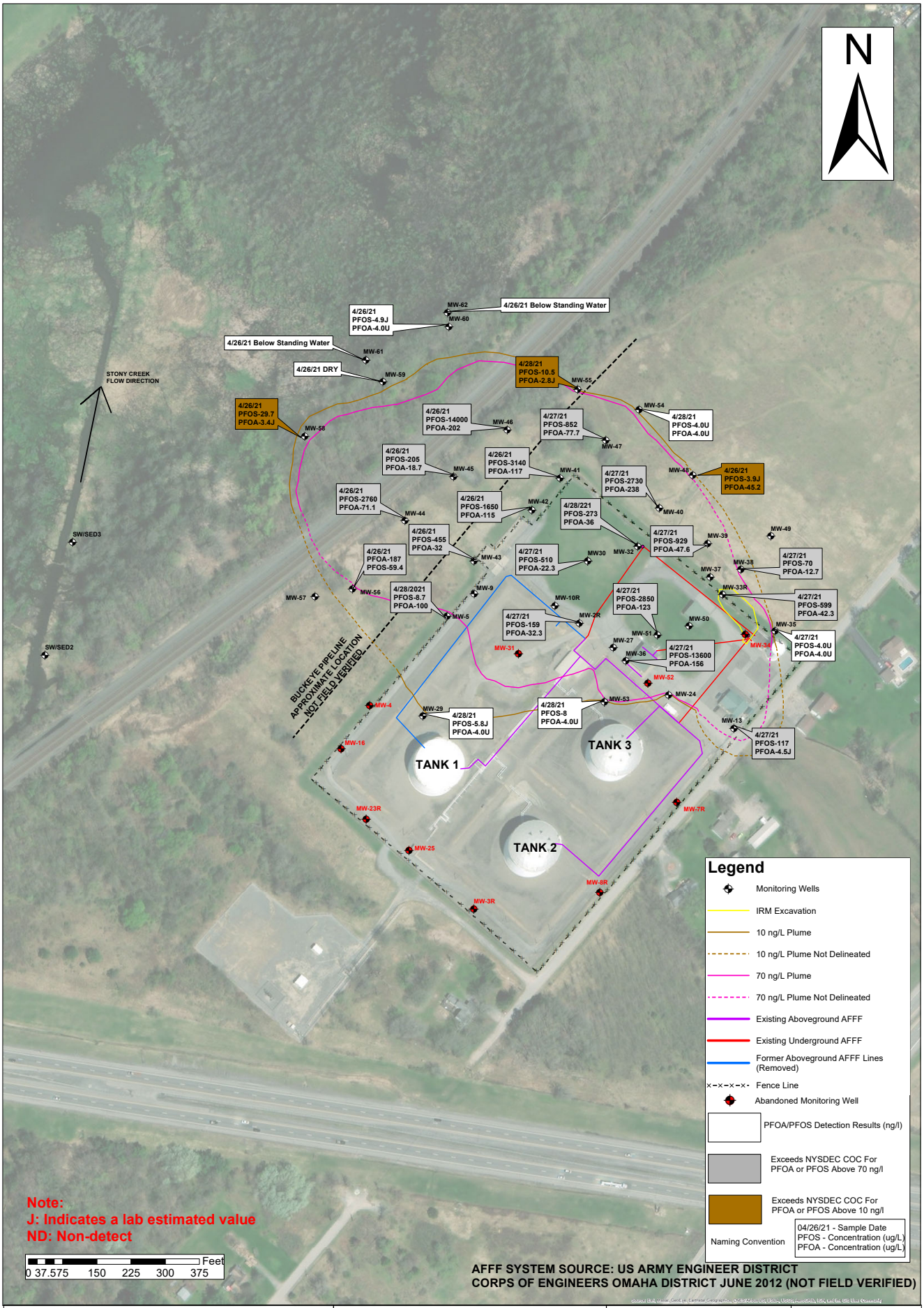

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FIGURE 4

GROUNDWATER SAMPLING DETECTIONS
04-2021

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PROJECT No.:
14003

Tables

Table 1: Well Gauging Data
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Verona, NY

Monitoring Well	Date	TOW Elevation (ft.)	DTW from TOW (ft.)	Groundwater Elevation (ft.)
MW-2R	4/27/2021	500.926	7.05	493.88
MW-05	4/28/2021	488.518	14.72	473.80
MW-13	4/27/2021	509.620	7.40	502.22
MW-29	4/28/2021	497.202	7.64	489.56
MW-30	4/27/2021	498.331	8.00	490.33
MW-32	4/28/2021	499.599	7.74	491.86
MW-33R	4/27/2021	502.156	5.85	496.31
MW-35	4/27/2021	504.860	4.94	499.92
MW-36	4/27/2021	501.524	4.84	496.68
MW-38	4/27/2021	502.677	6.79	495.89
MW-39	4/27/2021	-	5.53	-
MW-40	4/27/2021	495.763	5.40	490.36
MW-41	4/26/2021	482.944	9.65	473.29
MW-42	4/27/2021	482.800	8.42	474.38
MW-43	4/26/2021	484.553	13.04	471.51
MW-44	4/26/2021	470.402	3.78	466.62
MW-45	4/26/2021	472.096	2.45	469.65
MW-46	4/26/2021	476.560	4.00	472.56
MW-47	4/26/2021	485.746	8.76	476.99
MW-48	4/27/2021	495.534	6.04	489.49
MW-51	4/27/2021	504.947	4.77	500.18
MW-53	4/28/2021	503.595	3.60	500.00
MW-54	4/28/2021	486.496	Obstructed	-
MW-55	4/28/2021	488.993	3.65	485.34
MW-56	4/26/2021	469.727	4.02	465.93
MW-58	4/26/2021	456.774	2.48	454.62
MW-59	4/26/2021	463.105	Dry	-
MW-60	4/26/2021	459.160	3.15	456.03
MW-61	4/26/2021	-	Below Standing Water	-
MW-62	4/26/2021	456.565	Below Standing Water	-

Notes:
1. Elevations based on the NAD 1983 Central New York State Plane
2. TOW = Top of Monitoring Well
3. DTW = Depth to Water

Table 2: Detected Compounds in Groundwater
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DFSP Verona
Verona, NY

			Units	Perfluorooctanesulfonic Acid (PFOS)	Perfluorooctanoic Acid (PFOA)	Perfluoroheptonic Acid (PFHpA)	Perfluorononanoic Acid (PFNA)	Perfluorobutanesulfonic Acid (PFBS)	Perfluorohexanesulfonic Acid (PFHxS)
	NYSDEC COC Screening Level		ng/l	10	10	100	100	100	100
Monitoring Well	Sample Designation	Date Collected	-	-	-	-	-	-	-
MW-2R	MW-2R*	1/10/2019	ng/l	**171**	**24**	36.2	5.23 J	2.46 J	14.4
	MW-2R (D)*	1/10/2019	ng/l	**144**	**20.4**	30.6	3.97 J	2.05 J	12.4
	MW-2R	11/5/2019	ng/l	**143**	**45.9**	99.8	4.39 J	7.51 J	4.46
	MW-2R	10/30/2020	ng/l	**156**	**84.6**	240	6.8 J	25.3	**107**
	MW-2R	4/27/2021	ng/l	**159**	**32.3**	60.4	5.1 J	7.6 J	22.7
MW-3R	MW-3R	11/5/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	2.49 J
MW-4	MW-4	11/6/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
MW-5	MW-5	11/6/2019	ng/l	7.22 J	**47.1**	**118**	4.67 J	3.8 U	4.46 J
	MW-5	10/30/2020	ng/l	**17.7**	**76.5**	**156**	8.1	4.0 U	7.3 J
	MW-5	4/28/2021	ng/l	8.7	**100**	**189**	11.9	4.0 U	6.7 J
MW-7R	MW-7R*	1/9/2019	ng/l	4.52 J	4.0 U	4.0 U	4.0 U	4.0 U	6.65 J
	MW-7R	11/5/2019	ng/l	3.37 J	3.8 U	3.8 U	3.8 U	1.92 J	11.4
MW-8R	MW-8R	11/5/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	6.22 J
MW-9	MW-9	11/6/2019	ng/l	**124**	**13.7**	25.8	3.8 U	47.1	**108**
MW-10R	MW-10R	1/10/2019	ng/l	**1080**	**68.6**	74.2	4.0 U	**330**	**778**
	MW-10R	11/5/2019	ng/l	**978**[a]	**65.9**	62.6	3.8 U	**297**	**835**[a]
MW-13	MW-13*	1/8/2019	ng/l	**229**	5.49 J	4.32 J	3.8 U	10.7	78.7
	MW-13	11/5/2019	ng/l	**213**	7.38 J	5.02 J	3.8 U	9.58	85.8
	MW-13	10/30/2020	ng/l	**173**	4.2 J	4.1 J	4.0 U	11.8	76
	MW-13	4/27/2021	ng/l	**117**	4.5 J	3.4 J	4.0 U	6.6 J	44
MW-16R	MW-16R	11/5/2019	ng/l	9.3	3.8 U	3.8 U	3.8 U	3.8 U	2.45 J
MW-23R	MW-23R	11/5/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
MW-24	MW-24	11/5/2019	ng/l	**22.6**	3.8 U	3.8 U	3.8 U	6.67 J	15.3
MW-25	MW-25	11/5/2019	ng/l	3.77 J	2.07 J	3.8 U	3.8 U	3.8 U	11.1
MW-27	MW-27	11/5/2019	ng/l	**268**	**7.6 J**	15.5	3.8 U	6.47 J	94.2
MW-29	MW-29*	1/9/2019	ng/l	6.27 J	4.0 U	4.0 U	4.0 U	4.0 U	2.27 J
	MW-29 (D)*	1/9/2019	ng/l	7.62 J	4.0 U	4.0 U	4.0 U	4.0 U	2.48 J
	MW-29	11/6/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
	MW-29	10/30/2020	ng/l	3.8 J	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
	MW-29	4/28/2021	ng/l	5.8 J	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
MW-30	MW-30*	1/9/2019	ng/l	**637**	**50.1**	50.1	3.59 J	14.8	**255**
	MW-30	11/6/2019	ng/l	**405**	**35.8**	61.2	2.58 J	15.6	**350**
	MW-30	10/30/2020	ng/l	**1690**	**121**	**241**	13.1	56.2	**1010**
	MW-30	4/27/2021	ng/l	**510**	**22.3**	31.8	2.9 J	11.5	**231**
MW-31	MW-31	1/9/2019	ng/l	**13.5**	3.8 U	3.8 U	3.8 U	2.56 J	11.3
	MW-31	11/6/2019	ng/l	**98.1**	4.99 J	4.94 J	3.8 U	6.91 J	44.8
MW-32	MW-32*	1/9/2019	ng/l	**647**	**109**	**324**	25.2	23	**277**
	MW-32	11/6/2019	ng/l	**378**	**66.5**	**164**	19.6	15	**232**
	MW-32	4/28/2021	ng/l	**273**	**36**	92.5	7.0 J	15.1	**225**
MW-33/MW-33R	MW-33*	1/9/2019	ng/l	**5560**	**425**	**539**	**154**	46.5	**800**
	MW-33	11/7/2019	ng/l	**4500**[a]	**336**	**487**	**116**	41.9	**662**
	MW-33 (D)	11/7/2019	ng/l	**4730**[a]	**347**	**499**	**118**	44	**691**
	MW-33R	10/30/2020	ng/l	**19**	2.0 J	4.0 U	4.0 U	4.0 U	5.0 J
	MW-33R	4/27/2021	ng/l	**599**	**42.3**	**104**	6.9 J	31.2	**107**
	MW-33R (D)	4/27/2021	ng/l	**610**	**42.8**	**104**	7.1 J	28.5	**107**
MW-34	MW-34*	1/9/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
	MW-34	11/6/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
	MW-34 (D)	11/6/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
MW-35	MW-35*	1/9/2019	ng/l	3.8 U	3.8 U	3.8U	3.8 U	3.8 U	3.8 U
	MW-35	11/7/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
	MW-35	10/30/2020	ng/l	5.5 J	4.0 U	4.0 U	4.0 U	4.0 U	2.7 J
	MW-35	4/27/2021	ng/l	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
MW-36	MW-36*	1/9/2019	ng/l	**2030**	**25.5**	16.1	3.8 U	67.9	**255**
	MW-36	11/5/2019	ng/l	**6070**[a]	**77.4**	41.6	3.8 U	**187**	**678**
	MW-36	10/30/2020	ng/l	**4100**	**83.1**	31.8	4.0 U	**169**	**481**
	MW-36 (D)	10/30/2020	ng/l	**7660**	**123**	62.7	4.0 U	**297**	**1040**
	MW-36	4/27/2021	ng/l	**13600**	**156**	81.9	2.7 J	**335**	**1480**
	MW-36 (D)	4/27/2021	ng/l	**14700**	**146**	76.6	2.6 J	**309**	**1580**
MW-37	MW-37*	1/9/2019	ng/l	**2360**	**320**	**655**	16.7	**450**	**3770**
	MW-37	11/7/2019	ng/l	**7360**[a]	**415**	**975**[a]	37.7	**368**	**4580**[a]
	MW-37 (D)	11/7/2019	ng/l	**6540**[a]	**386**	**908**[a]	34.5	**334**	**4350**[a]
MW-38	MW-38	11/7/2019	ng/l	**84.6**	**10.1**	28.1	3.8 U	**103**	**103**
	MW-38	10/30/2020	ng/l	**75.6**	**13.3**	31.2	4.0 U	**120**	**146**
	MW-38	4/27/2021	ng/l	**70**	**12.7**	26.8	4.0 U	89.2	**135**
MW-39	MW-39	11/7/2019	ng/l	**1630**[a]	**67**	**130**	12.3	55.9	**1250**[a]
	MW-39	4/27/2021	ng/l	**929**	**47.6**	**100**	5.0 J	45.2	**900**
MW-40	MW-40	11/7/2019	ng/l	**2640**[a]	**193**	**449**	25.4	86.1	**1540**[a]
	MW-40	10/29/2020	ng/l	**2620**	**224**	**446**	26.8	88.6	**1590**
	MW-40 (D)	10/29/2020	ng/l	**3590**	**293**	**641**	37.4	**123**	**2480**
	MW-40	4/27/2021	ng/l	**2730**	**238**	**496**	32.1	**107**	**1630**
MW-41	MW-41	11/6/2019	ng/l	**4020**[a]	**107**	**166**	16	41	**1290**[a]
	MW-41	10/30/2020	ng/l	**6140**	**175**	**281**	27.3	66.9	**1560**
	MW-41 (D)	10/30/2020	ng/l	**5420**	**176**	**264**	**2639**	68.6	**1560**
	MW-41	4/26/2021	ng/l	**3140**	**117**	**192**	14.3	45.6	**1300**
MW-42	MW-42	11/6/2019	ng/l	**1460**[a]	**107**	**145**	3.62 J	**257**	**1510**[a]
	MW-42	10/30/2020	ng/l	**1910**	**135**	**175**	5.3 J	**321**	**1770**
	MW-42	4/26/2021	ng/l	**1650**	**115**	**132**	4.5 J	**274**	**1400**
MW-43	MW-43	11/6/2019	ng/l	**810**[a]	**33.1**	55.9	3.23 J	32.8	**291**
	MW-43	10/30/2020	ng/l	**665**	**33.9**	47.9	3.4 J	38.3	**281**
	MW-43	4/26/2021	ng/l	**455**	**32**	57.1	2.7 J	55.5	**357**
MW-44	MW-44	1/8/2020	ng/l	**3110**[a]	**69.6**	85.5	13.4	56.8	**739**[a]
	MW-44	10/29/2020	ng/l	**3860**	**75.4**	**102**	11.1	95.2	**794**
	MW-44	4/26/2021	ng/l	**2760**	**71.1**	**108**	12	89.1	**1060**
MW-45	MW-45	1/8/2020	ng/l	**98.3**	**20.2**	40.6	2.0 J	76.9	**490**
	MW-45	10/29/2020	ng/l	**239**	**24**	45.4	4.0 U	48.7	**310**
	MW-45	4/26/2021	ng/l	**205**	**18.7**	35.1	4.0 U	61.1	**432**
MW-46	MW-46	1/8/2020	ng/l	**13600**[a]	**166**	**289**	21.3	97.9	**6050**[a]
	MW-46	10/29/2020	ng/l	**6800**	**115**	**202**	10.4	**145**	**2100**
	MW-46	4/26/2021	ng/l	**14000**	**202**	**356**	29.5	**184**	**7690**

Table 2: Detected Compounds in Groundwater
Post Mitigation Performance Sampling Report
DFSP Verona
Verona, NY

			Units	Perfluorooctanesulfonic Acid (PFOS)	Perfluorooctanoic Acid (PFOA)	Perfluoroheptonic Acid (PFHpA)	Perfluorononanoic Acid (PFNA)	Perfluorobutanesulfonic Acid (PFBS)	Perfluorohexanesulfonic Acid (PFHxS)
	NYSDEC COC Screening Level		ng/l	10	10	100	100	100	100
Monitoring Well	Sample Designation	Date Collected	-	-	-	-	-	-	-
MW-47	MW-47	1/9/2020	ng/l	**679**	**78.9**	**206**	3.5 J	36.0	**540**
	MW-47	10/29/2020	ng/l	**1770**	**158**	**335**	19.3	60.3	**913**
	MW-47	4/27/2021	ng/l	**852**	**77.7**	**160**	5.8 J	37.2	**481**
MW-48	MW-48	1/9/2020	ng/l	7.0 J	**32.3**	**136**	3.8 U	83.0	**246**
	MW-48 (D)	1/9/2020	ng/l	3.0 J	**31.8**	**139**	3.8 U	81.0	**254**
	MW-48	10/29/2020	ng/l	**10.5**	**44.9**	**154**	4.0 U	85.1	**325**
	MW-48	4/26/2021	ng/l	3.9 J	**45.2**	**138**	4.4 U	69.2	**230**
MW-50	MW-50	1/8/2020	ng/l	**111**	**61.2**	**234**	3.8 U	13.6	**260**
MW-51	MW-51	1/8/2020	ng/l	**2620**[a]	**88.5**	**100**	14.9	26.8	**899**[a]
	MW-51	10/30/2020	ng/l	**2150**	**180**	**227**	20.5	50.3	**1330**
	MW-51	4/27/2021	ng/l	**2850**	**123**	98.6	22.3	31.9	**1110**
MW-52	MW-52	1/9/2020	ng/l	7.0 J	2.9 J	2.1 J	3.8 U	4.4 J	15.6
MW-53	MW-53	1/8/2020	ng/l	4.4 J	3.8 U	3.8 U	3.8 U	3.8 U	2.4 J
	MW-53	10/29/2020	ng/l	5.1 J	4.2 U	4.2 U	4.2 U	4.2 U	3.6 J
	MW-53	4/28/2021	ng/l	8	4.0 U	2.4 J	4.0 U	4.0 U	3.6 J
MW-54	MW-54	4/28/2021	ng/l	4.0 U	4.0 U	4.0 U	4.0 U	5.5 J	3.7 J
MW-55	MW-55	4/28/2021	ng/l	**10.5**	2.8 J	10	4.4 U	16.3	50.5
MW-56	MW-56	10/29/2020	ng/l	**226**	**72.9**	**286**	10.3	31.9	**393**
	MW-56	4/26/2021	ng/l	**187**	**59.4**	**239**	8.3	23.5	**355**
MW-58	MW-58	7/21/2020	ng/l	7.2 J	9.1	32.3	4.2 U	50.9	**262**
	MW-58	4/26/2021	ng/l	**29.7**	3.4 J	7.7 J	4.0 U	17.5	87.9
MW-60	MW-60	7/21/2020	ng/l	4.5 U	2.8 J	4.5 U	4.5 U	4.5 U	4.6 J
	MW-60	4/26/2021	ng/l	4.9 J	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
MW-61	MW-61	7/21/2020	ng/l	4.8 J	4.5 U	3.6 J	4.5 U	16	12.7
	MW-61	04/2021	ng/l	NS	NS	NS	NS	NS	NS
MW-62	MW-62	04/2021	ng/l	NS	NS	NS	NS	NS	NS
	E/MW-01	1/10/2019	ng/l	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
	FB/FBD-01	1/10/2019	ng/l	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.2 U
	10-17-19 Equipment QC	10/17/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8	3.8 U
	11072019 EQUIPMENT BLANK	11/7/2019	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
	121919 E/MW-01 (GW)	12/19/2019	ng/l	4 U	4 U	4 U	4 U	4 U	4 U
	01-09-2020 FB/FBD-01	1/9/2020	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
	01-09-2020 E/MW-01 (GW)	1/9/2020	ng/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
	FIELD BLANK	10/30/2020	ng/l	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
	EQUIPMENT BLANK	10/30/2020	ng/l	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
	EQUIPMENT BLANK	4/26/2021	ng/l	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U

Notes:
1. ng/l - nanograms per liter
2. U - Undetected at the Limit of Detection
3. J - Lab estimated Value
4. [a] - Result is from sample analysis run #2
5. (D) = duplicate sample
6. NS=Not Sampled
7. Shaded and bolded concentrations indicating result exceeds the NYSDEC's COC Screening Level for PFAS
8. Samples analyzed by Method: MS Semi-volatiles (EPA 537M QSM5.1 B-15)
9. 10-17-19 Equipment QC, 121919 E/MW-01 (GW), 11072019 EQUIPMENT BLANK, 01-09-2020 E/MW-01 (GW), EQUIPMENT BLANK are equipment blank samples
10. 01-09-2020 FB/FBD-01, FIELD BLANK are field blank samples
11. * - Data not shown of Figure 4 or Figure 5
12. COC - Contaminant of Concern

Appendix A - NYSDEC Correspondence

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau A
625 Broadway, 12th Floor, Albany, NY 12233-7015
P: (518) 402-9625 I F: (518) 402-9627
www.dec.ny.gov

Mr. William Potter, P.G.
Defense Logistics Agency
DLA Installation Management for Energy
8725 John J. Kingman Road, rm 2828
Fort Belvoir, VA 22060

SEP 0 4 2019

Re: DFSP Verona (633086)

Dear Mr. Potter:

The New York State Department of Environmental Conservation has reviewed the Final Site Characterization Report for Defense Fuel Support Point Verona, dated July 2019. The Department finds the report to be acceptable. The Department would like subsequent investigations to be performed to define the extents of soil and groundwater contamination identified and determine if groundwater contamination is impacting Stoney Creek. A work plan detailing the activities to be performed as part of the next phase of activities should be submitted for review and approval. Future figures should include the date of information being presented (e.g. Figures 3, 4, and 5). The Please contact me at (518) 402-9626 if you have any questions.

Regards,

Brian Jankauskas, P.E.
Project Manager
Remedial Bureau A, Section C

cc: J. Swartwout, DEC
E. O'Neil, DOH
file

Appendix B - Assistant Secretary Of The Air Force Letter

DEPARTMENT OF THE AIR FORCE
WASHINGTON, DC 20330-1000

OFFICE OF THE ASSISTANT SECRETARY

21 October 2020

SAF/IE
1665 Air Force Pentagon
Washington, DC 20330

The Honorable Jeanne Shaheen
United States Senate
Washington, DC 20515

Dear Senator Shaheen:

Thank you for your letter of September 27, 2020, regarding our communications with the New Hampshire Department of Environmental Services concerning recently enacted state Maximum Contaminant Levels and Ambient Groundwater Quality Standards for four per- and polyflouroalkyl substances (PFAS). We are conducting groundwater response actions nationally in accordance with the *Department of Defense Remediation Plan for Cleanup of Water Impacted with Perfluorooctane Sulfonate or Perfluorooctanoic Acid*, submitted to Congress in June 2020.

At the former Pease AFB, we have ensured that no one is drinking water with concentrations of PFOS and PFOA above USEPA lifetime health advisory (HA) levels attributable to the Department of the Air Force. We awarded the Remedial Investigation (RI) phase contract in July, pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), which includes a baseline human health risk assessment. As you note, we will also consider State standards as potential "applicable or relevant and appropriate requirements" (ARARs) during this phase of the process. Additionally, if at any time in the CERCLA process we find that anyone is being exposed to drinking water above USEPA's HA due to releases from Pease, we will take appropriate action.

The state of science for PFAS compounds continues to progress. Your memo highlights key policy issues in that we are currently constrained to apply USEPA's HA levels as the triggers for removal actions such as providing alternate water for private well owners. We will work through the DoD's PFAS Task Force to evaluate options for addressing these issues in a consistent manner across DoD.

We are committed to protecting human health and the environment at Pease and the surrounding community, and will continue working closely with stakeholders on PFOS/PFOA actions. I am available at your convenience to discuss this matter further or answer any questions you may have. We appreciate your continued support for the men and women of the Department of the Air Force.

Sincerely,

JOHN W. HENDERSON, P.E.
Assistant Secretary of the Air Force
(Installations, Environment and Energy)

Appendix C - Low-Flow Groundwater Sampling Records

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-2R	4/27/21
PROJECT NUMBER		START TIME	END TIME
8006.0010		1428	1515
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-2R	1515		1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	7.05 FT	FINAL DTW (BMP)	8.93 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	11.55 FT	SCREEN LENGTH	unknown FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	4.5 FT	DRAWDOWN VOLUME	1.23 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.9 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~4.8 GAL	DRAWDOWN/ TOTAL PURGED	0.26	PRESSURE TO PUMP	N/A PSI

(initial DTW- final DTW X well diam. squared X 0.041)

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1430	BEGIN PURGING									
1435	7.55	400	9	250	8.2	10.58	107	218.0	9.0	
1440	7.95	400	10	251	8.1	10.29	81	225.2	9.0	
1445	8.55	400	9	272	8.1	10.15	71	231.1	9.0	
1450	8.71	400	9	278	8.1	9.89	34	237.4	9.0	
1455	8.79	400	10	284	8.1	9.71	31	238.0	9.0	
1500	8.82	400	9	287	8.1	9.65	21	236.1	9.0	
1505	8.824	400	9	289	8.1	9.54	23	234.7	9.0	
1508	8.87	400	9	289	8.1	9.51	20	234.6	9.0	
1512	8.91	400	9	291	8.1	9.50	21	235.1	9.0	
1515	8.93	400	9	293	8.1	9.48	21	235.3	9.0	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: ____

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

NOTES:

Sampler Signature: RR

Checked By:

Print Name: R. Baisley

Date: 4/28/21

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-5	4/28/21
PROJECT NUMBER		START TIME	END TIME
8006.0010			
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-5	1025		OF

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	14.72 FT	FINAL DTW (BMP)	15.93 FT	PROT. CASING STICKUP (AGS)	- FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	21.64 FT	SCREEN LENGTH	0.1 Micron FT	PID AMBIENT AIR	- PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	6.92 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.198 GAL	PID WELL MOUTH	- PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.12 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	4.8 GAL	DRAWDOWN/ TOTAL PURGED	4.12	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
0938	BEGIN PURGING									
0942	15.20	400	10	762	7.3	2.24	25	154.2	19.0	
0948	15.81	400	10	720	7.2	3.19	12	161.7	19.0	
0953	15.86	400	10	754	7.0	3.25	8	174.5	19.0	
0958	15.91	400	10	734	7.0	3.31	<1	180.7	19.0	
1003	15.91	400	10	720	7.0	3.37	<1	181.7	19.0	
1008	15.91	400	10	706	7.0	3.43	<1	180.7	19.0	
1013	15.92	400	10	703	6.9	3.60	<1	178.0	19.0	
1018	15.93	400	10	701	6.9	3.65	<1	178.0	19.0	
1023	15.93	400	10	700	6.9	3.71	<1	178.0	19.0	
1025	15.93	400 mL/min	10	701	6.9	3.74	<1	178.1	19.0	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [X]

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

NUMBER OF GALLONS GENERATED: ~4.8

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

NOTES:

Sampler Signature: Ryan Barsley Print Name: Ryan Barsley

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-13	4/27/21
PROJECT NUMBER		START TIME	END TIME
8006.0010		1513	1604
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-13	1602	Verona	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	7.90 FT	FINAL DTW (BMP)	10.25 FT	PROT. CASING STICKUP (AGS)	– FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	15.53 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	7.63 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.385 GAL	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4716mL GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.5 GAL	DRAWDOWN/ TOTAL PURGED	0.154	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1515	BEGIN PURGING									
1520	8.91	200	11	815	7.6	4.96	45	218.7	13.00	
1525	9.0 9.20	200	10	803	7.4	4.83	38	215.6	13.00	
1530	9.35	200	11	809	7.4	5.11	24	212.5	13.00	
1533	9.90	200	11	812	7.4	4.73	26	210.7	13.00	
1538	9.98	200	11	828	7.4	4.38	17	204.7	13.00	
1543	10.15	200	11	837	7.4	4.23	14	201.8	13.00	
1547	10.24	200	11	836	7.4	4.18	8	197.7	13.00	
1551	10.25	200	11	837	7.4	4.21	8	197.1	13.00	
1556	10.26	200	11	838	7.4	4.19	7	197.2	13.00	
1600	10.27	200	11	835	7.4	4.18	4	197.1	13.00	
1602	10.27	200	11	839	7.4	4.17	5	196.4	13.00	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____ WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [X] WL METER _____
- [ ] PID _____
- [X] WQ METER _____
- [X] TURB. METER _____
- [X] PUMP _____
- [X] OTHER _____
- [ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: ~2.5

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

NOTES:

Sampler Signature:

Print Name:

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-29	4/28/21
PROJECT NUMBER		START TIME	END TIME
8006.0010			
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-29	1022	Verona	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [x] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [x] OTHER 0.17 in

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)	7.64 FT	FINAL DTW (BMP)	8.70 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	18.14 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	10.5 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.174 GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.72 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.6 GAL	DRAWDOWN/ TOTAL PURGED	6.6	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
0932	BEGIN PURGING									
0937	8.25	200	11	1058	7.1	3.89	141	-19	16.0	
0942	8.31	200	10	1052	6.9	3.64	46	-17.5	16.0	
0947	8.35	200	11	1035	6.7	3.48	20	-18.4	16.0	
0952	8.39	200	10	1021	6.7	3.41	22	-19.7	16.0	
0957	8.41	200	10	1017	6.7	3.34	21	-19.4	16.0	
1002	8.49	200	10	1012	6.7	3.24	23	-20.4	16.0	
1007	8.54	200	10	1009	6.7	3.09	21	-20.7	16.0	
1012	8.63	200	10	1010	6.7	3.07	21	-20.9	16.0	
1017	8.65	200	10	1011	6.7	3.04	23	-20.8	16.0	
1022	8.70	200	10	1011	6.7	3.05	22	-21.0	16.0	
		2L								

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [x] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [x] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [x] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [x] WL METER
- [ ] PID
- [x] WQ METER
- [x] TURB. METER
- [x] PUMP
- [x] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED

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

NOTES:

Sampler Signature:

Print Name:

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME: DFSP Verona		LOCATION ID: MW-30 (102)	DATE: 4/27/21
PROJECT NUMBER: 8006.0010		START TIME: 1325	END TIME: 1417
SAMPLE ID: MW-30	SAMPLE TIME: 1415	SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	8.00 FT	FINAL DTW (BMP)	8.35 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	17.77 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	9.77 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.057 GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	6035 mL ~~GAL~~	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.50 GAL	DRAWDOWN/ TOTAL PURGED	.22	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1328	BEGIN PURGING									
1333	8.35	200	9	891	7.2	1.84	51	149.1	15.00	
1338	8.35	200	9	853	7.0	1.00	27	163.0	15.00	
1342	8.35	200	9	854	7.0	1.03	24	164.0	15.00	
1348	8.35	200	9	854	7.0	0.87	19	158.7	15.00	
1353	8.35	200	9	855	7.0	0.82	8	154.5	15.00	
1359	8.35	200	9	854	7.0	0.71	7	153.7	15.00	
1404	8.35	200	9	854	7.0	0.64	6	153.6	15.00	
1409	8.35	200	9	854	7.0	0.54	4	153.4	15.00	
1413	8.35	200	9	853	7.0	0.48	4	153.2	15.00	
1415	8.35	200	9	854	7.0	0.42	3	153.0	15.00	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: ~2.5

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

NOTES:

Sampler Signature:

Print Name:

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME: DFSP Verona		LOCATION ID: MW-32	DATE: 4/28/21
PROJECT NUMBER: 8006.0010		START TIME	END TIME: 0
SAMPLE ID: MW-32	SAMPLE TIME: 0907	SITE NAME/NUMBER: Verona	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	7.74 FT	FINAL DTW (BMP)	8.41 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	17.84 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	10.1 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.109 GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.66 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.68 GAL	DRAWDOWN/ TOTAL PURGED	.065	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
0830	BEGIN PURGING									
0835	7.81	150	10	710	7.0	3.11	87	24.8	15.00	
0840	7.95	150	9	705	6.9	2.84	79	21.7	15.00	
0845	8.07	150	9	702	6.9	2.71	44	19.7	15.00	
0850	8.21	150	9	696	6.9	2.40	38	18.3	15.00	
0855	8.29	150	9	694	6.9	2.25	36	17.2	15.00	
0900	8.32	150	9	693	6.9	2.19	34	16.8	15.00	
0905	8.38	150	9	693	6.9	2.17	33	16.4	15.00	
0907	8.41	150	9	692	6.9	2.16	31	16.0	15.00	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [X] WL METER _____
- [ ] PID _____
- [X] WQ METER _____
- [X] TURB. METER _____
- [X] PUMP _____
- [X] OTHER _____
- [ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: _____

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

NOTES:

Sampler Signature:

Checked By:

Print Name:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME: DFSP Verona		LOCATION ID: MW-33R	DATE: 4/27/21
PROJECT NUMBER: 8006.0010		START TIME: 1140	END TIME: 1615
SAMPLE ID: MW-33R + DUP	SAMPLE TIME: 1614	SITE NAME/NUMBER: Verona	PAGE 1 OF 1

WELL DIAMETER (INCHES) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	5.85 FT	FINAL DTW (BMP)	10.82 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	17.53 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	11.68 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	~~4.81~~ .48 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/-3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1143	BEGIN PURGING									
1148	8.10	50mL/min	9	3439	9.2	1.95	138	-175.7	16.5	
1153	10.00		9	3369	9.1	0.39	<1	-150.6	16.5	
1159	12.12		9	3114	8.6	0.21	<1	-180.3	16.5	
1204	13.71		9	3043	8.4	0.16	<1	-197.5	16.5	
		Dry @	1210							

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] BLADDER [ ] WATTERA [ ] OTHER [ ] OTHER

DECON FLUIDS USED: [ ] LIQUINOX [ ] DEIONIZED WATER [ ] POTABLE WATER [ ] NITRIC ACID [ ] HEXANE [ ] METHANOL [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS: [X] SILICON TUBING [ ] TEFLON TUBING [ ] TEFLON LINED TUBING [X] HDPE TUBING [ ] LDPE TUBING [ ] OTHER [ ] OTHER [ ] S. STEEL PUMP MATERIAL [ ] PVC PUMP MATERIAL [ ] GEOPROBE SCREEN [ ] TEFLON BLADDER [ ] OTHER [ ] OTHER [ ] OTHER

EQUIPMENT USED: [X] WL METER [ ] PID [X] WQ METER [X] TURB. METER [X] PUMP [X] OTHER [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: ~ .25 Gal

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

NOTES:

Sampler Signature: [signature]

Print Name: Lucas Bansley

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-35	4/27/21
PROJECT NUMBER		START TIME	END TIME
8006.0010			
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-35	1135	Verona	OF

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	4.94 FT	FINAL DTW (BMP)	6.00 FT	PROT. CASING STICKUP (AGS)	- FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	17.93 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	- PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	12.99 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.173 GAL	PID WELL MOUTH	- PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.01 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.22 GAL	DRAWDOWN/ TOTAL PURGED	.078	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1053	BEGIN PURGING									
1058	5.45	200 mL/min	8	791	7.5	0.65	109	182.1	15.0	
1103	5.71	200	8	816	7.5	0.51	131	185.3	15.0	
1108	5.94	200	8	816	7.5	0.64	174	185.5	15.0	
1113	5.98	200	8	821	7.5	0.69	45	183.4	15.0	
1118	5.98	200	8	875	7.5	0.44	48	183.5	15.0	
1123	6.00	200	8	951	7.5	0.29	41	179.2	15.0	
1128	6.00	200	8	978	7.5	0.29	39	181.4	15.0	
1133	6.00	200	8	951	7.5	0.32	37	178.5	15.0	
1135	6.00	200	8	982	7.5	0.33	36	178.7	15.0	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED ____

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

NOTES:

Sampler Signature: Ryan Baisley
Checked By:

Print Name: Ryan Baisley
Date: 4/27/21

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME	DFSP Verona
PROJECT NUMBER	8006.0010
SAMPLE ID	MW-36
SAMPLE TIME	1451
LOCATION ID	MW-36
DATE	4/27/21
START TIME	143
END TIME	
SITE NAME/NUMBER	Verona
PAGE	OF

WELL DIAMETER (INCHES) ☐ 1 ☑ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES) ☐ 1/8 ☐ 3/16 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☒ OTHER 0.17 in

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)	4.84 FT	FINAL DTW (BMP)	5.59 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	14.42 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	9.58 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.123 GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.57 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.3 GAL	DRAWDOWN/ TOTAL PURGED	.095	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1423	BEGIN PURGING									
1429	5.42	150	11	1052	7.0	8.67	109	-21.8	12.0	
1434	5.50	150	10	1053	6.9	8.64	21	-19.3	12.0	
1439	5.58	150	11	1049	6.9	8.31	15	-13.5	12.0	
1444	5.58	150	11	1041	6.9	7.81	13	-12.1	12.0	
1449	5.60	150	11	1039	6.9	7.78	11	-11.8	12.0	
1451	5.59	150	11	1037	6.9	7.71	12	-11.1	12.0	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☒ TURB. METER
- ☒ PUMP
- ☒ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

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

NOTES:

Sampler Signature:

Checked By:

Print Name:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME	DFSP Verona
PROJECT NUMBER	8006.0010
SAMPLE ID	SAMPLE TIME 1615

LOCATION ID MW-33	DATE 4/27/21
START TIME	END TIME
SITE NAME/NUMBER	PAGE OF

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

TUBING ID (INCHES) ☐ 1/8 ☐ 3/16 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☒ OTHER 0.17 in

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)	6.79 FT	FINAL DTW (BMP)	6.79 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	15.00 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	8.21 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.33 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

1.32

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1238	BEGIN PURGING									
1244	10.71	50mL	5	1187	7.0	~~1.8~~ 1.8	310	-14.4	14.9	
1249	14.50		5	1171	7.1	1.1	291	-5.3	14.9	
			D.C @ 1258							

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED — YES [ ] NO [X]

NUMBER OF GALLONS GENERATED

NO-PURGE METHOD UTILIZED — YES [ ] NO [ ]

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

NOTES:

Sampler Signature: [signature] Print Name: Ryan Bissler

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME: DFSP Verona		LOCATION ID: MW-39	DATE: 4/27/21
PROJECT NUMBER: 8006.0010		START TIME: 1250	END TIME: 1319
SAMPLE ID: MW-39	SAMPLE TIME: 1317	SITE NAME/NUMBER: Verona	PAGE 1 OF 1

WELL DIAMETER (INCHES) [✓] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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): 5.53 FT	FINAL DTW (BMP): 7.60 FT	PROT. CASING STICKUP (AGS): — FT	TOC/TOR DIFFERENCE: FT
WELL DEPTH (BMP): 13.48 FT	SCREEN LENGTH: FT	PID AMBIENT AIR: — PPM	REFILL TIMER SETTING: N/A SEC
WATER COLUMN: 7.95 FT	DRAWDOWN VOLUME: 0.08 GAL (initial DTW- final DTW X well diam. squared X 0.041)	PID WELL MOUTH: — PPM	DISCHARGE TIMER SETTING: N/A SEC
CALCULATED GAL/VOL: 0.325 GAL (column X well diameter squared X 0.041)	TOTAL VOL. PURGED: 0.61 GAL (mL per minute X total minutes X 0.00026 gal/mL)	DRAWDOWN/ TOTAL PURGED: 0.131	PRESSURE TO PUMP: N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1254	BEGIN PURGING									
1259	7.51	100	8	609	6.9	1.41	21	77.4	12.0	
1300	7.54	100	8	604	6.8	1.20	8	65.4	12.0	
1304	7.58	100	8	604	6.8	0.57	<1	58.7	12.0	
1309	7.60	100	8	601	6.8	0.35	<1	53.7	12.0	
1314	7.60	100	8	600	6.8	0.31	<1	52.4	12.0	
1317	7.60	100	8	600	6.8	0.30	<1	52.1	12.0	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC; [ ] SUBMERSIBLE; [ ] BLADDER; [ ] WATTERA; [ ] OTHER; [ ] OTHER

DECON FLUIDS USED: [ ] LIQUINOX; [ ] DEIONIZED WATER; [ ] POTABLE WATER; [ ] NITRIC ACID; [ ] HEXANE; [ ] METHANOL; [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS: [X] SILICON TUBING; [ ] TEFLON TUBING; [ ] TEFLON LINED TUBING; [X] HDPE TUBING; [ ] LDPE TUBING; [ ] OTHER; [ ] OTHER; [ ] S. STEEL PUMP MATERIAL; [ ] PVC PUMP MATERIAL; [ ] GEOPROBE SCREEN; [ ] TEFLON BLADDER; [ ] OTHER; [ ] OTHER; [ ] OTHER

EQUIPMENT USED: [X] WL METER; [ ] PID; [X] WQ METER; [X] TURB. METER; [X] PUMP; [X] OTHER; [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [X]

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.

NOTES:

Sampler Signature: Ryan Br

Print Name: Ryan Beisler

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME	DFSP Verona
PROJECT NUMBER	8006.0010
SAMPLE ID	MW-40
SAMPLE TIME	1127
LOCATION ID	MW-40
DATE	4/27/21
START TIME	11:00
END TIME	1127
SITE NAME/NUMBER	
PAGE	OF

WELL DIAMETER (INCHES): [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	5.40 FT	FINAL DTW (BMP)	6.23 FT	PROT. CASING STICKUP (AGS)	— FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	14.12 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	8.72 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	-0.03 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.36 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	0.351 GAL	DRAWDOWN/ TOTAL PURGED	0.096	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1100	BEGIN PURGING									
1105	5.74	50	9	888	6.9	5.61	>999	-33.7	12.0	
1110	6.00	50	9	877	6.7	4.98	923	-46.3	12.0	
1115	6.13	50	9	875	6.6	4.77	553	-55.5	12.0	
1120	6.20	50	9	876	6.6	4.22	447	-47.3	12.0	
1125	6.23	50	8	873	6.6	4.30	443	-40.4	12.0	
										Sample @ 1127

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: 0.351

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

NOTES:

Sampler Signature:

Print Name:

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-41	4/26/21
PROJECT NUMBER		START TIME	END TIME
8006.0010			
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-41	1453	Verona	1 OF 1

WELL DIAMETER (INCHES): [\] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	9.65 FT	FINAL DTW (BMP)	9.70 FT	PROT. CASING STICKUP (AGS)	– FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	12.84 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	3.19 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.002 GAL	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.131 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	.463 GAL	DRAWDOWN/ TOTAL PURGED	.004	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1421	BEGIN PURGING									
1424	9.70	50	10	658	7.3	10.51	94	-29.4	10.5	
1427	9.71	50	9	670	6.5	10.15	35	-23.2	10.5	
1430	9.65	50	10	663	6.6	9.22	17	-26.1	10.5	
1433	9.71	50	10	662	6.6	8.06	12	-22.4	10.5	
1437	9.70	50	9	660	6.6	8.14	9	-22.1	10.5	
1441	9.71	50	10	658	6.6	8.18	8	-22.4	10.5	
1444	9.72	~~50~~ 50	10	657	6.6	8.09	8	-22.3	10.5	
1447	9.70	50	10	657	6.6	8.11	7	-26.9	10.5	
1450	9.71	50	10	654	6.6	8.12	7	-22.1	10.5	
1453	9.70	50	10	654	6.6	8.14	8	-22.3	10.5	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [X] WL METER _____
- [ ] PID _____
- [X] WQ METER _____
- [X] TURB. METER _____
- [X] PUMP _____
- [X] OTHER _____
- [ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: ~15

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

NOTES:

Sampler Signature:

Print Name:

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME: DFSP Verona		LOCATION ID: MW-42	DATE: 4/27/21
PROJECT NUMBER: 8006.0010		START TIME:	END TIME:
SAMPLE ID: MW-42	SAMPLE TIME: 1510	SITE NAME/NUMBER: Verona	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	8.42 FT	FINAL DTW (BMP)	9.23 FT	PROT. CASING STICKUP (AGS)	— FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	11.74 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	3.32 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.033 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	515 mL GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	.529 GAL	DRAWDOWN/ TOTAL PURGED	.062	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1430	BEGIN PURGING									
1435	8.91	50 mL	9	874	7.1	54	1.65	198.0	10.0	
1440	9.04	50	8	859	7.1	41	1.25	232.0	10.0	
1445	9.10	50	9	854	7.1	14	1.19	225.9	10.0	
1450	9.18	50	8	851	7.1	8	1.11	222.4	10.0	
1455	9.20	50	8	849	7.1	5	1.08	221.7	10.0	
1500	9.21	50	8	847	7.1	4	1.04	220.4	10.0	
1505	9.22	50	8	845	7.1	4	1.01	219.7	10.0	
1510	9.23	50	8	845	7.1	4	0.94	218.4	10.0	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [X] WL METER _____
- [ ] PID _____
- [X] WQ METER _____
- [X] TURB. METER _____
- [X] PUMP _____
- [X] OTHER _____
- [ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: 2.5 Gal

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

NOTES:

Sampler Signature:

Checked By:

Print Name:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-43	4/26/21
PROJECT NUMBER		START TIME	END TIME
8006.0010			
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-43	1614	Verona	1 OF 1

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

TUBING ID (INCHES) [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	13.04 FT	FINAL DTW (BMP)	13.08 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	16.05 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	3.01 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1431	BEGIN PURGING									
1436	15.51	500 mL/min	9	606	7.1	3.1	>999	221.6	15.5	
										Sample @ 1614

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
[X] PERISTALTIC	[ ] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER
[ ] _____	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER
[ ] WATTERA	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER _____	[X] PUMP
[ ] OTHER _____	[ ] METHANOL	[ ] OTHER _____	[ ] OTHER _____	[X] OTHER
[ ] OTHER _____	[ ] OTHER _____	[ ] OTHER _____	[ ] OTHER _____	[ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: ~ 0.1

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

NOTES:

Sampler Signature: Print Name:

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME: DFSP Verona		LOCATION ID: MW-44	DATE: 4/26/21
PROJECT NUMBER: 8006.0010		START TIME:	END TIME:
SAMPLE ID: MW-44	SAMPLE TIME: 1600	SITE NAME/NUMBER: Verona	PAGE 1 OF 1

WELL DIAMETER (INCHES) ☐ 1 ☐ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER ______

TUBING ID (INCHES) ☐ 1/8 ☐ 3/16 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☒ OTHER 0.17 in

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): 3.78 FT	FINAL DTW (BMP): 3.79 FT	PROT. CASING STICKUP (AGS): FT	TOC/TOR DIFFERENCE: FT
WELL DEPTH (BMP): 8.02 FT	SCREEN LENGTH: FT	PID AMBIENT AIR: PPM	REFILL TIMER SETTING: N/A SEC
WATER COLUMN: 4.24 FT	DRAWDOWN VOLUME: GAL (initial DTW- final DTW X well diam. squared X 0.041)	PID WELL MOUTH: PPM	DISCHARGE TIMER SETTING: N/A SEC
CALCULATED GAL/VOL: .657 ~~GAL~~ (column X well diameter squared X 0.041)	TOTAL VOL. PURGED: GAL (mL per minute X total minutes X 0.00026 gal/mL)	DRAWDOWN/ TOTAL PURGED:	PRESSURE TO PUMP: N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1322	BEGIN PURGING									
1326	5.47	50mL/min	10	659	7.3	1.37	268	-78.1	8PQ	
1331	6.21	"	10	580	6.9	1.06	"	-40.1	80	
	Dry @ 1333									
										Sample @ 1600

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☒ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS: ☒ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☒ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER ☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☒ WL METER ☐ PID ☒ WQ METER ☒ TURB. METER ☒ PUMP ☒ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

NUMBER OF GALLONS GENERATED: ~.17

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

NOTES:

Sampler Signature: [signature]

Print Name: Ryan Beasley

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME	DFSP Verona
PROJECT NUMBER	8006.0010
SAMPLE ID	4/26/21
SAMPLE TIME	1625
LOCATION ID	MW-4645
DATE	4/26/21
START TIME	
END TIME	
SITE NAME/NUMBER	Verona
PAGE	1 OF 1

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

TUBING ID (INCHES) ☐ 1/8 ☐ 3/16 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☒ OTHER 0.17 in

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)	2.47 FT	FINAL DTW (BMP)	4.35 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	7.96 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	5.49 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	851 mL GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1349	BEGIN PURGING									
1348		50	10	463	6.9	1.04	291	-6.4	7.6	

Day @ 1349

Sample @

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☒ TURB. METER
- ☒ PUMP
- ☒ OTHER
- ☐ FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☒	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
☐								
☐								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☐
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED: N.2

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

NOTES:

Sampler Signature: Print Name:

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-46	4/26/21
PROJECT NUMBER		START TIME	END TIME
8006.0010		1314	1345
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-46	1345	Verona	1 OF 1

WELL DIAMETER (INCHES): [✓] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	4.00 FT	FINAL DTW (BMP)	6.18 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	8.10 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	4.10 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	-0.09 GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.1681 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	0.39 GAL	DRAWDOWN/ TOTAL PURGED	123	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1314	BEGIN PURGING									
1319	5.19	50	11	360	7.1	4.33	64.1	-8.5	6.5	
1324	5.85	50	10	369	6.9	3.34	21.5	-2.7	6.5	
1329	6.12	50	10	389	6.6	18.21	64.0	21.3	6.5	
1334	6.18	50	11	390	6.6	18.29	64.0	39.8	6.5	
1339	6.18	50	11	391	6.4	12.37	29.6	48.9	6.5	
1344	6.18	50	11	392	6.4	12.85	28.5	50.4	6.5	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: 0.39

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

NOTES:

Sampler Signature: Print Name:

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-47	4/22/21
PROJECT NUMBER		START TIME	END TIME
8006.0010		1242	1254
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-47	1556	Verona	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	8.76 FT	FINAL DTW (BMP)	9.50 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	12.23 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	3.47 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.142 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1242	BEGIN PURGING									
1247	8.87	50	8	821	7.1	11.50	143	-6.7	12.0	
1252	12.08	50	9	822	6.8	10.32	351	-4.3	12.0	
1259										
	Dry @ 1254									
										Sample @ 1556

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES [ ] NO [X]

NUMBER OF GALLONS GENERATED ~1.2

NO-PURGE METHOD UTILIZED YES [ ] NO [ ]

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

NOTES:

Sampler Signature: RA Print Name: Ryan Bean

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-48	4/27/21
PROJECT NUMBER		START TIME	END TIME
8006.0010			
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-48	1218	Verona	1 OF 1

WELL DIAMETER (INCHES): [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	6.04 FT	FINAL DTW (BMP)	7.44 FT	PROT. CASING STICKUP (AGS)	- FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	11.98 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	- PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	5.94 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.057 GAL	PID WELL MOUTH	- PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.244 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	.503 GAL	DRAWDOWN/ TOTAL PURGED	.114	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1140	BEGIN PURGING									
1145	6.98	50	8	1035	7.0	9.92	60	-42.6	11.0	
1150	7.15	50	8	1056	6.8	8.41	54	-32.1	11.0	
1155	7.23	50	8	1066	6.7	7.70	51	-28.1	11.0	
1200	7.31	50	8	1067	6.7	7.38	45	-23.2	11.0	
1205	7.38	50	8	1068	6.7	7.29	31	-22.7	11.0	
1210	7.40	50	8	1069	6.7	7.14	30	-22.3	11.0	
1215	7.42	50	8	1071	6.7	7.10	28	-22.1	11.0	
1218	7.44	50	8	1071	6.7	7.09	27	-21.8	11.0	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: ~3 Gal

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

NOTES:

Sampler Signature:

Checked By:

Print Name:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-51	4/27/21
PROJECT NUMBER		START TIME	END TIME
8006.0010			
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-51	1540		OF

WELL DIAMETER (INCHES): [✓] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	4.77 FT	FINAL DTW (BMP)	4.87 FT	PROT. CASING STICKUP (AGS)	- FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	15.00 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	- PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	10.23 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.004 GAL	PID WELL MOUTH	- PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.42 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.65 GAL	DRAWDOWN/ TOTAL PURGED	0.002	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1515	BEGIN PURGING									
1520	4.85	250	9	632	6.8	1.91	123	-39.2	12.0	
1525	4.86	250	9	629	6.7	1.53	45	-31.4	12.0	
1530	4.87	250	9	622	6.7	1.64	21	-25.5	12.0	
1535	4.86	250	9	620	6.6	1.55	19	-27.1	12.0	
1540	4.87	250	9	621	6.7	1.56	15	-27.4	12.0	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: ~1.7

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

NOTES:

Sampler Signature: RA

Print Name: Ryan Bz

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME: DFSP Verona		LOCATION ID: MW-53	DATE: 4/28/21
PROJECT NUMBER: 8006.0010		START TIME:	END TIME: 1144
SAMPLE ID: MW-53	SAMPLE TIME: 1142	SITE NAME/NUMBER: Verona	PAGE 1 OF 1

WELL DIAMETER (INCHES) [✓] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	3.60 FT	FINAL DTW (BMP)	4.20 FT	PROT. CASING STICKUP (AGS)	— FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	14.50 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	10.9 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.024 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.4476 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	0.833 GAL	DRAWDOWN/ TOTAL PURGED	.029	PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1121	BEGIN PURGING									
1127	3.98	150 mL	12	822	6.8	5.81	248	-25.8	10.00	
1130	4.02	150	13	721	6.9	5.28	154	-17.2	10.0	
1133	4.07	150	13	666	7.0	8.11	140	-5.1	10.0	
1136	4.15	150	13	670	7.0	8.32	124	-5.4	10.0	
1139	4.18	150	13	672	7.0	8.33	121	1.7	10.0	
1142	4.20	150	13	677	7.1	8.38	123	1.4	10.0	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
[X] PERISTALTIC	[ ] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER
	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER
[ ] WATTERA	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER	[X] PUMP
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[X] OTHER
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS NO. TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES [ ] NO [ ]

NO-PURGE METHOD UTILIZED YES [ ] NO [ ]

NUMBER OF GALLONS GENERATED ~2 gal

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

NOTES:

Sampler Signature: [signature] Print Name: Zach Bartle

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-54	4/28/21
PROJECT NUMBER		START TIME	END TIME
8006.0010			
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-54	0935		OF

WELL DIAMETER (INCHES) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

MEASUREMENT POINT (MP) [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	Unknown FT	FINAL DTW (BMP)	— FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	Unknown FT	SCREEN LENGTH	— FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	— FT	DRAWDOWN VOLUME	— GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	— GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~1.13 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

(initial DTW- final DTW X well diam. squared X 0.041)

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
0852	BEGIN PURGING									
0857	—	50	10	665	7.2	7.28	541	1419		
			Dry @ 0952							

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED _____

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

NOTES: Obstruction @ 3.5 ft, water measurements estimated based on MW-47.

Sampler Signature: [signature] Print Name: Ryan Brisbin

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME: DFSP Verona		LOCATION ID: MW-55	DATE: 4/28/21
PROJECT NUMBER: 8006.0010		START TIME:	END TIME:
SAMPLE ID:	SAMPLE TIME: 1035	SITE NAME/NUMBER:	PAGE OF

WELL DIAMETER (INCHES) ☐ 1 ☐ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER ______

TUBING ID (INCHES) ☐ 1/8 ☐ 3/16 ☐ 1/4 ☐ 3/8 ☐ 1/2 [X] OTHER 0.17 in

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)	3.65 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	6.22 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	2.57 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	398 mL GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
0834	BEGIN PURGING									
0839	5.89	50 mL	12	499	7.2	6.14	671	-49.9	6.0	
				Dry @ 0841						

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER ______
- ☐ OTHER ______

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER ______

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- [X] HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER ______
- ☐ OTHER ______
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER ______
- ☐ OTHER ______
- ☐ OTHER ______

EQUIPMENT USED
- [X] WL METER ______
- ☐ PID ______
- [X] WQ METER ______
- [X] TURB. METER ______
- [X] PUMP ______
- [X] OTHER ______
- ☐ FILTERS NO. ___ TYPE ______

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO [X]

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.

NOTES:

Sampler Signature: Ryan B[signature]

Print Name: Ryan Baisly

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME	DFSP Verona
PROJECT NUMBER	8006.0010
SAMPLE ID	MW-56
SAMPLE TIME	1535

LOCATION ID	MW-56
DATE	4/26/21
START TIME	
END TIME	15
SITE NAME/NUMBER	Verona
PAGE	OF

WELL DIAMETER (INCHES): [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	4.82 FT	FINAL DTW (BMP)	5.25 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	5.49 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	1.47 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1306	BEGIN PURGING									
1311	5.14	50 mL/M	10	723	6.9	4.46	74	12.3	[illegible]	
	Avg @ 1312									
										Sample @ 1535

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [X] WL METER _____
- [ ] PID _____
- [X] WQ METER _____
- [X] TURB. METER _____
- [X] PUMP _____
- [X] OTHER _____
- [ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: 2.15 gal

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

NOTES:

Sampler Signature: Print Name:

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME		LOCATION ID	DATE
DFSP Verona		MW-58	4/26/21
PROJECT NUMBER		START TIME	END TIME
8006.0010			
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
MW-58	1702	Verona	1 OF 1

WELL DIAMETER (INCHES): [x] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [ ] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	2.48 FT	FINAL DTW (BMP)	2.02 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	6.75 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	4.27 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.66 5 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL.)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1153	BEGIN PURGING									
1156	2.53	50	5	5.38	6.2	0.86	1.35	32.7	6.0	
1200	2.50	50	5	573	6.2	0.33	4.9	-52.5	6.0	
1205	Dry									
										Sample @ 1702

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: 1.2 Gal

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

NOTES:

Sampler Signature:

Print Name:

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

TK&K SERVICES

PROJECT NAME	DFSP Verona
PROJECT NUMBER	8006.0010
SAMPLE ID	MW-60
SAMPLE TIME	1724

LOCATION ID	MW-60
DATE	4/26/21
START TIME	1123
END TIME	
SITE NAME/NUMBER	Verona
PAGE	1 OF 1

WELL DIAMETER (INCHES): [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 3/16 [X] 1/4 [ ] 3/8 [ ] 1/2 [X] OTHER 0.17 in

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)	3.15 FT	FINAL DTW (BMP)	3.09 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	5.26 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	N/A SEC
WATER COLUMN	2.11 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	N/A SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.347 ~~GAL~~	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	N/A PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 %)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10% or <0.5)	TURBIDITY (ntu) (+/- 10% or < 5	ORP (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
1123	BEGIN PURGING									
1128	3.70	50-4/min	9	78	5.91	5.39	251	291.1	5.0	
1134	4.92	50	5	90	6.0	4.56	210	354.6	5.0	
	DTW @ 1135									
										Sample @ 1724

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER
- [ ] PID
- [X] WQ METER
- [X] TURB. METER
- [X] PUMP
- [X] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	PFAS Short List	LCQSM537UCMR3	N	4° C	2 x 125 mL			
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[ ]

NUMBER OF GALLONS GENERATED: 2.2

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

NOTES:

Sampler Signature:

Print Name:

Checked By:

Date:

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: DFSP Verona
PROJECT NUMBER: [redacted]
PROJECT LOCATION: Verona, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 4/28/21
CREW:
SAMPLER NAME: [illegible]
SAMPLER SIGNATURE:
CHECKED BY: DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI AE
MODEL NO.
UNIT ID NO. AE

AM CALIBRATION Start Time 0545 /End Time 0600

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.0	+/- 0.1 pH Units
pH (7)	SU	7.0	7.0	+/- 0.1 pH Units
pH (10)	SU	10.0	10.0	+/- 0.1 pH Units
Redox	+/- mV	240	234.9	+/- 10 mV
Conductivity	mS/cm	1.413	1412	+/- 0.5 % of standard
DO (saturated)	%	100	90.7	+/- 2% of standard
DO (saturated)	mg/L[1] (see Table 1)			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		< 0.5 mg/L
Temperature	°C		16	
Baro. Press.	mmHg		759	

POST CALIBRATION CHECK Start Time /End Time

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.0	+/- 0.3 pH Units
240	232.8	+/- 10 mV
1.413	1410	+/- 5% of standard
		+/- 0.5 mg/L of standard
	17	
	746	

TURBIDITY METER

METER TYPE Hach
MODEL NO. 2100
UNIT ID NO. 0557

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1		<0.1	5.22	+/- 0.3 NTU of stan.
0-10 Standard	NTU	5.22			53.8	+/- 5% of standard
0-100 Standard	NTU	53.8			545	+/- 5% of standard
0-1000 Standard	NTU	545				+/- 5% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: DFSP Verona
PROJECT NUMBER:
PROJECT LOCATION: Verona, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: _____ DATE: 4/27/21
CREW:
SAMPLER NAME: R Bamm
SAMPLER SIGNATURE:
CHECKED BY: _____ DATE: _____

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI AE
MODEL NO.
UNIT ID NO.

AM CALIBRATION
Start Time _____ /End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.0	+/- 0.1 pH Units
pH (7)	SU	7.0	7.0	+/- 0.1 pH Units
pH (10)	SU	10.0	10.0	+/- 0.1 pH Units
Redox	+/- mV	240	234.5	+/- 10 mV
Conductivity	mS/cm	1.413	1413	+/- 0.5 % of standard
DO (saturated)	%	100	98.7	+/- 2% of standard
DO (saturated)	mg/L[1] (see Table 1)	_____	_____	+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1	'	< 0.5 mg/L
Temperature	°C		15	
Baro. Press.	mmHg		769	

POST CALIBRATION CHECK
Start Time _____ /End Time _____

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.0	+/- 0.3 pH Units
240	234.8	+/- 10 mV
1.413	1414	+/- 5% of standard
_____	97.6	+/- 0.5 mg/L of standard
	15	
	760	

TURBIDITY METER

METER TYPE Hach
MODEL NO. 2100
UNIT ID NO. 0557

	Units	Standard Value	Meter Value
<0.1 Standard	NTU	<0.1	_____
0-10 Standard	NTU	5.22	_____
0-100 Standard	NTU	55.8	_____
0-1000 Standard	NTU	548	_____

Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1	5.22	+/- 0.3 NTU of stan.
_____	55.7	+/- 5% of standard
_____	546	+/- 5% of standard
_____	_____	+/- 5% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: DFSP Verona
PROJECT NUMBER:
PROJECT LOCATION: Verona, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: _____ DATE: 4/28/21
CREW:
SAMPLER NAME: R Barsley
SAMPLER SIGNATURE:
CHECKED BY: _____ DATE: _____

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO.
UNIT ID NO. AE

AM CALIBRATION
Start Time 0545 /End Time 0600

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.0	+/- 0.1 pH Units
pH (7)	SU	7.0	7.0	+/- 0.1 pH Units
pH (10)	SU	10.0	10.0	+/- 0.1 pH Units
Redox	+/- mV	240	234.4	+/- 10 mV
Conductivity	mS/cm	1.413	1412	+/- 0.5 % of standard
DO (saturated)	%	100	90.7	+/- 2% of standard
DO (saturated)	mg/L[1] (see Table 1)			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		< 0.5 mg/L
Temperature	°C		16	
Baro. Press.	mmHg		759	

POST CALIBRATION CHECK
Start Time _____ /End Time _____

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.1	+/- 0.3 pH Units
240	233.4	+/- 10 mV
1.413	1412	+/- 5% of standard
		+/- 0.5 mg/L of standard
	16	
	749	

TURBIDITY METER

METER TYPE Hach
MODEL NO. 2100
UNIT ID NO. 3422

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1		<0.1	<1	+/- 0.3 NTU of stan.
0-10 Standard	NTU	<1			47.7	+/- 5% of standard
0-100 Standard	NTU	47.7			512	+/- 5% of standard
0-1000 Standard	NTU	512				+/- 5% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: DFSP Verona
PROJECT NUMBER: [redacted]
PROJECT LOCATION: Verona, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: _____ DATE: 4/26/21
CREW:
SAMPLER NAME: C Avdra
SAMPLER SIGNATURE:
CHECKED BY: _____ DATE: _____

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO.
UNIT ID NO. AB

AM CALIBRATION
Start Time _____/End Time_____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.0	+/- 0.1 pH Units
pH (7)	SU	7.0	7.0	+/- 0.1 pH Units
pH (10)	SU	10.0	10.0	+/- 0.1 pH Units
Redox	+/- mV	240	234.4	+/- 10 mV
Conductivity	mS/cm	1.413	1413	+/- 0.5 % of standard
DO (saturated)	%	100	100.3	+/- 2% of standard
DO (saturated)	mg/L[1] (see Table 1)			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		< 0.5 mg/L
Temperature	°C		17	
Baro. Press.	mmHg		760	

POST CALIBRATION CHECK
Start Time _____/End Time_____

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.0	+/- 0.3 pH Units
240	238.7	+/- 10 mV
1.413	1407	+/- 5% of standard
		+/- 0.5 mg/L of standard
	17	
	741	

TURBIDITY METER

METER TYPE Hach
MODEL NO. 2100
UNIT ID NO. 3422

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1		<0.1	<1	+/- 0.3 NTU of stan.
0-10 Standard	NTU	<1			47.4	+/- 5% of standard
0-100 Standard	NTU	47.5			512	+/- 5% of standard
0-1000 Standard	NTU	513				+/- 5% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: DFSP Verona
PROJECT NUMBER:
PROJECT LOCATION: Verona, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 4/27/21
CREW:
SAMPLER NAME: K. Ambin
SAMPLER SIGNATURE:
CHECKED BY: DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO.
UNIT ID NO. AB

AM CALIBRATION
Start Time 0545 /End Time 0600

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.0	+/- 0.1 pH Units
pH (7)	SU	7.0	7.0	+/- 0.1 pH Units
pH (10)	SU	10.0	10.0	+/- 0.1 pH Units
Redox	+/- mV	240	234.4	+/- 10 mV
Conductivity	mS/cm	1.413	1414	+/- 0.5 % of standard
DO (saturated)	%	100	100.7	+/- 2% of standard
DO (saturated)	mg/L[1] (see Table 1)			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		< 0.5 mg/L
Temperature	°C		17	
Baro. Press.	mmHg		762	

POST CALIBRATION CHECK
Start Time /End Time

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.0	+/- 0.3 pH Units
240	235.1	+/- 10 mV
1.413	1417	+/- 5% of standard
		+/- 0.5 mg/L of standard
	17	
	760	

TURBIDITY METER

METER TYPE Hach
MODEL NO. 2100
UNIT ID NO. ~~3422 (AB)~~ 3422

	Units	Standard Value	Meter Value
<0.1 Standard	NTU	<0.1	
0-10 Standard	NTU	<1	
0-100 Standard	NTU	40.7	
0-1000 Standard	NTU	512	

Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1	<1	+/- 0.3 NTU of stan.
	40.7	+/- 5% of standard
	517	+/- 5% of standard
		+/- 5% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: DFSP Verona
PROJECT NUMBER:
PROJECT LOCATION: Verona, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: _____ DATE: 4/28/17
CREW:
SAMPLER NAME:
SAMPLER SIGNATURE:
CHECKED BY: _____ DATE: _____

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.:
UNIT ID NO.: AB

AM CALIBRATION Start Time 0545 /End Time 600

POST CALIBRATION CHECK Start Time _____ /End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.0	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.0	+/- 0.1 pH Units	7.0		+/- 0.3 pH Units
pH (10)	SU	10.0	10.0	+/- 0.1 pH Units			
Redox	+/- mV	240	234.4	+/- 10 mV	240		+/- 10 mV
Conductivity	mS/cm	1.413	1412	+/- 0.5 % of standard	1.413		+/- 5% of standard
DO (saturated)	%	100	100.7	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Table 1)			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		< 0.5 mg/L			
Temperature	°C		16				
Baro. Press.	mmHg		759				

TURBIDITY METER

METER TYPE: Hach
MODEL NO.: 2100
UNIT ID NO.: 0557

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1		<0.1		+/- 0.3 NTU of stan.
0-10 Standard	NTU	5.27				+/- 5% of standard
0-100 Standard	NTU	53.8				+/- 5% of standard
0-1000 Standard	NTU	545				+/- 5% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

Appendix D - Groundwater Laboratory Reports

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

TK&K Services

DFSP; 5449 W Main St, Verona, NY

14003.0001

SGS Job Number: FA85205

Sampling Dates: 04/26/21 - 04/28/21

Report to:

andrea.colby@sgs.com

Total number of pages in report: **104**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, UT, VT, WA, WV

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SGS North America Inc.

Sample Summary

TK&K Services

Job No: FA85205

DFSP; 5449 W Main St, Verona, NY
Project No: 14003.0001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA85205-1	04/27/21	15:15	RBKA	05/01/21	AQ	Ground Water	MW-2R
FA85205-2	04/28/21	10:25	RBKA	05/01/21	AQ	Ground Water	MW-5
FA85205-3	04/27/21	16:02	RBKA	05/01/21	AQ	Ground Water	MW-13
FA85205-4	04/27/21	14:15	RBKA	05/01/21	AQ	Ground Water	MW-30
FA85205-5	04/28/21	10:22	RBKA	05/01/21	AQ	Ground Water	MW-29
FA85205-6	04/28/21	09:07	RBKA	05/01/21	AQ	Ground Water	MW-32
FA85205-7	04/27/21	16:14	RBKA	05/01/21	AQ	Ground Water	MW-33R
FA85205-8	04/27/21	16:14	RBKA	05/01/21	AQ	Ground Water	MW-33R DUP
FA85205-9	04/27/21	11:35	RBKA	05/01/21	AQ	Ground Water	MW-35
FA85205-10	04/27/21	14:55	RBKA	05/01/21	AQ	Ground Water	MW-36
FA85205-11	04/27/21	14:55	RBKA	05/01/21	AQ	Ground Water	MW-36 DUP
FA85205-12	04/27/21	16:15	RBKA	05/01/21	AQ	Ground Water	MW-38
FA85205-13	04/27/21	13:17	RBKA	05/01/21	AQ	Ground Water	MW-39

Sample Summary
(continued)

TK&K Services

Job No: FA85205

DFSP; 5449 W Main St, Verona, NY
Project No: 14003.0001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA85205-14	04/27/21	11:27	RBKA	05/01/21	AQ	Ground Water	MW-40
FA85205-15	04/26/21	14:53	RBKA	05/01/21	AQ	Ground Water	MW-41
FA85205-16	04/26/21	15:10	RBKA	05/01/21	AQ	Ground Water	MW-42
FA85205-17	04/26/21	16:14	RBKA	05/01/21	AQ	Ground Water	MW-43
FA85205-18	04/26/21	16:00	RBKA	05/01/21	AQ	Ground Water	MW-44
FA85205-19	04/26/21	16:25	RBKA	05/01/21	AQ	Ground Water	MW-45
FA85205-20	04/26/21	13:45	RBKA	05/01/21	AQ	Ground Water	MW-46
FA85205-21	04/27/21	15:56	RBKA	05/01/21	AQ	Ground Water	MW-47
FA85205-22	04/26/21	12:18	RBKA	05/01/21	AQ	Ground Water	MW-48
FA85205-23	04/27/21	15:40	RBKA	05/01/21	AQ	Ground Water	MW-51
FA85205-24	04/28/21	11:42	RBKA	05/01/21	AQ	Ground Water	MW-53
FA85205-25	04/28/21	09:35	RBKA	05/01/21	AQ	Ground Water	MW-54
FA85205-26	04/28/21	10:35	RBKA	05/01/21	AQ	Ground Water	MW-55

Sample Summary
(continued)

TK&K Services

Job No: FA85205

DFSP; 5449 W Main St, Verona, NY
Project No: 14003.0001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA85205-27	04/26/21	17:02	RBKA	05/01/21	AQ	Ground Water	MW-56
FA85205-28	04/26/21	17:24	RBKA	05/01/21	AQ	Ground Water	MW-60
FA85205-29	04/26/21	13:20	RBKA	05/01/21	AQ	Equipment Blank	EQUIPMENT BLANK
FA85205-30	04/26/21	17:02	RBKA	05/01/21	AQ	Ground Water	MW-58

Summary of Hits

Job Number: FA85205
Account: TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY
Collected: 04/26/21 thru 04/28/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA85205-1	**MW-2R**					
Perfluoroheptanoic acid		0.0604	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0323	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0051 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0076 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.0227	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.159	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-2	**MW-5**					
Perfluoroheptanoic acid		0.189	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.100	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0119	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.0067 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.0087	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-3	**MW-13**					
Perfluoroheptanoic acid		0.0034 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0045 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0066 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.0440	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.117	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-4	**MW-30**					
Perfluoroheptanoic acid		0.0318	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0223	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0029 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0115	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.231	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.510	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-5	**MW-29**					
Perfluorooctanesulfonic acid		0.0058 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-6	**MW-32**					
Perfluoroheptanoic acid		0.0925	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0360	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0070 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0151	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.225	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15

Summary of Hits

Job Number: FA85205
Account: TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY
Collected: 04/26/21 thru 04/28/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Perfluorooctanesulfonic acid		0.273	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-7	**MW-33R**					
Perfluoroheptanoic acid		0.104	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0423	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0069 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0312	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.107	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.599	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-8	**MW-33R DUP**					
Perfluoroheptanoic acid		0.104	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0428	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0071 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0285	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.107	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.610	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-9	**MW-35**					
No hits reported in this sample.						
FA85205-10	**MW-36**					
Perfluoroheptanoic acid		0.0819	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.156	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0027 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.335	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		1.48	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		13.6	0.32	0.16	ug/l	EPA 537M QSM5.3 B-15
FA85205-11	**MW-36 DUP**					
Perfluoroheptanoic acid		0.0766	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.146	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0026 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.309	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		1.58	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		14.7	0.16	0.080	ug/l	EPA 537M QSM5.3 B-15
FA85205-12	**MW-38**					
Perfluoroheptanoic acid		0.0268	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15

Summary of Hits

Job Number: FA85205
Account: TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY
Collected: 04/26/21 thru 04/28/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Perfluorooctanoic acid		0.0127	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0892	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.135	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.0700	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-13	**MW-39**					
Perfluoroheptanoic acid		0.100	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0476	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0050 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0452	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.900	0.040	0.020	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.929	0.040	0.020	ug/l	EPA 537M QSM5.3 B-15
FA85205-14	**MW-40**					
Perfluoroheptanoic acid		0.496	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.238	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0321	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.107	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		1.63	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		2.73	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
FA85205-15	**MW-41**					
Perfluoroheptanoic acid		0.192	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.117	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0143	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0456	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		1.30	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		3.14	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
FA85205-16	**MW-42**					
Perfluoroheptanoic acid		0.132	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.115	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0045 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.274	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		1.40	0.040	0.020	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		1.65	0.040	0.020	ug/l	EPA 537M QSM5.3 B-15
FA85205-17	**MW-43**					
Perfluoroheptanoic acid [a]		0.0571	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid [a]		0.0320	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15

Summary of Hits

Job Number: FA85205
Account: TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY
Collected: 04/26/21 thru 04/28/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Perfluorononanoic acid [a]		0.0027 J	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid [a]		0.0555	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid [a]		0.357	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid [a]		0.455	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
FA85205-18	**MW-44**					
Perfluoroheptanoic acid		0.108	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0711	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0120	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0891	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		1.06	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		2.76	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
FA85205-19	**MW-45**					
Perfluoroheptanoic acid		0.0351	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0187	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0611	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.432	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.205	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-20	**MW-46**					
Perfluoroheptanoic acid		0.356	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.202	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0295	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.184	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		7.69	0.32	0.16	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		14.0	0.32	0.16	ug/l	EPA 537M QSM5.3 B-15
FA85205-21	**MW-47**					
Perfluoroheptanoic acid		0.160	0.0083	0.0042	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0777	0.0083	0.0042	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid		0.0058 J	0.0083	0.0042	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0372	0.0083	0.0042	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.481	0.0083	0.0042	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.852	0.042	0.021	ug/l	EPA 537M QSM5.3 B-15
FA85205-22	**MW-48**					
Perfluoroheptanoic acid		0.138	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0452	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0692	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15

Summary of Hits

Job Number: FA85205
Account: TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY
Collected: 04/26/21 thru 04/28/21

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	LOQ	LOD	Units	Method
Perfluorohexanesulfonic acid	0.230	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid	0.0039 J	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
FA85205-23 MW-51					
Perfluoroheptanoic acid	0.0986	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid	0.123	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid	0.0223	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid	0.0319	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid	1.11	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid	2.85	0.080	0.040	ug/l	EPA 537M QSM5.3 B-15
FA85205-24 MW-53					
Perfluoroheptanoic acid	0.0024 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid	0.0036 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid	0.0080	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-25 MW-54					
Perfluorobutanesulfonic acid	0.0055 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid	0.0037 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-26 MW-55					
Perfluoroheptanoic acid	0.010	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid	0.0028 J	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid	0.0163	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid	0.0505	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid	0.0105	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15
FA85205-27 MW-56					
Perfluoroheptanoic acid	0.239	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid	0.0594	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorononanoic acid	0.0083	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid	0.0235	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid	0.355	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid	0.187	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
FA85205-28 MW-60					
Perfluorooctanesulfonic acid	0.0049 J	0.0088	0.0044	ug/l	EPA 537M QSM5.3 B-15

Summary of Hits

Job Number: FA85205
Account: TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY
Collected: 04/26/21 thru 04/28/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA85205-29	**EQUIPMENT BLANK**					
No hits reported in this sample.						
FA85205-30	**MW-58**					
Perfluoroheptanoic acid		0.0077 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanoic acid		0.0034 J	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorobutanesulfonic acid		0.0175	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorohexanesulfonic acid		0.0879	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15
Perfluorooctanesulfonic acid		0.0297	0.0080	0.0040	ug/l	EPA 537M QSM5.3 B-15

(a) Dilution due to sample clogging SPE cartridge, only partial volume was extracted.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-2R		
Lab Sample ID:	FA85205-1	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14930.D	1	05/13/21 13:58	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0604	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0323	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0051	0.0080	0.0040	0.0020	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0076	0.0080	0.0040	0.0020	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.0227	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.159	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	95%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	94%		50-150%
	13C3-PFBS	94%		50-150%
	13C3-PFHxS	90%		50-150%
	13C8-PFOS	89%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	FA85205-2	**Date Sampled:**	04/28/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14932.D	1	05/13/21 14:43	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.189	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.100	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0119	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0067	0.0080	0.0040	0.0020	ug/l	J
1763-23-1	Perfluorooctanesulfonic acid	0.0087	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	86%		50-150%
	13C8-PFOA	85%		50-150%
	13C9-PFNA	85%		50-150%
	13C3-PFBS	86%		50-150%
	13C3-PFHxS	84%		50-150%
	13C8-PFOS	79%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	FA85205-3	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14934.D	1	05/13/21 15:13	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0034	0.0080	0.0040	0.0020	ug/l	J
335-67-1	Perfluorooctanoic acid	0.0045	0.0080	0.0040	0.0020	ug/l	J
375-95-1	Perfluorononanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0066	0.0080	0.0040	0.0020	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.0440	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.117	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	100%		50-150%
	13C8-PFOA	99%		50-150%
	13C9-PFNA	97%		50-150%
	13C3-PFBS	97%		50-150%
	13C3-PFHxS	97%		50-150%
	13C8-PFOS	89%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-30		
Lab Sample ID:	FA85205-4	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14935.D	1	05/13/21 15:36	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0318	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0223	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0029	0.0080	0.0040	0.0020	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0115	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.231	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.510	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	101%		50-150%
	13C8-PFOA	100%		50-150%
	13C9-PFNA	97%		50-150%
	13C3-PFBS	100%		50-150%
	13C3-PFHxS	100%		50-150%
	13C8-PFOS	87%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29		
Lab Sample ID:	FA85205-5	**Date Sampled:**	04/28/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14937.D	1	05/13/21 16:06	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0058	0.0080	0.0040	0.0020	ug/l	J

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	94%		50-150%
	13C8-PFOA	93%		50-150%
	13C9-PFNA	90%		50-150%
	13C3-PFBS	93%		50-150%
	13C3-PFHxS	89%		50-150%
	13C8-PFOS	82%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-32		
Lab Sample ID:	FA85205-6	**Date Sampled:**	04/28/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14940.D	1	05/13/21 16:51	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0925	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0360	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0070	0.0080	0.0040	0.0020	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0151	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.225	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.273	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	90%		50-150%
	13C8-PFOA	90%		50-150%
	13C9-PFNA	85%		50-150%
	13C3-PFBS	87%		50-150%
	13C3-PFHxS	87%		50-150%
	13C8-PFOS	82%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-33R		
Lab Sample ID:	FA85205-7	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14941.D	1	05/13/21 17:06	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.104	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0423	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0069	0.0080	0.0040	0.0020	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0312	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.107	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.599	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	83%		50-150%
	13C8-PFOA	84%		50-150%
	13C9-PFNA	83%		50-150%
	13C3-PFBS	75%		50-150%
	13C3-PFHxS	85%		50-150%
	13C8-PFOS	76%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-33R DUP		
Lab Sample ID:	FA85205-8	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14942.D	1	05/13/21 17:22	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.104	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0428	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0071	0.0080	0.0040	0.0020	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0285	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.107	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.610	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	78%		50-150%
	13C8-PFOA	79%		50-150%
	13C9-PFNA	77%		50-150%
	13C3-PFBS	70%		50-150%
	13C3-PFHxS	79%		50-150%
	13C8-PFOS	73%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-35		
Lab Sample ID:	FA85205-9	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14943.D	1	05/13/21 17:37	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	84%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	83%		50-150%
	13C3-PFBS	83%		50-150%
	13C3-PFHxS	79%		50-150%
	13C8-PFOS	76%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-36		
Lab Sample ID:	FA85205-10	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14944.D	1	05/13/21 17:52	MV	05/12/21 10:00	OP85360	S4Q208
Run #2	4Q14945.D	10	05/13/21 18:07	MV	05/12/21 10:00	OP85360	S4Q208
Run #3	4Q15031.D	40	05/14/21 18:10	MV	05/12/21 10:00	OP85360	S4Q209

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml
Run #3	125 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0819	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.156	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0027	0.0080	0.0040	0.0020	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.335	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	1.48 [a]	0.080	0.040	0.020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	13.6 [b]	0.32	0.16	0.080	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFHpA	96%	98%	105%	50-150%
	13C8-PFOA	93%	98%	107%	50-150%
	13C9-PFNA	63%	90%	102%	50-150%
	13C3-PFBS	96%	101%	112%	50-150%
	13C3-PFHxS	92%	107%	90%	50-150%
	13C8-PFOS	55%	80%	98%	50-150%

(a) Result is from Run# 2
(b) Result is from Run# 3

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-36 DUP		
Lab Sample ID:	FA85205-11	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14946.D	1	05/13/21 18:22	MV	05/12/21 10:00	OP85360	S4Q208
Run #2	4Q14947.D	10	05/13/21 18:37	MV	05/12/21 10:00	OP85360	S4Q208
Run #3	4Q14948.D	20	05/13/21 18:52	MV	05/12/21 10:00	OP85360	S4Q208

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml
Run #3	125 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0766	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.146	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0026	0.0080	0.0040	0.0020	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.309	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	1.58 [a]	0.080	0.040	0.020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	14.7 [b]	0.16	0.080	0.040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFHpA	94%	102%	99%	50-150%
	13C8-PFOA	91%	98%	98%	50-150%
	13C9-PFNA	63%	91%	94%	50-150%
	13C3-PFBS	93%	113%	102%	50-150%
	13C3-PFHxS	89%	96%	106%	50-150%
	13C8-PFOS	56%	82%	80%	50-150%

(a) Result is from Run# 2

(b) Result is from Run# 3

U = Not detected LOD = Limit of Detection J = Indicates an estimated value

LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-38		
Lab Sample ID:	FA85205-12	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14949.D	1	05/13/21 19:07	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0268	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0127	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0892	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.135	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0700	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	96%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	94%		50-150%
	13C3-PFBS	93%		50-150%
	13C3-PFHxS	94%		50-150%
	13C8-PFOS	88%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-39		
Lab Sample ID:	FA85205-13	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14952.D	1	05/13/21 19:52	MV	05/12/21 10:00	OP85360	S4Q208
Run #2	4Q14953.D	5	05/13/21 20:06	MV	05/12/21 10:00	OP85360	S4Q208

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.100	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0476	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0050	0.0080	0.0040	0.0020	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0452	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.900 [a]	0.040	0.020	0.010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.929 [a]	0.040	0.020	0.010	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	95%	93%	50-150%
	13C8-PFOA	96%	93%	50-150%
	13C9-PFNA	90%	91%	50-150%
	13C3-PFBS	94%	94%	50-150%
	13C3-PFHxS	90%	89%	50-150%
	13C8-PFOS	89%	91%	50-150%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-40		
Lab Sample ID:	FA85205-14	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14954.D	1	05/13/21 20:21	MV	05/12/21 10:00	OP85360	S4Q208
Run #2	4Q14955.D	10	05/13/21 20:36	MV	05/12/21 10:00	OP85360	S4Q208

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.496	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.238	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0321	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.107	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	1.63 [a]	0.080	0.040	0.020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	2.73 [a]	0.080	0.040	0.020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	92%	99%	50-150%
	13C8-PFOA	92%	101%	50-150%
	13C9-PFNA	87%	98%	50-150%
	13C3-PFBS	94%	104%	50-150%
	13C3-PFHxS	90%	106%	50-150%
	13C8-PFOS	83%	90%	50-150%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-41		
Lab Sample ID:	FA85205-15	**Date Sampled:**	04/26/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14956.D	1	05/13/21 20:51	MV	05/12/21 10:00	OP85360	S4Q208
Run #2	4Q14957.D	10	05/13/21 21:06	MV	05/12/21 10:00	OP85360	S4Q208

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.192	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.117	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0143	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0456	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	1.30 [a]	0.080	0.040	0.020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	3.14 [a]	0.080	0.040	0.020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	91%	89%	50-150%
	13C8-PFOA	89%	88%	50-150%
	13C9-PFNA	78%	87%	50-150%
	13C3-PFBS	89%	89%	50-150%
	13C3-PFHxS	87%	89%	50-150%
	13C8-PFOS	75%	84%	50-150%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-42		
Lab Sample ID:	FA85205-16	**Date Sampled:**	04/26/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14958.D	1	05/13/21 21:21	MV	05/12/21 10:00	OP85360	S4Q208
Run #2	4Q14959.D	5	05/13/21 21:36	MV	05/12/21 10:00	OP85360	S4Q208

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.132	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.115	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0045	0.0080	0.0040	0.0020	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.274	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	1.40 [a]	0.040	0.020	0.010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	1.65 [a]	0.040	0.020	0.010	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	85%	97%	50-150%
	13C8-PFOA	86%	98%	50-150%
	13C9-PFNA	81%	94%	50-150%
	13C3-PFBS	84%	96%	50-150%
	13C3-PFHxS	84%	107%	50-150%
	13C8-PFOS	75%	91%	50-150%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-43		
Lab Sample ID:	FA85205-17	**Date Sampled:**	04/26/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q14960.D	1.1	05/13/21 21:51	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0571	0.0088	0.0044	0.0022	ug/l	
335-67-1	Perfluorooctanoic acid	0.0320	0.0088	0.0044	0.0022	ug/l	
375-95-1	Perfluorononanoic acid	0.0027	0.0088	0.0044	0.0022	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0555	0.0088	0.0044	0.0022	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.357	0.0088	0.0044	0.0022	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.455	0.0088	0.0044	0.0022	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	96%		50-150%
	13C8-PFOA	95%		50-150%
	13C9-PFNA	90%		50-150%
	13C3-PFBS	95%		50-150%
	13C3-PFHxS	94%		50-150%
	13C8-PFOS	86%		50-150%

(a) Dilution due to sample clogging SPE cartridge, only partial volume was extracted.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-44		
Lab Sample ID:	FA85205-18	**Date Sampled:**	04/26/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14964.D	1	05/13/21 22:51	MV	05/12/21 10:00	OP85360	S4Q208
Run #2	4Q14965.D	10	05/13/21 23:06	MV	05/12/21 10:00	OP85360	S4Q208

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.108	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0711	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0120	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0891	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	1.06 [a]	0.080	0.040	0.020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	2.76 [a]	0.080	0.040	0.020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	98%	97%	50-150%
	13C8-PFOA	98%	97%	50-150%
	13C9-PFNA	84%	95%	50-150%
	13C3-PFBS	98%	100%	50-150%
	13C3-PFHxS	93%	97%	50-150%
	13C8-PFOS	80%	93%	50-150%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-45		
Lab Sample ID:	FA85205-19	**Date Sampled:**	04/26/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14966.D	1	05/13/21 23:21	MV	05/12/21 10:00	OP85360	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0351	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0187	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0611	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.432	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.205	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	95%		50-150%
	13C8-PFOA	95%		50-150%
	13C9-PFNA	93%		50-150%
	13C3-PFBS	92%		50-150%
	13C3-PFHxS	93%		50-150%
	13C8-PFOS	86%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-46		
Lab Sample ID:	FA85205-20	**Date Sampled:**	04/26/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14967.D	1	05/13/21 23:36	MV	05/12/21 10:00	OP85360	S4Q208
Run #2	4Q15032.D	40	05/14/21 18:25	MV	05/12/21 10:00	OP85360	S4Q209

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.356	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.202	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0295	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.184	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	7.69 [a]	0.32	0.16	0.080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	14.0 [a]	0.32	0.16	0.080	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	87%	107%	50-150%
	13C8-PFOA	100%	112%	50-150%
	13C9-PFNA	65%	110%	50-150%
	13C3-PFBS	98%	108%	50-150%
	13C3-PFHxS	81%	117%	50-150%
	13C8-PFOS	64%	102%	50-150%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-47		
Lab Sample ID:	FA85205-21	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14971.D	1	05/14/21 00:35	MV	05/12/21 12:00	OP85361	S4Q208
Run #2	4Q14972.D	5	05/14/21 00:50	MV	05/12/21 12:00	OP85361	S4Q208

	Initial Volume	Final Volume
Run #1	120 ml	1.0 ml
Run #2	120 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.160	0.0083	0.0042	0.0021	ug/l	
335-67-1	Perfluorooctanoic acid	0.0777	0.0083	0.0042	0.0021	ug/l	
375-95-1	Perfluorononanoic acid	0.0058	0.0083	0.0042	0.0021	ug/l	J
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0372	0.0083	0.0042	0.0021	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.481	0.0083	0.0042	0.0021	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.852 [a]	0.042	0.021	0.010	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	71%	74%	50-150%
	13C8-PFOA	72%	73%	50-150%
	13C9-PFNA	65%	68%	50-150%
	13C3-PFBS	72%	75%	50-150%
	13C3-PFHxS	71%	73%	50-150%
	13C8-PFOS	56%	61%	50-150%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-48
Lab Sample ID: FA85205-22
Matrix: AQ - Ground Water
Method: EPA 537M QSM5.3 B-15 EPA 537 MOD
Project: DFSP; 5449 W Main St, Verona, NY

Date Sampled: 04/26/21
Date Received: 05/01/21
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14977.D	1.1	05/14/21 02:05	MV	05/12/21 12:00	OP85361	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.138	0.0088	0.0044	0.0022	ug/l	
335-67-1	Perfluorooctanoic acid	0.0452	0.0088	0.0044	0.0022	ug/l	
375-95-1	Perfluorononanoic acid	0.0044 U	0.0088	0.0044	0.0022	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0692	0.0088	0.0044	0.0022	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.230	0.0088	0.0044	0.0022	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0039	0.0088	0.0044	0.0022	ug/l	J

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	96%		50-150%
	13C8-PFOA	91%		50-150%
	13C9-PFNA	87%		50-150%
	13C3-PFBS	97%		50-150%
	13C3-PFHxS	88%		50-150%
	13C8-PFOS	78%		50-150%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-51		
Lab Sample ID:	FA85205-23	**Date Sampled:**	04/27/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14979.D	1	05/14/21 02:35	MV	05/12/21 12:00	OP85361	S4Q208
Run #2	4Q14980.D	10	05/14/21 02:50	MV	05/12/21 12:00	OP85361	S4Q208

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0986	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.123	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0223	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0319	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	1.11 [a]	0.080	0.040	0.020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	2.85 [a]	0.080	0.040	0.020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	79%	83%	50-150%
	13C8-PFOA	75%	80%	50-150%
	13C9-PFNA	67%	78%	50-150%
	13C3-PFBS	84%	91%	50-150%
	13C3-PFHxS	79%	84%	50-150%
	13C8-PFOS	69%	80%	50-150%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-53		
Lab Sample ID:	FA85205-24	**Date Sampled:**	04/28/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14981.D	1	05/14/21 03:05	MV	05/12/21 12:00	OP85361	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0024	0.0080	0.0040	0.0020	ug/l	J
335-67-1	Perfluorooctanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0036	0.0080	0.0040	0.0020	ug/l	J
1763-23-1	Perfluorooctanesulfonic acid	0.0080	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	96%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	90%		50-150%
	13C3-PFBS	93%		50-150%
	13C3-PFHxS	93%		50-150%
	13C8-PFOS	80%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-54		
Lab Sample ID:	FA85205-25	**Date Sampled:**	04/28/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14982.D	1	05/14/21 03:20	MV	05/12/21 12:00	OP85361	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0055	0.0080	0.0040	0.0020	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.0037	0.0080	0.0040	0.0020	ug/l	J
1763-23-1	Perfluorooctanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	98%		50-150%
	13C8-PFOA	97%		50-150%
	13C9-PFNA	96%		50-150%
	13C3-PFBS	97%		50-150%
	13C3-PFHxS	96%		50-150%
	13C8-PFOS	91%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-55		
Lab Sample ID:	FA85205-26	**Date Sampled:**	04/28/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14983.D	1.1	05/14/21 03:35	MV	05/12/21 12:00	OP85361	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.010	0.0088	0.0044	0.0022	ug/l	
335-67-1	Perfluorooctanoic acid	0.0028	0.0088	0.0044	0.0022	ug/l	J
375-95-1	Perfluorononanoic acid	0.0044 U	0.0088	0.0044	0.0022	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0163	0.0088	0.0044	0.0022	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0505	0.0088	0.0044	0.0022	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0105	0.0088	0.0044	0.0022	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	96%		50-150%
	13C8-PFOA	92%		50-150%
	13C9-PFNA	90%		50-150%
	13C3-PFBS	94%		50-150%
	13C3-PFHxS	89%		50-150%
	13C8-PFOS	82%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-56		
Lab Sample ID:	FA85205-27	**Date Sampled:**	04/26/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14984.D	1	05/14/21 03:50	MV	05/12/21 12:00	OP85361	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.239	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0594	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0083	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0235	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.355	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.187	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	91%		50-150%
	13C8-PFOA	92%		50-150%
	13C9-PFNA	92%		50-150%
	13C3-PFBS	91%		50-150%
	13C3-PFHxS	88%		50-150%
	13C8-PFOS	83%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-60		
Lab Sample ID:	FA85205-28	**Date Sampled:**	04/26/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14987.D	1.1	05/14/21 04:35	MV	05/12/21 12:00	OP85361	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0044 U	0.0088	0.0044	0.0022	ug/l	
335-67-1	Perfluorooctanoic acid	0.0044 U	0.0088	0.0044	0.0022	ug/l	
375-95-1	Perfluorononanoic acid	0.0044 U	0.0088	0.0044	0.0022	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0044 U	0.0088	0.0044	0.0022	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0044 U	0.0088	0.0044	0.0022	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0049	0.0088	0.0044	0.0022	ug/l	J

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	95%		50-150%
	13C8-PFOA	95%		50-150%
	13C9-PFNA	93%		50-150%
	13C3-PFBS	90%		50-150%
	13C3-PFHxS	90%		50-150%
	13C8-PFOS	89%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	FA85205-29	**Date Sampled:**	04/26/21
Matrix:	AQ - Equipment Blank	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14988.D	1	05/14/21 04:49	MV	05/12/21 12:00	OP85361	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	81%		50-150%
	13C8-PFOA	71%		50-150%
	13C9-PFNA	67%		50-150%
	13C3-PFBS	84%		50-150%
	13C3-PFHxS	70%		50-150%
	13C8-PFOS	66%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-58		
Lab Sample ID:	FA85205-30	**Date Sampled:**	04/26/21
Matrix:	AQ - Ground Water	**Date Received:**	05/01/21
Method:	EPA 537M QSM5.3 B-15 EPA 537 MOD	**Percent Solids:**	n/a
Project:	DFSP; 5449 W Main St, Verona, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q14989.D	1	05/14/21 05:04	MV	05/12/21 12:00	OP85361	S4Q208
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0077	0.0080	0.0040	0.0020	ug/l	J
335-67-1	Perfluorooctanoic acid	0.0034	0.0080	0.0040	0.0020	ug/l	J
375-95-1	Perfluorononanoic acid	0.0040 U	0.0080	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.0175	0.0080	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0879	0.0080	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0297	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFHpA	89%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	84%		50-150%
	13C3-PFBS	89%		50-150%
	13C3-PFHxS	85%		50-150%
	13C8-PFOS	82%		50-150%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

FA 85205 Page 1 of 3

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #:

Client / Reporting Information

Company Name: TK&K Services
Street Address: 719 Hale Street
City State Zip: Beverly, MA 01915
Project Contact E-mail: Brian Emery brian.emery@tkandk.com
Phone #: 978.653.4138, EXT. 104
Sampler(s) Name(s) Phone #: B. Emery TK&K/Adirondack Env.

Project Information

Project Name: DFSP Verona
Street: 5449 West Main Street
City State: Verona, NY
Project #: 14003.0001
Client Purchase Order #: 14003.00011
Project Manager: Eric Blomberg

Billing Information (if different from Report to)

Company Name: TK&K Services
Street Address: 5665 Atlanta Highway, Suite 103-211
City State Zip: Alpharetta, GA, 30004
Attention: Kelly

Requested Analysis

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	EPA 537M ID QSM 5.3 B-15	LAB USE ONLY
1	MW-2R		4/27/21	1515	RB	G	W	2									X	
2	MW-5		4/28/21	1025	RB	G	W										X	
3	MW-13		4/27/21	1602	RB	G	W										X	
4	MW-30		4/27/21	1415	RB	G	W										X	
5	MW-29		4/28/21	1022	KA	G	W										X	
6	MW-32		4/28/21	0907	KA	G	W										X	
7	MW-33R		4/27/21	1614	KA	G	W										X	
8	MW-33R DUP		4/27/21	1614	KA	G	W										X	
9	MW-35		4/27/21	1135	RB	G	W										X	
10	MW-36		4/27/21	1455	KA	G	W										X	
11	MW-36 DUP		4/27/21	1455	KA	G	W										X	
12	MW-38		4/27/21	1615	RB	G	W	↓									X	

INITIAL ASSESSMENT: CMV
LABEL VERIFICATION: PM

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [x] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other
- [ ] All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Data Deliverable Information

- [x] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [ ] EDD Format

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Per quote dated 3/30/2021 by Andrea Colby.

SGS-ACCUTEST MARLBOR 4/29

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date / Time:	Received By:	Date / Time:
1		4/28/2 1200	1	4/29/21 12:00
2		4/29/21 0930	2	
3		4/29/21 1810	3	
4		5/1/21	4	
5	COC page one		5	

Custody Seal # 0329 ☐ Intact ☐ Not intact ☐ Absent ☐ Preserved where applicable 940 On Ice Cooler Temp. °C 2.0 Therm. ID:

FA85205: Chain of Custody
Page 1 of 4

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking # | Bottle Order Control #
SGS Quote # | SGS Job #

Client / Reporting Information

Company Name: TK&K Services
Street Address: 719 Hale Street
City State Zip: Beverly, MA 01915
Project Contact E-mail: Brian Emery brian.emery@tkandk.com
Phone #: 978.653.4138, EXT. 104
Sampler(s) Name(s) Phone #: B. Emery TK&K/Adirondack Env.

Project Information

Project Name: DFSP Verona
Street: 5449 West Main Street
City State: Verona, NY
Project #: 14003.0001
Client Purchase Order #: 14003.00011
Project Manager: Eric Blomberg

Billing Information (If different from Report to)

Company Name: TK&K Services
Street Address: 5665 Atlanta Highway, Suite 103-211
City State Zip: Alpharetta, GA, 30004
Attention: Kelly

Requested Analysis

EPA 537/M ID QSM 5.3 B-15

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	EPA 537/M ID QSM 5.3 B-15	LAB USE ONLY
13	MW-39		4/27/21	1317		G	W	2									X	
14	MW-40		4/27/21	1127	KA	G	W										X	
15	MW-41		4/26/21	1453	KA	G	W										X	
16	MW-42		4/26/21	1510	KA	G	W										X	
17	MW-43		4/26/21	1614	RB	G	W										X	
18	MW-44		4/26/21	1600	KA	G	W										X	
19	MW-45		4/26/21	1625	KA	G	W										X	
20	MW-46		4/26/21	1345	KA	G	W										X	
21	MW-47		4/27/21	1556	RB	G	W										X	
22	MW-48		4/28/21	1218	RB	G	W										X	
23	MW-51		4/27/21	1540	RB	G	W										X	
24	MW-53		4/28/21	1142	KA	G	W										X	

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [x] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Data Deliverable Information

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- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria_____
- [ ] CT RCP Criteria_____
- [ ] State Forms
- [ ] EDD Format _____

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Per quote dated 3/30/2021 by Andrea Colby.

http://www.sgs.com/en/terms-and-conditions

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	Relinquished by:	Date / Time:	Received by:
1		4/28/21 1200	4/28/21 12:00
2		4/27/21 9:30A	4/27/21 0930
3		4/29/21 1800	
4			5/1/21 0930
5	CoC page two		

Custody Seal # | Intact | Not intact | Preserved where applicable | Absent | Therm. ID: | On Ice | Cooler Temp. °C

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking # | Bottle Order Control #
SGS Quote # | SGS Job #

Client / Reporting Information

Company Name: TK&K Services
Street Address: 719 Hale Street
City State Zip: Beverly, MA 01915
Project Contact E-mail: Brian Emery brian.emery@tkandk.com
Phone #: 978.653.4138, EXT. 104
Sampler(s) Name(s) Phone #: B. Emery TK&K/Adirondack Env.

Project Information

Project Name: DFSP Verona
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Project #: 14003.0001
Client Purchase Order #: 14003.00011
Project Manager: Eric Blomberg

Billing Information (if different from Report to)

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Street Address: 5665 Atlanta Highway, Suite 103-211
City State Zip: Alpharetta, GA, 30004
Attention: Kelly

Requested Analysis

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	EPA 537M ID QSM 5.3 B-15	LAB USE ONLY
25	MW-54		4/28/21	0935	RB	G	W	2									X	
26	MW-55		4/28/21	1035	RB	G	W										X	
27	MW-56		4/26/21	1702	KA	G	W										X	
28	MW-60		4/26/21	1724	KA	G	W										X	
29	Equipment Blank		4/26/21	1320	RB	G	W										X	
30	MW-58		4/26/21	1702	RB	G	W	↓									X	
						G	W										X	
						G	W										X	
						G	W										X	
						G	W										X	
						G	W										X	
						G	W										X	

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [x] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
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- [ ] Other
- [ ] All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Data Deliverable Information

- [x] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
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Comments / Special Instructions

Per quote dated 3/30/2021 by Andrea Colby.

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished By:	Date / Time:	Received By:
1		4/28/21 1200	1 4/29/21 12:00
2	4/29/21 9:30A	4/29/21 0930	2
3	4/29/21 1205		3
4		4/29/21	4
5	COC page three		5

Custody Seal # | Intact | Not intact | Preserved where applicable | Absent | Therm. ID: 940 | On Ice | Cooler Temp. °C

SGS Sample Receipt Summary

Job Number: FA85205 **Client:** TK&K SERVICES **Project:** DFSP VERONA

Date / Time Received: 5/1/2021 9:40:00 AM **Delivery Method:** FX **Airbill #'s:** 9304 4370 3694

Therm ID: IR 1; **Therm CF:** -1.8; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (2.0);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 5/1/2021 9:40:00 AM Reviewer: _____ Date: _____

FA85205: Chain of Custody
Page 4 of 4

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Isotope Dilution Standard Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Instrument Blank

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q208-IBLK	4Q14925.D	1	05/13/21	MV	n/a	n/a	S4Q208

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-1, FA85205-2, FA85205-3, FA85205-4, FA85205-5, FA85205-6, FA85205-7, FA85205-8, FA85205-9, FA85205-10, FA85205-11, FA85205-12, FA85205-13, FA85205-14, FA85205-15, FA85205-16, FA85205-17, FA85205-18, FA85205-19, FA85205-20, FA85205-21, FA85205-22, FA85205-23, FA85205-24, FA85205-25, FA85205-26, FA85205-27, FA85205-28, FA85205-29, FA85205-30

CAS No.	Compound	Result	RL	MDL	Units	Q
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.0010	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0010	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	97%	50-150%
	13C5-PFPeA	97%	50-150%
	13C5-PFHxA	96%	50-150%
	13C4-PFHpA	97%	50-150%
	13C8-PFOA	97%	50-150%
	13C9-PFNA	97%	50-150%
	13C6-PFDA	97%	50-150%
	13C7-PFUnDA	99%	50-150%
	13C2-PFDoDA	96%	50-150%
	13C2-PFTeDA	90%	50-150%
	13C3-PFBS	96%	50-150%
	13C3-PFHxS	95%	50-150%
	13C8-PFOS	98%	50-150%
	13C8-FOSA	100%	50-150%
	d3-MeFOSA	97%	50-150%
	d3-MeFOSAA	107%	50-150%
	d5-EtFOSAA	106%	50-150%
	13C2-4:2FTS	90%	50-150%
	13C2-6:2FTS	91%	50-150%
	13C2-8:2FTS	94%	50-150%
	13C3-HFPO-DA	101%	50-150%

Instrument Blank

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q209-IBLK	4Q14999.D	1	05/14/21	MV	n/a	n/a	S4Q209

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-10, FA85205-20

CAS No.	Compound	Result	RL	MDL	Units	Q
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	105%	50-150%
	13C5-PFPeA	103%	50-150%
	13C5-PFHxA	102%	50-150%
	13C4-PFHpA	104%	50-150%
	13C8-PFOA	104%	50-150%
	13C9-PFNA	105%	50-150%
	13C6-PFDA	104%	50-150%
	13C7-PFUnDA	104%	50-150%
	13C2-PFDoDA	101%	50-150%
	13C2-PFTeDA	100%	50-150%
	13C3-PFBS	102%	50-150%
	13C3-PFHxS	104%	50-150%
	13C8-PFOS	105%	50-150%
	13C8-FOSA	109%	50-150%
	d3-MeFOSA	107%	50-150%
	d3-MeFOSAA	119%	50-150%
	d5-EtFOSAA	122%	50-150%
	13C2-4:2FTS	98%	50-150%
	13C2-6:2FTS	100%	50-150%
	13C2-8:2FTS	98%	50-150%
	13C3-HFPO-DA	103%	50-150%

Method Blank Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP85360-MB	4Q14929.D	1	05/13/21	MV	05/12/21	OP85360	S4Q208

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-1, FA85205-2, FA85205-3, FA85205-4, FA85205-5, FA85205-6, FA85205-7, FA85205-8, FA85205-9, FA85205-10, FA85205-11, FA85205-12, FA85205-13, FA85205-14, FA85205-15, FA85205-16, FA85205-17, FA85205-18, FA85205-19, FA85205-20

CAS No.	Compound	Result	RL	MDL	Units	Q
375-85-9	Perfluoroheptanoic acid	ND	0.0080	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0080	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0080	0.0020	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0080	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0080	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0080	0.0020	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFHpA	87%	50-150%
	13C8-PFOA	86%	50-150%
	13C9-PFNA	84%	50-150%
	13C3-PFBS	87%	50-150%
	13C3-PFHxS	83%	50-150%
	13C8-PFOS	79%	50-150%

Method Blank Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP85361-MB	4Q14970.D	1	05/14/21	MV	05/12/21	OP85361	S4Q208

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-21, FA85205-22, FA85205-23, FA85205-24, FA85205-25, FA85205-26, FA85205-27, FA85205-28, FA85205-29, FA85205-30

CAS No.	Compound	Result	RL	MDL	Units	Q
375-85-9	Perfluoroheptanoic acid	ND	0.0080	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0080	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0080	0.0020	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0080	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0080	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0080	0.0020	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFHpA	95%	50-150%
	13C8-PFOA	94%	50-150%
	13C9-PFNA	90%	50-150%
	13C3-PFBS	95%	50-150%
	13C3-PFHxS	91%	50-150%
	13C8-PFOS	88%	50-150%

Blank Spike Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP85360-BS	4Q14928.D	1	05/13/21	MV	05/12/21	OP85360	S4Q208

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-1, FA85205-2, FA85205-3, FA85205-4, FA85205-5, FA85205-6, FA85205-7, FA85205-8, FA85205-9, FA85205-10, FA85205-11, FA85205-12, FA85205-13, FA85205-14, FA85205-15, FA85205-16, FA85205-17, FA85205-18, FA85205-19, FA85205-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-85-9	Perfluoroheptanoic acid	0.16	0.151	94	72-130
335-67-1	Perfluorooctanoic acid	0.16	0.149	93	71-133
375-95-1	Perfluorononanoic acid	0.16	0.150	94	69-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.150	94	73-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.146	91	68-131
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.150	94	65-140

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFHpA	97%	50-150%
	13C8-PFOA	95%	50-150%
	13C9-PFNA	89%	50-150%
	13C3-PFBS	96%	50-150%
	13C3-PFHxS	92%	50-150%
	13C8-PFOS	86%	50-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP85361-BS	4Q14969.D	1	05/14/21	MV	05/12/21	OP85361	S4Q208

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-21, FA85205-22, FA85205-23, FA85205-24, FA85205-25, FA85205-26, FA85205-27, FA85205-28, FA85205-29, FA85205-30

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-85-9	Perfluoroheptanoic acid	0.16	0.156	98	72-130
335-67-1	Perfluorooctanoic acid	0.16	0.154	96	71-133
375-95-1	Perfluorononanoic acid	0.16	0.154	96	69-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.158	99	73-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.151	94	68-131
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.154	96	65-140

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFHpA	95%	50-150%
	13C8-PFOA	93%	50-150%
	13C9-PFNA	87%	50-150%
	13C3-PFBS	95%	50-150%
	13C3-PFHxS	88%	50-150%
	13C8-PFOS	83%	50-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP85360-MS	4Q14931.D	1	05/13/21	MV	05/12/21	OP85360	S4Q208
FA85205-1	4Q14930.D	1	05/13/21	MV	05/12/21	OP85360	S4Q208

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-1, FA85205-2, FA85205-3, FA85205-4, FA85205-5, FA85205-6, FA85205-7, FA85205-8, FA85205-9, FA85205-10, FA85205-11, FA85205-12, FA85205-13, FA85205-14, FA85205-15, FA85205-16, FA85205-17, FA85205-18, FA85205-19, FA85205-20

CAS No.	Compound	FA85205-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-85-9	Perfluoroheptanoic acid	0.0604		0.16	0.216	97	72-130
335-67-1	Perfluorooctanoic acid	0.0323		0.16	0.188	97	71-133
375-95-1	Perfluorononanoic acid	0.0051	J	0.16	0.158	96	69-130
375-73-5	Perfluorobutanesulfonic acid	0.0076	J	0.16	0.163	97	73-130
355-46-4	Perfluorohexanesulfonic acid	0.0227		0.16	0.167	90	68-131
1763-23-1	Perfluorooctanesulfonic acid	0.159		0.16	0.319	100	65-140

CAS No.	ID Standard Recoveries	MS	FA85205-1	Limits
	13C4-PFHpA	85%	95%	50-150%
	13C8-PFOA	84%	96%	50-150%
	13C9-PFNA	83%	94%	50-150%
	13C3-PFBS	84%	94%	50-150%
	13C3-PFHxS	85%	90%	50-150%
	13C8-PFOS	79%	89%	50-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP85361-MS	4Q14976.D	5	05/14/21	MV	05/12/21	OP85361	S4Q208
FA85205-21	4Q14971.D	1	05/14/21	MV	05/12/21	OP85361	S4Q208
FA85205-21	4Q14972.D	5	05/14/21	MV	05/12/21	OP85361	S4Q208

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-21, FA85205-22, FA85205-23, FA85205-24, FA85205-25, FA85205-26, FA85205-27, FA85205-28, FA85205-29, FA85205-30

CAS No.	Compound	FA85205-21 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-85-9	Perfluoroheptanoic acid	0.160		0.16	0.321	101	72-130
335-67-1	Perfluorooctanoic acid	0.0777		0.16	0.238	100	71-133
375-95-1	Perfluorononanoic acid	0.0058	J	0.16	0.165	100	69-130
375-73-5	Perfluorobutanesulfonic acid	0.0372		0.16	0.196	99	73-130
355-46-4	Perfluorohexanesulfonic acid	0.481		0.16	0.665	115	68-131
1763-23-1	Perfluorooctanesulfonic acid	0.852 [a]		0.16	1.07	136	65-140

CAS No.	ID Standard Recoveries	MS	FA85205-21	FA85205-21	Limits
	13C4-PFHpA	88%	71%	74%	50-150%
	13C8-PFOA	88%	72%	73%	50-150%
	13C9-PFNA	86%	65%	68%	50-150%
	13C3-PFBS	90%	72%	75%	50-150%
	13C3-PFHxS	86%	71%	73%	50-150%
	13C8-PFOS	75%	56%	61%	50-150%

(a) Result is from Run #2.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP85360-DUP	4Q14933.D	1	05/13/21	MV	05/12/21	OP85360	S4Q208
FA85205-2	4Q14932.D	1	05/13/21	MV	05/12/21	OP85360	S4Q208

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-1, FA85205-2, FA85205-3, FA85205-4, FA85205-5, FA85205-6, FA85205-7, FA85205-8, FA85205-9, FA85205-10, FA85205-11, FA85205-12, FA85205-13, FA85205-14, FA85205-15, FA85205-16, FA85205-17, FA85205-18, FA85205-19, FA85205-20

CAS No.	Compound	FA85205-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-85-9	Perfluoroheptanoic acid	0.189		0.196		4	30
335-67-1	Perfluorooctanoic acid	0.100		0.105		5	30
375-95-1	Perfluorononanoic acid	0.0119		0.0134		12	30
375-73-5	Perfluorobutanesulfonic acid	0.0080	U	ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	0.0067	J	0.0069	J	3	30
1763-23-1	Perfluorooctanesulfonic acid	0.0087		0.0095		9	30

CAS No.	ID Standard Recoveries	DUP	FA85205-2	Limits
	13C4-PFHpA	90%	86%	50-150%
	13C8-PFOA	89%	85%	50-150%
	13C9-PFNA	87%	85%	50-150%
	13C3-PFBS	89%	86%	50-150%
	13C3-PFHxS	87%	84%	50-150%
	13C8-PFOS	80%	79%	50-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP85361-DUP	4Q14978.D	1	05/14/21	MV	05/12/21	OP85361	S4Q208
FA85205-22	4Q14977.D	1.1	05/14/21	MV	05/12/21	OP85361	S4Q208

The QC reported here applies to the following samples: **Method:** EPA 537M QSM5.3 B-15

FA85205-21, FA85205-22, FA85205-23, FA85205-24, FA85205-25, FA85205-26, FA85205-27, FA85205-28, FA85205-29, FA85205-30

CAS No.	Compound	FA85205-22 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-85-9	Perfluoroheptanoic acid	0.138		0.139		1	30
335-67-1	Perfluorooctanoic acid	0.0452		0.0437		3	30
375-95-1	Perfluorononanoic acid	0.0088 U		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	0.0692		0.0706		2	30
355-46-4	Perfluorohexanesulfonic acid	0.230		0.290		23	30
1763-23-1	Perfluorooctanesulfonic acid	0.0039	J	0.0045	J	14	30

CAS No.	ID Standard Recoveries	DUP	FA85205-22	Limits
	13C4-PFHpA	86%	96%	50-150%
	13C8-PFOA	86%	91%	50-150%
	13C9-PFNA	81%	87%	50-150%
	13C3-PFBS	84%	97%	50-150%
	13C3-PFHxS	82%	88%	50-150%
	13C8-PFOS	72%	78%	50-150%

* = Outside of Control Limits.

Isotope Dilution Standard Recovery Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Method: EPA 537M QSM5.3 B-15 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
FA85205-1	4Q14930.D	95	96	94	94	90	89
FA85205-2	4Q14932.D	86	85	85	86	84	79
FA85205-3	4Q14934.D	100	99	97	97	97	89
FA85205-4	4Q14935.D	101	100	97	100	100	87
FA85205-5	4Q14937.D	94	93	90	93	89	82
FA85205-6	4Q14940.D	90	90	85	87	87	82
FA85205-7	4Q14941.D	83	84	83	75	85	76
FA85205-8	4Q14942.D	78	79	77	70	79	73
FA85205-9	4Q14943.D	84	86	83	83	79	76
FA85205-10	4Q14945.D	98	98	90	101	107	80
FA85205-10	4Q14944.D	96	93	63	96	92	55
FA85205-10	4Q15031.D	105	107	102	112	90	98
FA85205-11	4Q14947.D	102	98	91	113	96	82
FA85205-11	4Q14948.D	99	98	94	102	106	80
FA85205-11	4Q14946.D	94	91	63	93	89	56
FA85205-12	4Q14949.D	96	96	94	93	94	88
FA85205-13	4Q14953.D	93	93	91	94	89	91
FA85205-13	4Q14952.D	95	96	90	94	90	89
FA85205-14	4Q14955.D	99	101	98	104	106	90
FA85205-14	4Q14954.D	92	92	87	94	90	83
FA85205-15	4Q14957.D	89	88	87	89	89	84
FA85205-15	4Q14956.D	91	89	78	89	87	75
FA85205-16	4Q14959.D	97	98	94	96	107	91
FA85205-16	4Q14958.D	85	86	81	84	84	75
FA85205-17	4Q14960.D	96	95	90	95	94	86
FA85205-18	4Q14965.D	97	97	95	100	97	93
FA85205-18	4Q14964.D	98	98	84	98	93	80
FA85205-19	4Q14966.D	95	95	93	92	93	86
FA85205-20	4Q15032.D	107	112	110	108	117	102
FA85205-20	4Q14967.D	87	100	65	98	81	64
FA85205-21	4Q14972.D	74	73	68	75	73	61
FA85205-21	4Q14971.D	71	72	65	72	71	56
FA85205-22	4Q14977.D	96	91	87	97	88	78
FA85205-23	4Q14980.D	83	80	78	91	84	80
FA85205-23	4Q14979.D	79	75	67	84	79	69
FA85205-24	4Q14981.D	96	96	90	93	93	80
FA85205-25	4Q14982.D	98	97	96	97	96	91
FA85205-26	4Q14983.D	96	92	90	94	89	82
FA85205-27	4Q14984.D	91	92	92	91	88	83
FA85205-28	4Q14987.D	95	95	93	90	90	89

Isotope Dilution Standard Recovery Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Method: EPA 537M QSM5.3 B-15 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
FA85205-29	4Q14988.D	81	71	67	84	70	66
FA85205-30	4Q14989.D	89	86	84	89	85	82
OP85360-BS	4Q14928.D	97	95	89	96	92	86
OP85360-DUP	4Q14933.D	90	89	87	89	87	80
OP85360-MB	4Q14929.D	87	86	84	87	83	79
OP85360-MS	4Q14931.D	85	84	83	84	85	79
OP85361-BS	4Q14969.D	95	93	87	95	88	83
OP85361-DUP	4Q14978.D	86	86	81	84	82	72
OP85361-MB	4Q14970.D	95	94	90	95	91	88
OP85361-MS	4Q14976.D	88	88	86	90	86	75
S4Q208-IBLK	4Q14925.D	97	97	97	96	95	98
S4Q209-IBLK	4Q14999.D	104	104	105	102	104	105

Isotope Dilution Standards	Recovery Limits
S1 = 13C4-PFHpA	50-150%
S2 = 13C8-PFOA	50-150%
S3 = 13C9-PFNA	50-150%
S4 = 13C3-PFBS	50-150%
S5 = 13C3-PFHxS	50-150%
S6 = 13C8-PFOS	50-150%

Initial Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q207-ICC207
Lab FileID: 4Q14857.D

Initial Calibration Report

Method Path	D:\MassHunter\methods
Method File	BR_LN_051321_S4Q207.quantmethod.xml
Batch Name	D:\MassHunter\Data\051221_ID_S4Q207\QuantResults\s4q207.batch.bin
Last Calib Update	5/13/2021 9:49:17 AM

Level Name	Calibration Files	Acq. Date-Time	Level Last Update Time
1	D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d	5/12/2021 3:45:11 PM	5/13/2021 9:49:17 AM
2	D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d	5/12/2021 4:00:07 PM	5/13/2021 9:49:17 AM
3	D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d	5/12/2021 4:15:03 PM	5/13/2021 9:49:17 AM
4	D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d	5/12/2021 4:29:58 PM	5/13/2021 9:49:17 AM
5	D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d	5/12/2021 4:44:53 PM	5/13/2021 9:49:17 AM
6	D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d	5/12/2021 4:59:49 PM	5/13/2021 9:49:17 AM
7	D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d	5/12/2021 5:14:46 PM	5/13/2021 9:49:17 AM
8	D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d	5/12/2021 5:29:47 PM	5/13/2021 9:49:17 AM

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
S 13C4-PFBA	Linear	2320	2184	2305	2300	2293	2246	2185	2240	2259	2.379
S 13C5-PFPeA	Linear	4671	4389	4576	4612	4589	4514	4444	4599	4549	2.063
S 13C3-PFBS	Linear	358.2	347.0	358.0	362.2	360.2	354.6	347.3	370.5	357.3	2.174
S 13C2-4:2FTS	Linear	1944	1829	1922	1950	1985	2029	2146	2519	2041	10.479
S 13C5-PFHxA	Linear	5931	5631	5825	5805	5820	5725	5608	5823	5771	1.890
S 13C3-HFPO-DA	Linear	617.9	587.7	619.8	607.1	619.8	605.8	606.4	627.8	611.6	2.039
S 13C4-PFHpA	Linear	4973	4688	4949	4974	4935	4773	4702	4836	4854	2.481
S 13C3-PFHxS	Linear	333.1	323.6	332.4	347.8	333.1	325.8	318.5	325.1	329.9	2.705
S 13C2-6:2FTS	Linear	2806	2652	2778	2773	2833	2858	2974	3317	2874	6.982
S 13C8-PFOA	Linear	8170	7789	8015	8018	8061	7865	7726	7729	7921	2.107
S 13C8-PFOS	Linear	523.3	494.7	528.4	517.4	521.4	503.7	498.6	501.7	511.2	2.522
S 13C9-PFNA	Linear	7733	7295	7516	7533	7555	7365	7043	7035	7384	3.384
S 13C8-FOSA	Linear	2070	2029	2069	2037	2013	1928	1769	1620	1942	8.435
S 13C6-PFDA	Linear	6049	5833	6016	6070	5961	5807	5455	5341	5816	4.759
S 13C2-8:2FTS	Linear	2557	2407	2511	2485	2547	2519	2612	2860	2562	5.234
S d3-MeFOSA	Linear	638.6	601.9	617.6	613.5	619.4	608.4	574.7	525.5	600.0	5.851
S d3-MeFOSAA	Linear	1740	1666	1694	1716	1705	1644	1606	1543	1664	3.901
S 13C7-PFUnDA	Linear	8724	8179	8577	8555	8475	8151	7769	7487	8240	5.234
S d5-EtFOSAA	Linear	1584	1486	1576	1579	1573	1485	1480	1426	1524	4.007
S 13C2-PFDoDA	Linear	9054	8697	9103	9160	9062	8829	8588	8611	8888	2.637
S 13C2-PFTeDA	Linear	10781	10313	10841	10837	10839	10538	10407	10484	10630	2.054
						ISTD					
I M4-PFBA											
T PFBA	Linear	0.3498	0.4781	0.4227	0.4261	0.4217	0.4493	0.4468	0.4360	0.4288	8.617
						ISTD					
I M5-PFPeA											
T PFPeA	Linear	0.8370	1.0422	0.9181	0.9446	0.9293	0.9843	0.9894	0.9561	0.9501	6.352
						ISTD					
I M5-PFHxA											
T PFHxA	Linear	0.8743	1.0447	0.9408	0.9867	0.9583	1.0216	1.0145	0.9817	0.9778	5.509

Generated at 9:49 AM on 5/13/2021

Initial Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q207-ICC207
Lab FileID: 4Q14857.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M4-PFHpA						ISTD					
T PFHpA	Linear	1.2635	1.5898	1.3554	1.4571	1.4206	1.5565	1.5004	1.4858	1.4537	7.319
I M8-PFOA						ISTD					
T br-PFOA	Linear	0.9892	1.2552	1.1529	1.2041	1.1811	1.2673	1.2476	1.2174	1.1894	7.539
T PFOA	Linear	1.0199	1.2552	1.1529	1.2041	1.1811	1.2673	1.2476	1.2174	1.1932	6.704
T LN-PFOA	Linear	0.9892	1.2552	1.1529	1.2041	1.1811	1.2673	1.2476	1.2174	1.1894	7.539
I M9-PFNA						ISTD					
T br-PFNA	Linear	0.7268	0.9780	0.8296	0.8779	0.8506	0.9033	0.9001	0.8972	0.8704	8.351
T PFNA	Linear	0.7268	0.9780	0.8296	0.8779	0.8506	0.9033	0.9001	0.8972	0.8704	8.351
T LN-PFNA	Linear	0.7268	0.9780	0.8296	0.8779	0.8506	0.9033	0.9001	0.8972	0.8704	8.351
I M6-PFDA						ISTD					
T 9Cl-PF3ONS	Linear	0.6289	0.7997	0.7123	0.6948	0.7091	0.7751	0.8122	0.8070	0.7424	8.898
T PFDA	Linear	1.1369	1.3873	1.1908	1.2519	1.2414	1.3119	1.3023	1.2720	1.2618	6.078
I M7-PFUnDA						ISTD					
T PFDS	Linear	0.0797	0.1006	0.0965	0.0955	0.0935	0.1009	0.1028	0.1045	0.0968	8.102
T PFUnDA	Linear	0.7519	0.9748	0.8402	0.9186	0.9059	0.9709	0.9509	0.9602	0.9092	8.526
I M2-PFDoDA						ISTD					
T 11Cl-PF3OUdS	Linear	0.3737	0.4726	0.4149	0.4174	0.4242	0.4424	0.4526	0.4461	0.4305	6.983
T PFDoDA	Linear	0.8176	1.0327	0.9200	0.9374	0.9435	1.0152	1.0153	0.9883	0.9588	7.358
I M2-PFTeDA						ISTD					
T PFTrDA	Linear	0.6870	0.9152	0.7933	0.8271	0.8147	0.8896	0.8665	0.8630	0.8321	8.526
T PFTeDA	Linear	0.9749	1.1701	1.0340	1.0766	1.0815	1.1316	1.1271	1.0915	1.0859	5.616
I M8-FOSA						ISTD					
T FOSA	Linear	0.8389	0.9997	0.9713	0.9975	0.9550	1.0215	1.0100	1.0102	0.9755	6.087
I M3-PFBS						ISTD					
T PFBS	Linear	2.6406	3.1821	2.8584	2.9025	2.9232	3.0651	3.1031	2.9360	2.9514	5.697
T PFBeS	Linear	1.5811	2.0256	1.8405	1.8811	1.8555	1.9334	1.9526	1.8600	1.8662	7.007
I M3-PFHxS						ISTD					
T br-PFHxS	Linear	2.7693	3.1468	2.7851	2.6179	2.8196	2.9189	2.8706	2.8929	2.8526	5.310
T PFHxS	Linear	2.3572	2.6715	2.3196	2.3205	2.3612	2.5600	2.4982	2.4509	2.4424	5.209
T LN-PFHxS	Linear	2.2940	2.6067	2.2562	2.2798	2.2987	2.5110	2.4475	2.3907	2.3856	5.311
T ADONA	Linear	22.82	28.40	25.06	25.83	26.33	28.27	27.77	27.93	26.55	7.320
I M8-PFOS						ISTD					
T PFHpS	Linear	1.6624	1.7879	1.5008	1.5823	1.5073	1.6536	1.6390	1.6031	1.6171	5.726
T br-PFOS	Linear	2.1692	2.8642	2.6916	2.6722	2.6170	2.6098	2.6225	2.6624	2.6136	7.546
T PFOS	Linear	1.8063	2.1029	1.8984	1.9405	1.9393	1.9759	1.9334	1.9405	1.9422	4.239
T LN-PFOS	Linear	1.6904	1.8622	1.6480	1.7094	1.7253	1.7758	1.7158	1.7125	1.7299	3.710

Generated at 9:49 AM on 5/13/2021

Initial Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q207-ICC207
Lab FileID: 4Q14857.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
T PFNS	Linear	1.4456	1.6982	1.4008	1.5207	1.4421	1.5578	1.5133	1.4431	1.5027	6.290
I M2-4:2FTS				----------	----------	ISTD	----------	----------			
T 4:2FTS	Linear	1.0328	1.2772	1.1390	1.1691	1.1420	1.1640	1.0822	0.9233	1.1162	9.426
I M2-6:2FTS				----------	----------	ISTD	----------	----------			
T 6:2FTS	Linear	1.0237	1.2247	1.1231	1.1406	1.1195	1.1290	1.0513	0.8946	1.0883	9.071
I M2-8:2FTS				----------	----------	ISTD	----------	----------			
T 8:2FTS	Linear	0.9083	1.1684	1.1008	1.1104	1.0967	1.1311	1.0383	0.8902	1.0555	9.776
I M3-MeFOSAA				----------	----------	ISTD	----------	----------			
T MeFOSAA	Linear	0.7644	1.0852	0.9016	0.9223	0.9091	1.0033	0.9512	0.9691	0.9383	9.838
I M3-HFPO-DA				----------	----------	ISTD	----------	----------			
T HFPO-DA	Linear	1.7479	2.0292	1.7759	1.8642	1.8082	1.8828	1.8658	1.8390	1.8516	4.628
I M3-MeFOSA				----------	----------	ISTD	----------	----------			
T MeFOSA	Linear	1.0091	1.2314	1.1289	1.0546	1.0449	1.1049	1.0747	1.0877	1.0920	6.168
I M5-EtFOSAA				----------	----------	ISTD	----------	----------			
T EtFOSAA	Linear	0.8428	1.0032	0.8787	0.8668	0.8632	0.9514	0.9155	0.9246	0.9058	5.907

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Initial Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q207-ICC207
Lab FileID: 4Q14857.D

Initial Calibration Report

Compounds with Curve fitting not using Avg Response Factor:

Compound	Curve Fit	Curve Fit Formula	Curve Fit R2
T PFBA	Linear	y = 0.438324 * x	0.999807
S 13C4-PFBA	Linear	y = 2259.214258 * x	0.000000
S 13C5-PFPeA	Linear	y = 4549.211894 * x	0.000000
T PFPeA	Linear	y = 0.963093 * x	0.999679
S 13C3-PFBS	Linear	y = 357.264754 * x	0.000000
T PFBS	Linear	y = 2.971848 * x	0.999205
S 13C2-4:2FTS	Linear	y = 2040.511856 * x	0.000000
T 4:2FTS	Linear	y = 0.963430 * x	0.990545
S 13C5-PFHxA	Linear	y = 5771.164338 * x	0.000000
T PFHxA	Linear	y = 0.989010 * x	0.999676
T PFPeS	Linear	y = 1.880013 * x	0.999389
S 13C3-HFPO-DA	Linear	y = 611.564823 * x	0.000000
T HFPO-DA	Linear	y = 1.845300 * x	0.999924
T br-PFHxS	Linear	y = 2.888289 * x	0.999947
S 13C4-PFHpA	Linear	y = 4853.651333 * x	0.000000
T PFHpA	Linear	y = 1.490212 * x	0.999852
S 13C3-PFHxS	Linear	y = 329.929738 * x	0.000000
T PFHxS	Linear	y = 2.462385 * x	0.999808
T LN-PFHxS	Linear	y = 2.404307 * x	0.999743
T ADONA	Linear	y = 27.889218 * x	0.999926
T br-PFOA	Linear	y = 1.224405 * x	0.999782
S 13C2-6:2FTS	Linear	y = 2873.851378 * x	0.000000
T 6:2FTS	Linear	y = 0.934182 * x	0.990217
S 13C8-PFOA	Linear	y = 7921.405744 * x	0.000000
T PFOA	Linear	y = 1.224405 * x	0.999782
T LN-PFOA	Linear	y = 1.224405 * x	0.999782
T PFHpS	Linear	y = 1.610717 * x	0.999798
T br-PFOS	Linear	y = 2.652811 * x	0.999931
T br-PFNA	Linear	y = 0.897490 * x	0.999958
S 13C8-PFOS	Linear	y = 511.152694 * x	0.000000
T PFOS	Linear	y = 1.940199 * x	0.999979
T LN-PFOS	Linear	y = 1.715164 * x	0.999937
S 13C9-PFNA	Linear	y = 7384.434480 * x	0.000000
T PFNA	Linear	y = 0.897490 * x	0.999958
T LN-PFNA	Linear	y = 0.897490 * x	0.999958
T 9Cl-PF3ONS	Linear	y = 0.805985 * x	0.999686
S 13C8-FOSA	Linear	y = 1941.811355 * x	0.000000
T FOSA	Linear	y = 1.010066 * x	0.999957
T PFNS	Linear	y = 1.460256 * x	0.999958
S 13C6-PFDA	Linear	y = 5816.371884 * x	0.999230
T PFDA	Linear	y = 1.278735 * x	0.000000
S 13C2-8:2FTS	Linear	y = 2562.239750 * x	0.999822
T 8:2FTS	Linear	y = 0.928082 * x	0.000000
			0.990786

Generated at 9:49 AM on 5/13/2021

Initial Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q207-ICC207
Lab FileID: 4Q14857.D

Initial Calibration Report

S d3-MeFOSA	Linear	y = 599.961957 * x	0.000000
S d3-MeFOSAA	Linear	y = 1664.254382 * x	0.000000
T MeFOSA	Linear	y = 1.085387 * x	0.999930
T MeFOSAA	Linear	y = 0.966159 * x	0.999799
T PFDS	Linear	y = 0.103969 * x	0.999752
S 13C7-PFUnDA	Linear	y = 8239.710139 * x	0.000000
T PFUnDA	Linear	y = 0.958236 * x	0.999922
S d5-EtFOSAA	Linear	y = 1523.690914 * x	0.000000
T EtFOSAA	Linear	y = 0.923113 * x	0.999872
T 11Cl-PF3OUdS	Linear	y = 0.447040 * x	0.999898
S 13C2-PFDoDA	Linear	y = 8888.036308 * x	0.000000
T PFDoDA	Linear	y = 0.993841 * x	0.999763
T PFTrDA	Linear	y = 0.864000 * x	0.999907
S 13C2-PFTeDA	Linear	y = 10629.711463 * x	0.000000
T PFTeDA	Linear	y = 1.099440 * x	0.999707

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 9:49 AM on 5/13/2021

Initial Calibration Verification

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q207-ICV207
Lab FileID: 4Q14861.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051221_ID_S4Q207\s4q207.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14861
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.311	1.6	101.6
13C2-6:2FTS	20.000	19.851	-0.7	99.3
13C2-8:2FTS	20.000	20.334	1.7	101.7
13C2-PFDoDA	20.000	20.397	2.0	102.0
13C2-PFTeDA	20.000	20.246	1.2	101.2
13C3-PFBS	20.000	20.262	1.3	101.3
13C3-PFHxS	20.000	20.387	1.9	101.9
13C4-PFBA	20.000	20.321	1.6	101.6
13C4-PFHpA	20.000	20.529	2.6	102.6
13C5-PFHxA	20.000	20.612	3.1	103.1
13C5-PFPeA	20.000	20.342	1.7	101.7
13C6-PFDA	20.000	20.456	2.3	102.3
13C7-PFUnDA	20.000	20.667	3.3	103.3
13C8-FOSA	20.000	20.121	0.6	100.6
13C8-PFOA	20.000	20.382	1.9	101.9
13C8-PFOS	20.000	20.334	1.7	101.7
13C9-PFNA	20.000	20.300	1.5	101.5
4:2FTS	20.000	20.894	4.5	104.5
6:2FTS	20.000	20.385	1.9	101.9
8:2FTS	20.000	20.357	1.8	101.8
d3-MeFOSAA	20.000	21.091	5.5	105.5
EtFOSAA	20.000	18.288	-8.6	91.4
FOSA	20.000	17.928	-10.4	89.6
MeFOSAA	20.000	17.806	-11.0	89.0
PFBA	20.000	18.342	-8.3	91.7
PFBS	20.000	16.468	-17.7	82.3
PFDA	20.000	17.270	-13.6	86.4
PFDoDA	20.000	18.788	-6.1	93.9
PFDS	20.000	16.264	-18.7	81.3
PFHpA	20.000	18.189	-9.1	90.9
PFHpS	20.000	17.388	-13.1	86.9
PFHxA	20.000	18.060	-9.7	90.3
PFHxS	20.000	16.733	-16.3	83.7
PFNA	20.000	16.850	-15.8	84.2
PFNS	20.000	18.077	-9.6	90.4
PFOA	20.000	18.902	-5.5	94.5
PFOS	20.000	18.762	-6.2	93.8

Initial Calibration Verification

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q207-ICV207
Lab FileID: 4Q14861.D

PFPeA	20.000	17.784	-11.1	88.9
PFPeS	20.000	16.605	-17.0	83.0
PFTeDA	20.000	17.217	-13.9	86.1
PFTrDA	20.000	20.245	1.2	101.2
PFUnDA	20.000	18.257	-8.7	91.3
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	16.728	-16.4	83.6
13C3-HFPO-DA	20.000	20.606	3.0	103.0
9Cl-PF3ONS	20.000	15.979	-20.1	79.9
ADONA	20.000	16.913	-15.4	84.6
HFPO-DA	20.000	18.443	-7.8	92.2
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	21.584	7.9	107.9
MeFOSA	0.000	0.000	0.0	92.5
M3-MeFOSA	---	--ISTD--		
br-PFOS	4.800	3.529	-26.5	73.5
LN-PFOS	15.200	15.766	3.7	103.7
br-PFHxS	2.400	2.296	-4.3	95.7
LN-PFHxS	17.600	14.379	-18.3	81.7
br-PFOA	20.000	0.000	# -100.0	0.0
LN-PFOA	20.000	18.902	-5.5	94.5
br-PFNA	20.000	0.000	# -100.0	0.0
LN-PFNA	20.000	16.850	-15.8	84.2
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	20.416	2.1	102.1

CC Criteria: +/- 30%

Initial Calibration Verification

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q207-ICV207
Lab FileID: 4Q14862.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051221_ID_S4Q207\s4q207.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14862
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	18.244	-8.8	91.2
13C2-6:2FTS	20.000	18.960	-5.2	94.8
13C2-8:2FTS	20.000	19.202	-4.0	96.0
13C2-PFDoDA	20.000	19.930	-0.3	99.7
13C2-PFTeDA	20.000	19.798	-1.0	99.0
13C3-PFBS	20.000	19.821	-0.9	99.1
13C3-PFHxS	20.000	20.115	0.6	100.6
13C4-PFBA	20.000	20.088	0.4	100.4
13C4-PFHpA	20.000	20.025	0.1	100.1
13C5-PFHxA	20.000	19.859	-0.7	99.3
13C5-PFPeA	20.000	20.108	0.5	100.5
13C6-PFDA	20.000	20.564	2.8	102.8
13C7-PFUnDA	20.000	20.395	2.0	102.0
13C8-FOSA	20.000	20.769	3.8	103.8
13C8-PFOA	20.000	20.079	0.4	100.4
13C8-PFOS	20.000	19.977	-0.1	99.9
13C9-PFNA	20.000	20.169	0.8	100.8
4:2FTS	20.000	0.000	# -100.0	0.0
6:2FTS	20.000	0.000	# -100.0	0.0
8:2FTS	20.000	0.000	# -100.0	0.0
d3-MeFOSAA	20.000	20.616	3.1	103.1
EtFOSAA	20.000	0.000	# -100.0	0.0
FOSA	20.000	0.000	# -100.0	0.0
MeFOSAA	20.000	0.000	# -100.0	0.0
PFBA	20.000	0.000	# -100.0	0.0
PFBS	20.000	0.000	# -100.0	0.0
PFDA	20.000	0.000	# -100.0	0.0
PFDoDA	20.000	0.000	# -100.0	0.0
PFDS	20.000	0.000	# -100.0	0.0
PFHpA	20.000	0.000	# -100.0	0.0
PFHpS	20.000	0.000	# -100.0	0.0
PFHxA	20.000	0.000	# -100.0	0.0
PFHxS	20.000	0.000	# -100.0	0.0
PFNA	20.000	0.000	# -100.0	0.0
PFNS	20.000	0.000	# -100.0	0.0
PFOA	20.000	17.559	-12.2	87.8
PFOS	20.000	0.000	# -100.0	0.0

Initial Calibration Verification

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q207-ICV207
Lab FileID: 4Q14862.D

PFPeA	20.000	0.000	# -100.0	0.0
PFPeS	20.000	0.000	# -100.0	0.0
PFTeDA	20.000	0.000	# -100.0	0.0
PFTrDA	20.000	0.000	# -100.0	0.0
PFUnDA	20.000	0.000	# -100.0	0.0
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	0.000	# -100.0	0.0
13C3-HFPO-DA	20.000	19.975	-0.1	99.9
9Cl-PF3ONS	20.000	0.000	# -100.0	0.0
ADONA	20.000	0.000	# -100.0	0.0
HFPO-DA	20.000	0.000	# -100.0	0.0
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.730	3.6	103.6
MeFOSA	0.000	0.000	0.0	92.5
M3-MeFOSA	---	--ISTD--		
br-PFOS	4.800	0.000	# -100.0	0.0
LN-PFOS	15.200	0.000	# -100.0	0.0
br-PFHxS	2.400	0.000	# -100.0	0.0
LN-PFHxS	17.600	0.000	# -100.0	0.0
br-PFOA	20.000	2.084	# -89.6	10.4
LN-PFOA	20.000	15.475	-22.6	77.4
br-PFNA	20.000	0.000	# -100.0	0.0
LN-PFNA	20.000	0.000	# -100.0	0.0
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	20.586	2.9	102.9

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14926.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051321_ID_S4Q208\s4q208.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14926
Type : QC
Level : 2

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	18.361	-8.2	91.8
13C2-6:2FTS	20.000	18.654	-6.7	93.3
13C2-8:2FTS	20.000	18.703	-6.5	93.5
13C2-PFDoDA	20.000	19.117	-4.4	95.6
13C2-PFTeDA	20.000	18.313	-8.4	91.6
13C3-PFBS	20.000	19.174	-4.1	95.9
13C3-PFHxS	20.000	19.476	-2.6	97.4
13C4-PFBA	20.000	19.405	-3.0	97.0
13C4-PFHpA	20.000	19.236	-3.8	96.2
13C5-PFHxA	20.000	19.381	-3.1	96.9
13C5-PFPeA	20.000	19.374	-3.1	96.9
13C6-PFDA	20.000	19.426	-2.9	97.1
13C7-PFUnDA	20.000	19.558	-2.2	97.8
13C8-FOSA	20.000	20.252	1.3	101.3
13C8-PFOA	20.000	19.277	-3.6	96.4
13C8-PFOS	20.000	19.373	-3.1	96.9
13C9-PFNA	20.000	19.185	-4.1	95.9
4:2FTS	1.000	1.169	16.9	116.9
6:2FTS	1.000	1.144	14.4	114.4
8:2FTS	1.000	1.172	17.2	117.2
d3-MeFOSAA	20.000	21.711	8.6	108.6
EtFOSAA	1.000	1.135	13.5	113.5
FOSA	1.000	1.021	2.1	102.1
MeFOSAA	1.000	1.129	12.9	112.9
PFBA	1.000	1.060	6.0	106.0
PFBS	1.000	1.172	17.2	117.2
PFDA	1.000	1.080	8.0	108.0
PFDoDA	1.000	1.081	8.1	108.1
PFDS	1.000	0.955	-4.5	95.5
PFHpA	1.000	1.101	10.1	110.1
PFHpS	1.000	1.139	13.9	113.9
PFHxA	1.000	1.083	8.3	108.3
PFHxS	1.000	1.096	9.6	109.6
PFNA	1.000	1.101	10.1	110.1
PFNS	1.000	1.102	10.2	110.2
PFOA	1.000	1.047	4.7	104.7
PFOS	1.000	1.138	13.8	113.8

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14926.D

PFPeA	1.000	1.091	9.1	109.1
PFPeS	1.000	1.151	15.1	115.1
PFTeDA	1.000	1.125	12.5	112.5
PFTrDA	1.000	1.115	11.5	111.5
PFUnDA	1.000	1.073	7.3	107.3
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	1.000	1.056	5.6	105.6
13C3-HFPO-DA	20.000	20.104	0.5	100.5
9Cl-PF3ONS	1.000	1.025	2.5	102.5
ADONA	1.000	1.023	2.3	102.3
HFPO-DA	1.000	1.108	10.8	110.8
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	19.635	-1.8	98.2
MeFOSA	1.000	1.072	7.2	107.2
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	21.481	7.4	107.4

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14927.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051321_ID_S4Q208\s4q208.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14927
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.190	1.0	101.0
13C2-6:2FTS	20.000	20.360	1.8	101.8
13C2-8:2FTS	20.000	20.175	0.9	100.9
13C2-PFDoDA	20.000	19.883	-0.6	99.4
13C2-PFTeDA	20.000	19.217	-3.9	96.1
13C3-PFBS	20.000	20.016	0.1	100.1
13C3-PFHxS	20.000	20.142	0.7	100.7
13C4-PFBA	20.000	20.287	1.4	101.4
13C4-PFHpA	20.000	20.563	2.8	102.8
13C5-PFHxA	20.000	20.240	1.2	101.2
13C5-PFPeA	20.000	20.336	1.7	101.7
13C6-PFDA	20.000	19.697	-1.5	98.5
13C7-PFUnDA	20.000	19.976	-0.1	99.9
13C8-FOSA	20.000	20.064	0.3	100.3
13C8-PFOA	20.000	20.276	1.4	101.4
13C8-PFOS	20.000	19.889	-0.6	99.4
13C9-PFNA	20.000	20.080	0.4	100.4
4:2FTS	20.000	21.143	5.7	105.7
6:2FTS	20.000	20.617	3.1	103.1
8:2FTS	20.000	21.217	6.1	106.1
d3-MeFOSAA	20.000	22.020	10.1	110.1
EtFOSAA	20.000	20.162	0.8	100.8
FOSA	20.000	20.210	1.0	101.0
MeFOSAA	20.000	20.012	0.1	100.1
PFBA	20.000	19.846	-0.8	99.2
PFBS	20.000	20.855	4.3	104.3
PFDA	20.000	21.155	5.8	105.8
PFDoDA	20.000	20.587	2.9	102.9
PFDS	20.000	19.256	-3.7	96.3
PFHpA	20.000	20.401	2.0	102.0
PFHpS	20.000	20.546	2.7	102.7
PFHxA	20.000	20.685	3.4	103.4
PFHxS	20.000	20.114	0.6	100.6
PFNA	20.000	20.750	3.7	103.7
PFNS	20.000	21.282	6.4	106.4
PFOA	20.000	20.538	2.7	102.7
PFOS	20.000	20.323	1.6	101.6

Continuing Calibration Summary

Job Number: FA85205 **Sample:** S4Q208-CC207
Account: TKKMAB TK&K Services **Lab FileID:** 4Q14927.D
Project: DFSP; 5449 W Main St, Verona, NY

PFPeA	20.000	20.648	3.2	103.2
PFPeS	20.000	20.893	4.5	104.5
PFTeDA	20.000	20.962	4.8	104.8
PFTrDA	20.000	21.047	5.2	105.2
PFUnDA	20.000	20.466	2.3	102.3
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	20.361	1.8	101.8
13C3-HFPO-DA	20.000	21.060	5.3	105.3
9Cl-PF3ONS	20.000	19.496	-2.5	97.5
ADONA	20.000	20.451	2.3	102.3
HFPO-DA	20.000	20.326	1.6	101.6
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	19.951	-0.2	99.8
MeFOSA	20.000	21.079	5.4	105.4
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.349	11.7	111.7

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14938.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051321_ID_S4Q208\s4q208.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14938
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.274	1.4	101.4
13C2-6:2FTS	20.000	20.409	2.0	102.0
13C2-8:2FTS	20.000	20.372	1.9	101.9
13C2-PFDoDA	20.000	19.604	-2.0	98.0
13C2-PFTeDA	20.000	19.339	-3.3	96.7
13C3-PFBS	20.000	19.927	-0.4	99.6
13C3-PFHxS	20.000	20.282	1.4	101.4
13C4-PFBA	20.000	20.282	1.4	101.4
13C4-PFHpA	20.000	20.268	1.3	101.3
13C5-PFHxA	20.000	20.191	1.0	101.0
13C5-PFPeA	20.000	20.278	1.4	101.4
13C6-PFDA	20.000	19.819	-0.9	99.1
13C7-PFUnDA	20.000	20.084	0.4	100.4
13C8-FOSA	20.000	20.314	1.6	101.6
13C8-PFOA	20.000	20.417	2.1	102.1
13C8-PFOS	20.000	19.839	-0.8	99.2
13C9-PFNA	20.000	20.501	2.5	102.5
4:2FTS	20.000	20.968	4.8	104.8
6:2FTS	20.000	21.133	5.7	105.7
8:2FTS	20.000	20.869	4.3	104.3
d3-MeFOSAA	20.000	22.366	11.8	111.8
EtFOSAA	20.000	21.365	6.8	106.8
FOSA	20.000	20.262	1.3	101.3
MeFOSAA	20.000	20.052	0.3	100.3
PFBA	20.000	20.171	0.9	100.9
PFBS	20.000	20.683	3.4	103.4
PFDA	20.000	21.210	6.1	106.1
PFDoDA	20.000	20.346	1.7	101.7
PFDS	20.000	19.718	-1.4	98.6
PFHpA	20.000	20.585	2.9	102.9
PFHpS	20.000	20.958	4.8	104.8
PFHxA	20.000	20.575	2.9	102.9
PFHxS	20.000	19.851	-0.7	99.3
PFNA	20.000	20.393	2.0	102.0
PFNS	20.000	21.435	7.2	107.2
PFOA	20.000	20.560	2.8	102.8
PFOS	20.000	20.290	1.5	101.5

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14938.D

PFPeA	20.000	20.468	2.3	102.3
PFPeS	20.000	21.057	5.3	105.3
PFTeDA	20.000	21.127	5.6	105.6
PFTrDA	20.000	20.890	4.5	104.5
PFUnDA	20.000	20.310	1.6	101.6
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	20.428	2.1	102.1
13C3-HFPO-DA	20.000	21.038	5.2	105.2
9Cl-PF3ONS	20.000	19.279	-3.6	96.4
ADONA	20.000	20.154	0.8	100.8
HFPO-DA	20.000	20.498	2.5	102.5
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.359	1.8	101.8
MeFOSA	20.000	20.679	3.4	103.4
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	21.803	9.0	109.0

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14950.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051321_ID_S4Q208\s4q208.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14950
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.560	2.8	102.8
13C2-6:2FTS	20.000	20.640	3.2	103.2
13C2-8:2FTS	20.000	20.401	2.0	102.0
13C2-PFDoDA	20.000	20.018	0.1	100.1
13C2-PFTeDA	20.000	19.251	-3.7	96.3
13C3-PFBS	20.000	20.312	1.6	101.6
13C3-PFHxS	20.000	20.281	1.4	101.4
13C4-PFBA	20.000	20.655	3.3	103.3
13C4-PFHpA	20.000	20.787	3.9	103.9
13C5-PFHxA	20.000	20.466	2.3	102.3
13C5-PFPeA	20.000	20.462	2.3	102.3
13C6-PFDA	20.000	19.781	-1.1	98.9
13C7-PFUnDA	20.000	20.248	1.2	101.2
13C8-FOSA	20.000	20.591	3.0	103.0
13C8-PFOA	20.000	20.588	2.9	102.9
13C8-PFOS	20.000	19.981	-0.1	99.9
13C9-PFNA	20.000	20.437	2.2	102.2
4:2FTS	20.000	21.113	5.6	105.6
6:2FTS	20.000	20.886	4.4	104.4
8:2FTS	20.000	21.322	6.6	106.6
d3-MeFOSAA	20.000	22.303	11.5	111.5
EtFOSAA	20.000	20.362	1.8	101.8
FOSA	20.000	20.376	1.9	101.9
MeFOSAA	20.000	20.463	2.3	102.3
PFBA	20.000	20.178	0.9	100.9
PFBS	20.000	20.719	3.6	103.6
PFDA	20.000	21.691	8.5	108.5
PFDoDA	20.000	20.256	1.3	101.3
PFDS	20.000	19.155	-4.2	95.8
PFHpA	20.000	20.347	1.7	101.7
PFHpS	20.000	21.211	6.1	106.1
PFHxA	20.000	20.675	3.4	103.4
PFHxS	20.000	20.136	0.7	100.7
PFNA	20.000	20.973	4.9	104.9
PFNS	20.000	20.901	4.5	104.5
PFOA	20.000	20.561	2.8	102.8
PFOS	20.000	21.030	5.2	105.2

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14950.D

PFPeA	20.000	20.521	2.6	102.6
PFPeS	20.000	20.931	4.7	104.7
PFTeDA	20.000	21.040	5.2	105.2
PFTrDA	20.000	21.004	5.0	105.0
PFUnDA	20.000	20.351	1.8	101.8
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	20.730	3.6	103.6
13C3-HFPO-DA	20.000	20.929	4.6	104.6
9Cl-PF3ONS	20.000	19.844	-0.8	99.2
ADONA	20.000	20.644	3.2	103.2
HFPO-DA	20.000	20.371	1.9	101.9
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.291	1.5	101.5
MeFOSA	20.000	21.312	6.6	106.6
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.450	12.3	112.3

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14961.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051321_ID_S4Q208\s4q208.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14961
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.573	2.9	102.9
13C2-6:2FTS	20.000	20.802	4.0	104.0
13C2-8:2FTS	20.000	20.726	3.6	103.6
13C2-PFDoDA	20.000	20.423	2.1	102.1
13C2-PFTeDA	20.000	19.576	-2.1	97.9
13C3-PFBS	20.000	20.451	2.3	102.3
13C3-PFHxS	20.000	20.183	0.9	100.9
13C4-PFBA	20.000	20.573	2.9	102.9
13C4-PFHpA	20.000	20.664	3.3	103.3
13C5-PFHxA	20.000	20.344	1.7	101.7
13C5-PFPeA	20.000	20.527	2.6	102.6
13C6-PFDA	20.000	19.995	0.0	100.0
13C7-PFUnDA	20.000	20.741	3.7	103.7
13C8-FOSA	20.000	20.808	4.0	104.0
13C8-PFOA	20.000	20.532	2.7	102.7
13C8-PFOS	20.000	20.907	4.5	104.5
13C9-PFNA	20.000	20.648	3.2	103.2
4:2FTS	20.000	20.848	4.2	104.2
6:2FTS	20.000	20.576	2.9	102.9
8:2FTS	20.000	21.242	6.2	106.2
d3-MeFOSAA	20.000	22.658	13.3	113.3
EtFOSAA	20.000	20.488	2.4	102.4
FOSA	20.000	19.748	-1.3	98.7
MeFOSAA	20.000	19.881	-0.6	99.4
PFBA	20.000	20.122	0.6	100.6
PFBS	20.000	20.491	2.5	102.5
PFDA	20.000	21.305	6.5	106.5
PFDoDA	20.000	20.290	1.5	101.5
PFDS	20.000	18.906	-5.5	94.5
PFHpA	20.000	20.728	3.6	103.6
PFHpS	20.000	19.982	-0.1	99.9
PFHxA	20.000	20.843	4.2	104.2
PFHxS	20.000	20.280	1.4	101.4
PFNA	20.000	20.622	3.1	103.1
PFNS	20.000	20.754	3.8	103.8
PFOA	20.000	20.635	3.2	103.2
PFOS	20.000	19.801	-1.0	99.0

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14961.D

PFPeA	20.000	20.657	3.3	103.3
PFPeS	20.000	20.616	3.1	103.1
PFTeDA	20.000	20.924	4.6	104.6
PFTrDA	20.000	21.043	5.2	105.2
PFUnDA	20.000	20.193	1.0	101.0
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	20.308	1.5	101.5
13C3-HFPO-DA	20.000	20.766	3.8	103.8
9Cl-PF3ONS	20.000	19.797	-1.0	99.0
ADONA	20.000	20.641	3.2	103.2
HFPO-DA	20.000	19.982	-0.1	99.9
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.415	2.1	102.1
MeFOSA	20.000	20.814	4.1	104.1
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.394	12.0	112.0

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14963.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051321_ID_S4Q208\s4q208.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14963
Type : QC
Level : 2

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	18.303	-8.5	91.5
13C2-6:2FTS	20.000	18.991	-5.0	95.0
13C2-8:2FTS	20.000	19.110	-4.4	95.6
13C2-PFDoDA	20.000	19.344	-3.3	96.7
13C2-PFTeDA	20.000	18.982	-5.1	94.9
13C3-PFBS	20.000	19.349	-3.3	96.7
13C3-PFHxS	20.000	20.004	0.0	100.0
13C4-PFBA	20.000	19.765	-1.2	98.8
13C4-PFHpA	20.000	19.742	-1.3	98.7
13C5-PFHxA	20.000	19.470	-2.6	97.4
13C5-PFPeA	20.000	19.781	-1.1	98.9
13C6-PFDA	20.000	19.532	-2.3	97.7
13C7-PFUnDA	20.000	19.754	-1.2	98.8
13C8-FOSA	20.000	20.895	4.5	104.5
13C8-PFOA	20.000	20.072	0.4	100.4
13C8-PFOS	20.000	19.473	-2.6	97.4
13C9-PFNA	20.000	19.741	-1.3	98.7
4:2FTS	1.000	1.156	15.6	115.6
6:2FTS	1.000	1.111	11.1	111.1
8:2FTS	1.000	1.085	8.5	108.5
d3-MeFOSAA	20.000	22.689	13.4	113.4
EtFOSAA	1.000	1.085	8.5	108.5
FOSA	1.000	1.103	10.3	110.3
MeFOSAA	1.000	1.089	8.9	108.9
PFBA	1.000	1.012	1.2	101.2
PFBS	1.000	1.142	14.2	114.2
PFDA	1.000	1.088	8.8	108.8
PFDoDA	1.000	1.036	3.6	103.6
PFDS	1.000	1.006	0.6	100.6
PFHpA	1.000	1.102	10.2	110.2
PFHpS	1.000	1.107	10.7	110.7
PFHxA	1.000	1.116	11.6	111.6
PFHxS	1.000	1.118	11.8	111.8
PFNA	1.000	1.088	8.8	108.8
PFNS	1.000	1.108	10.8	110.8
PFOA	1.000	1.023	2.3	102.3
PFOS	1.000	1.135	13.5	113.5

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14963.D

PFPeA	1.000	1.072	7.2	107.2
PFPeS	1.000	1.157	15.7	115.7
PFTeDA	1.000	1.093	9.3	109.3
PFTrDA	1.000	1.030	3.0	103.0
PFUnDA	1.000	1.029	2.9	102.9
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	1.000	1.047	4.7	104.7
13C3-HFPO-DA	20.000	19.854	-0.7	99.3
9Cl-PF3ONS	1.000	1.003	0.3	100.3
ADONA	1.000	1.000	0.0	100.0
HFPO-DA	1.000	1.042	4.2	104.2
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	19.962	-0.2	99.8
MeFOSA	1.000	1.224	22.4	122.4
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.198	11.0	111.0

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14973.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051321_ID_S4Q208\s4q208.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14973
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.391	2.0	102.0
13C2-6:2FTS	20.000	20.789	3.9	103.9
13C2-8:2FTS	20.000	20.361	1.8	101.8
13C2-PFDoDA	20.000	20.252	1.3	101.3
13C2-PFTeDA	20.000	19.864	-0.7	99.3
13C3-PFBS	20.000	20.013	0.1	100.1
13C3-PFHxS	20.000	19.221	-3.9	96.1
13C4-PFBA	20.000	20.570	2.8	102.8
13C4-PFHpA	20.000	20.656	3.3	103.3
13C5-PFHxA	20.000	20.431	2.2	102.2
13C5-PFPeA	20.000	20.393	2.0	102.0
13C6-PFDA	20.000	19.945	-0.3	99.7
13C7-PFUnDA	20.000	20.469	2.3	102.3
13C8-FOSA	20.000	20.756	3.8	103.8
13C8-PFOA	20.000	20.565	2.8	102.8
13C8-PFOS	20.000	20.672	3.4	103.4
13C9-PFNA	20.000	20.527	2.6	102.6
4:2FTS	20.000	21.348	6.7	106.7
6:2FTS	20.000	20.807	4.0	104.0
8:2FTS	20.000	21.489	7.4	107.4
d3-MeFOSAA	20.000	23.379	16.9	116.9
EtFOSAA	20.000	21.175	5.9	105.9
FOSA	20.000	20.182	0.9	100.9
MeFOSAA	20.000	19.821	-0.9	99.1
PFBA	20.000	20.236	1.2	101.2
PFBS	20.000	21.097	5.5	105.5
PFDA	20.000	21.254	6.3	106.3
PFDoDA	20.000	20.127	0.6	100.6
PFDS	20.000	19.595	-2.0	98.0
PFHpA	20.000	20.494	2.5	102.5
PFHpS	20.000	20.554	2.8	102.8
PFHxA	20.000	20.675	3.4	103.4
PFHxS	20.000	21.113	5.6	105.6
PFNA	20.000	20.731	3.7	103.7
PFNS	20.000	20.377	1.9	101.9
PFOA	20.000	20.899	4.5	104.5
PFOS	20.000	20.312	1.6	101.6

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14973.D

PFPeA	20.000	20.688	3.4	103.4
PFPeS	20.000	21.280	6.4	106.4
PFTeDA	20.000	21.013	5.1	105.1
PFTrDA	20.000	20.713	3.6	103.6
PFUnDA	20.000	20.449	2.2	102.2
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	20.444	2.2	102.2
13C3-HFPO-DA	20.000	20.499	2.5	102.5
9Cl-PF3ONS	20.000	19.873	-0.6	99.4
ADONA	20.000	21.836	9.2	109.2
HFPO-DA	20.000	19.574	-2.1	97.9
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.708	3.5	103.5
MeFOSA	20.000	20.342	1.7	101.7
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.483	12.4	112.4

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14985.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051321_ID_S4Q208\s4q208.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14985
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.693	3.5	103.5
13C2-6:2FTS	20.000	20.998	5.0	105.0
13C2-8:2FTS	20.000	20.869	4.3	104.3
13C2-PFDoDA	20.000	20.490	2.4	102.4
13C2-PFTeDA	20.000	20.319	1.6	101.6
13C3-PFBS	20.000	20.370	1.9	101.9
13C3-PFHxS	20.000	20.226	1.1	101.1
13C4-PFBA	20.000	20.729	3.6	103.6
13C4-PFHpA	20.000	20.803	4.0	104.0
13C5-PFHxA	20.000	20.225	1.1	101.1
13C5-PFPeA	20.000	20.557	2.8	102.8
13C6-PFDA	20.000	20.442	2.2	102.2
13C7-PFUnDA	20.000	20.343	1.7	101.7
13C8-FOSA	20.000	20.948	4.7	104.7
13C8-PFOA	20.000	20.711	3.6	103.6
13C8-PFOS	20.000	20.360	1.8	101.8
13C9-PFNA	20.000	20.469	2.3	102.3
4:2FTS	20.000	20.614	3.1	103.1
6:2FTS	20.000	20.929	4.6	104.6
8:2FTS	20.000	21.094	5.5	105.5
d3-MeFOSAA	20.000	23.588	17.9	117.9
EtFOSAA	20.000	20.652	3.3	103.3
FOSA	20.000	19.945	-0.3	99.7
MeFOSAA	20.000	20.444	2.2	102.2
PFBA	20.000	20.197	1.0	101.0
PFBS	20.000	20.768	3.8	103.8
PFDA	20.000	20.749	3.7	103.7
PFDoDA	20.000	20.309	1.5	101.5
PFDS	20.000	19.404	-3.0	97.0
PFHpA	20.000	20.581	2.9	102.9
PFHpS	20.000	20.807	4.0	104.0
PFHxA	20.000	20.674	3.4	103.4
PFHxS	20.000	20.626	3.1	103.1
PFNA	20.000	20.470	2.3	102.3
PFNS	20.000	21.362	6.8	106.8
PFOA	20.000	20.537	2.7	102.7
PFOS	20.000	20.289	1.4	101.4

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-CC207
Lab FileID: 4Q14985.D

PFPeA	20.000	20.607	3.0	103.0
PFPeS	20.000	20.586	2.9	102.9
PFTeDA	20.000	20.722	3.6	103.6
PFTrDA	20.000	20.346	1.7	101.7
PFUnDA	20.000	20.616	3.1	103.1
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	19.931	-0.3	99.7
13C3-HFPO-DA	20.000	19.523	-2.4	97.6
9Cl-PF3ONS	20.000	19.425	-2.9	97.1
ADONA	20.000	20.663	3.3	103.3
HFPO-DA	20.000	20.177	0.9	100.9
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	21.639	8.2	108.2
MeFOSA	20.000	20.110	0.6	100.6
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	23.835	19.2	119.2

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-ECC207
Lab FileID: 4Q14993.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051321_ID_S4Q208\s4q208.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q14993
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.508	2.5	102.5
13C2-6:2FTS	20.000	21.025	5.1	105.1
13C2-8:2FTS	20.000	20.901	4.5	104.5
13C2-PFDoDA	20.000	20.411	2.1	102.1
13C2-PFTeDA	20.000	20.192	1.0	101.0
13C3-PFBS	20.000	20.801	4.0	104.0
13C3-PFHxS	20.000	19.539	-2.3	97.7
13C4-PFBA	20.000	20.741	3.7	103.7
13C4-PFHpA	20.000	20.502	2.5	102.5
13C5-PFHxA	20.000	20.479	2.4	102.4
13C5-PFPeA	20.000	20.503	2.5	102.5
13C6-PFDA	20.000	20.553	2.8	102.8
13C7-PFUnDA	20.000	20.571	2.9	102.9
13C8-FOSA	20.000	20.931	4.7	104.7
13C8-PFOA	20.000	20.642	3.2	103.2
13C8-PFOS	20.000	20.610	3.1	103.1
13C9-PFNA	20.000	20.876	4.4	104.4
4:2FTS	20.000	21.016	5.1	105.1
6:2FTS	20.000	20.845	4.2	104.2
8:2FTS	20.000	21.125	5.6	105.6
d3-MeFOSAA	20.000	23.977	19.9	119.9
EtFOSAA	20.000	20.925	4.6	104.6
FOSA	20.000	20.100	0.5	100.5
MeFOSAA	20.000	20.125	0.6	100.6
PFBA	20.000	20.292	1.5	101.5
PFBS	20.000	20.455	2.3	102.3
PFDA	20.000	20.723	3.6	103.6
PFDoDA	20.000	20.568	2.8	102.8
PFDS	20.000	19.744	-1.3	98.7
PFHpA	20.000	20.748	3.7	103.7
PFHpS	20.000	20.370	1.8	101.8
PFHxA	20.000	20.481	2.4	102.4
PFHxS	20.000	21.007	5.0	105.0
PFNA	20.000	20.128	0.6	100.6
PFNS	20.000	20.750	3.8	103.8
PFOA	20.000	20.628	3.1	103.1
PFOS	20.000	19.863	-0.7	99.3

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q208-ECC207
Lab FileID: 4Q14993.D

PFPeA	20.000	20.453	2.3	102.3
PFPeS	20.000	20.281	1.4	101.4
PFTeDA	20.000	20.793	4.0	104.0
PFTrDA	20.000	20.699	3.5	103.5
PFUnDA	20.000	20.313	1.6	101.6
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	19.724	-1.4	98.6
13C3-HFPO-DA	20.000	19.512	-2.4	97.6
9Cl-PF3ONS	20.000	19.368	-3.2	96.8
ADONA	20.000	21.333	6.7	106.7
HFPO-DA	20.000	20.603	3.0	103.0
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.501	2.5	102.5
MeFOSA	20.000	20.957	4.8	104.8
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	23.474	17.4	117.4

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15000.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051421_ID_S4Q209\s4q209.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\051221_ID_S4Q207\4Q14852.d
2:D:\MassHunter\Data\051221_ID_S4Q207\4Q14853.d
3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q15000
Type : QC
Level : 2

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	18.693	-6.5	93.5
13C2-6:2FTS	20.000	18.693	-6.5	93.5
13C2-8:2FTS	20.000	19.047	-4.8	95.2
13C2-PFDoDA	20.000	19.163	-4.2	95.8
13C2-PFTeDA	20.000	18.611	-6.9	93.1
13C3-PFBS	20.000	19.404	-3.0	97.0
13C3-PFHxS	20.000	18.929	-5.4	94.6
13C4-PFBA	20.000	19.685	-1.6	98.4
13C4-PFHpA	20.000	19.294	-3.5	96.5
13C5-PFHxA	20.000	19.427	-2.9	97.1
13C5-PFPeA	20.000	19.561	-2.2	97.8
13C6-PFDA	20.000	19.755	-1.2	98.8
13C7-PFUnDA	20.000	19.762	-1.2	98.8
13C8-FOSA	20.000	20.158	0.8	100.8
13C8-PFOA	20.000	19.640	-1.8	98.2
13C8-PFOS	20.000	18.939	-5.3	94.7
13C9-PFNA	20.000	19.576	-2.1	97.9
4:2FTS	1.000	1.161	16.1	116.1
6:2FTS	1.000	1.163	16.3	116.3
8:2FTS	1.000	1.119	11.9	111.9
d3-MeFOSAA	20.000	23.701	18.5	118.5
EtFOSAA	1.000	1.179	17.9	117.9
FOSA	1.000	1.115	11.5	111.5
MeFOSAA	1.000	1.134	13.4	113.4
PFBA	1.000	1.038	3.8	103.8
PFBS	1.000	1.089	8.9	108.9
PFDA	1.000	1.113	11.3	111.3
PFDoDA	1.000	1.054	5.4	105.4
PFDS	1.000	1.015	1.5	101.5
PFHpA	1.000	1.055	5.5	105.5
PFHpS	1.000	1.135	13.5	113.5
PFHxA	1.000	1.074	7.4	107.4
PFHxS	1.000	1.160	16.0	116.0
PFNA	1.000	1.067	6.7	106.7
PFNS	1.000	1.178	17.8	117.8
PFOA	1.000	1.016	1.6	101.6
PFOS	1.000	1.124	12.4	112.4

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15000.D

PFPeA	1.000	1.064	6.4	106.4
PFPeS	1.000	1.176	17.6	117.6
PFTeDA	1.000	1.124	12.4	112.4
PFTrDA	1.000	1.076	7.6	107.6
PFUnDA	1.000	1.075	7.5	107.5
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	1.000	1.045	4.5	104.5
13C3-HFPO-DA	20.000	19.642	-1.8	98.2
9Cl-PF3ONS	1.000	1.028	2.8	102.8
ADONA	1.000	1.064	6.4	106.4
HFPO-DA	1.000	1.048	4.8	104.8
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.645	3.2	103.2
MeFOSA	1.000	1.059	5.9	105.9
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	23.106	15.5	115.5

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15001.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051421_ID_S4Q209\s4q209.batch.bin

Level ID:Calibration File
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3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q15001
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.235	1.2	101.2
13C2-6:2FTS	20.000	20.496	2.5	102.5
13C2-8:2FTS	20.000	20.002	0.0	100.0
13C2-PFDoDA	20.000	19.802	-1.0	99.0
13C2-PFTeDA	20.000	19.132	-4.3	95.7
13C3-PFBS	20.000	19.825	-0.9	99.1
13C3-PFHxS	20.000	20.280	1.4	101.4
13C4-PFBA	20.000	20.130	0.6	100.6
13C4-PFHpA	20.000	20.007	0.0	100.0
13C5-PFHxA	20.000	20.024	0.1	100.1
13C5-PFPeA	20.000	20.110	0.6	100.6
13C6-PFDA	20.000	19.501	-2.5	97.5
13C7-PFUnDA	20.000	20.049	0.2	100.2
13C8-FOSA	20.000	20.596	3.0	103.0
13C8-PFOA	20.000	20.105	0.5	100.5
13C8-PFOS	20.000	20.250	1.2	101.2
13C9-PFNA	20.000	20.222	1.1	101.1
4:2FTS	20.000	21.066	5.3	105.3
6:2FTS	20.000	20.785	3.9	103.9
8:2FTS	20.000	21.336	6.7	106.7
d3-MeFOSAA	20.000	22.952	14.8	114.8
EtFOSAA	20.000	21.129	5.6	105.6
FOSA	20.000	19.855	-0.7	99.3
MeFOSAA	20.000	20.666	3.3	103.3
PFBA	20.000	20.178	0.9	100.9
PFBS	20.000	20.939	4.7	104.7
PFDA	20.000	21.540	7.7	107.7
PFDoDA	20.000	20.073	0.4	100.4
PFDS	20.000	19.381	-3.1	96.9
PFHpA	20.000	20.984	4.9	104.9
PFHpS	20.000	20.115	0.6	100.6
PFHxA	20.000	20.658	3.3	103.3
PFHxS	20.000	19.862	-0.7	99.3
PFNA	20.000	20.633	3.2	103.2
PFNS	20.000	20.709	3.5	103.5
PFOA	20.000	20.929	4.6	104.6
PFOS	20.000	20.142	0.7	100.7

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15001.D

PFPeA	20.000	20.529	2.6	102.6
PFPeS	20.000	20.647	3.2	103.2
PFTeDA	20.000	20.922	4.6	104.6
PFTrDA	20.000	20.925	4.6	104.6
PFUnDA	20.000	20.220	1.1	101.1
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	20.538	2.7	102.7
13C3-HFPO-DA	20.000	20.473	2.4	102.4
9Cl-PF3ONS	20.000	19.641	-1.8	98.2
ADONA	20.000	20.157	0.8	100.8
HFPO-DA	20.000	20.082	0.4	100.4
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	19.913	-0.4	99.6
MeFOSA	20.000	20.995	5.0	105.0
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.879	14.4	114.4

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15025.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051421_ID_S4Q209\s4q209.batch.bin

Level ID:Calibration File
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3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q15025
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.116	0.6	100.6
13C2-6:2FTS	20.000	20.403	2.0	102.0
13C2-8:2FTS	20.000	20.413	2.1	102.1
13C2-PFDoDA	20.000	20.237	1.2	101.2
13C2-PFTeDA	20.000	19.791	-1.0	99.0
13C3-PFBS	20.000	20.012	0.1	100.1
13C3-PFHxS	20.000	20.644	3.2	103.2
13C4-PFBA	20.000	20.531	2.7	102.7
13C4-PFHpA	20.000	20.387	1.9	101.9
13C5-PFHxA	20.000	20.331	1.7	101.7
13C5-PFPeA	20.000	20.425	2.1	102.1
13C6-PFDA	20.000	20.306	1.5	101.5
13C7-PFUnDA	20.000	20.390	2.0	102.0
13C8-FOSA	20.000	20.759	3.8	103.8
13C8-PFOA	20.000	20.339	1.7	101.7
13C8-PFOS	20.000	20.286	1.4	101.4
13C9-PFNA	20.000	20.302	1.5	101.5
4:2FTS	20.000	20.888	4.4	104.4
6:2FTS	20.000	20.935	4.7	104.7
8:2FTS	20.000	21.355	6.8	106.8
d3-MeFOSAA	20.000	22.733	13.7	113.7
EtFOSAA	20.000	20.604	3.0	103.0
FOSA	20.000	19.787	-1.1	98.9
MeFOSAA	20.000	20.691	3.5	103.5
PFBA	20.000	20.179	0.9	100.9
PFBS	20.000	21.113	5.6	105.6
PFDA	20.000	20.770	3.9	103.9
PFDoDA	20.000	20.274	1.4	101.4
PFDS	20.000	19.122	-4.4	95.6
PFHpA	20.000	20.549	2.7	102.7
PFHpS	20.000	20.806	4.0	104.0
PFHxA	20.000	20.469	2.3	102.3
PFHxS	20.000	20.063	0.3	100.3
PFNA	20.000	20.350	1.7	101.7
PFNS	20.000	21.285	6.4	106.4
PFOA	20.000	20.437	2.2	102.2
PFOS	20.000	20.274	1.4	101.4

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15025.D

PFPeA	20.000	20.503	2.5	102.5
PFPeS	20.000	20.827	4.1	104.1
PFTeDA	20.000	21.020	5.1	105.1
PFTrDA	20.000	20.734	3.7	103.7
PFUnDA	20.000	19.992	0.0	100.0
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	19.936	-0.3	99.7
13C3-HFPO-DA	20.000	20.246	1.2	101.2
9Cl-PF3ONS	20.000	19.213	-3.9	96.1
ADONA	20.000	19.717	-1.4	98.6
HFPO-DA	20.000	20.848	4.2	104.2
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.441	2.2	102.2
MeFOSA	20.000	20.886	4.4	104.4
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.864	14.3	114.3

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15037.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051421_ID_S4Q209\s4q209.batch.bin

Level ID:Calibration File
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4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q15037
Type : QC
Level : 6

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	20.491	2.5	102.5
13C2-6:2FTS	20.000	20.925	4.6	104.6
13C2-8:2FTS	20.000	20.546	2.7	102.7
13C2-PFDoDA	20.000	19.478	-2.6	97.4
13C2-PFTeDA	20.000	19.170	-4.1	95.9
13C3-PFBS	20.000	20.434	2.2	102.2
13C3-PFHxS	20.000	21.414	7.1	107.1
13C4-PFBA	20.000	20.728	3.6	103.6
13C4-PFHpA	20.000	20.508	2.5	102.5
13C5-PFHxA	20.000	20.334	1.7	101.7
13C5-PFPeA	20.000	20.348	1.7	101.7
13C6-PFDA	20.000	20.138	0.7	100.7
13C7-PFUnDA	20.000	20.002	0.0	100.0
13C8-FOSA	20.000	20.725	3.6	103.6
13C8-PFOA	20.000	20.849	4.2	104.2
13C8-PFOS	20.000	20.696	3.5	103.5
13C9-PFNA	20.000	20.645	3.2	103.2
4:2FTS	20.000	20.935	4.7	104.7
6:2FTS	20.000	20.493	2.5	102.5
8:2FTS	20.000	20.861	4.3	104.3
d3-MeFOSAA	20.000	22.997	15.0	115.0
EtFOSAA	20.000	20.401	2.0	102.0
FOSA	20.000	20.609	3.0	103.0
MeFOSAA	20.000	20.378	1.9	101.9
PFBA	20.000	20.274	1.4	101.4
PFBS	20.000	20.542	2.7	102.7
PFDA	20.000	21.097	5.5	105.5
PFDoDA	20.000	20.822	4.1	104.1
PFDS	20.000	19.596	-2.0	98.0
PFHpA	20.000	20.714	3.6	103.6
PFHpS	20.000	20.299	1.5	101.5
PFHxA	20.000	20.593	3.0	103.0
PFHxS	20.000	19.401	-3.0	97.0
PFNA	20.000	20.692	3.5	103.5
PFNS	20.000	20.240	1.2	101.2
PFOA	20.000	20.448	2.2	102.2
PFOS	20.000	19.960	-0.2	99.8

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15037.D

PFPeA	20.000	20.652	3.3	103.3
PFPeS	20.000	20.931	4.7	104.7
PFTeDA	20.000	21.087	5.4	105.4
PFTrDA	20.000	21.119	5.6	105.6
PFUnDA	20.000	20.592	3.0	103.0
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	20.000	20.964	4.8	104.8
13C3-HFPO-DA	20.000	20.560	2.8	102.8
9Cl-PF3ONS	20.000	19.532	-2.3	97.7
ADONA	20.000	19.388	-3.1	96.9
HFPO-DA	20.000	19.985	-0.1	99.9
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.514	2.6	102.6
MeFOSA	20.000	20.877	4.4	104.4
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.927	14.6	114.6

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15039.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\051421_ID_S4Q209\s4q209.batch.bin

Level ID:Calibration File
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3:D:\MassHunter\Data\051221_ID_S4Q207\4Q14854.d
4:D:\MassHunter\Data\051221_ID_S4Q207\4Q14855.d
5:D:\MassHunter\Data\051221_ID_S4Q207\4Q14856.d
6:D:\MassHunter\Data\051221_ID_S4Q207\4Q14857.d
7:D:\MassHunter\Data\051221_ID_S4Q207\4Q14858.d
8:D:\MassHunter\Data\051221_ID_S4Q207\4Q14859.d

Data File: 4Q15039
Type : QC
Level : 2

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	20.000	18.622	-6.9	93.1
13C2-6:2FTS	20.000	18.922	-5.4	94.6
13C2-8:2FTS	20.000	19.268	-3.7	96.3
13C2-PFDoDA	20.000	19.347	-3.3	96.7
13C2-PFTeDA	20.000	18.866	-5.7	94.3
13C3-PFBS	20.000	20.041	0.2	100.2
13C3-PFHxS	20.000	19.814	-0.9	99.1
13C4-PFBA	20.000	20.021	0.1	100.1
13C4-PFHpA	20.000	19.809	-1.0	99.0
13C5-PFHxA	20.000	19.603	-2.0	98.0
13C5-PFPeA	20.000	19.684	-1.6	98.4
13C6-PFDA	20.000	19.930	-0.4	99.6
13C7-PFUnDA	20.000	19.856	-0.7	99.3
13C8-FOSA	20.000	21.126	5.6	105.6
13C8-PFOA	20.000	20.129	0.6	100.6
13C8-PFOS	20.000	20.014	0.1	100.1
13C9-PFNA	20.000	20.028	0.1	100.1
4:2FTS	1.000	1.163	16.3	116.3
6:2FTS	1.000	1.185	18.5	118.5
8:2FTS	1.000	1.174	17.4	117.4
d3-MeFOSAA	20.000	22.709	13.5	113.5
EtFOSAA	1.000	1.069	6.9	106.9
FOSA	1.000	1.076	7.6	107.6
MeFOSAA	1.000	1.063	6.3	106.3
PFBA	1.000	1.078	7.8	107.8
PFBS	1.000	1.068	6.8	106.8
PFDA	1.000	1.077	7.7	107.7
PFDoDA	1.000	1.029	2.9	102.9
PFDS	1.000	0.958	-4.2	95.8
PFHpA	1.000	1.044	4.4	104.4
PFHpS	1.000	1.131	13.1	113.1
PFHxA	1.000	1.117	11.7	111.7
PFHxS	1.000	1.033	3.3	103.3
PFNA	1.000	1.080	8.0	108.0
PFNS	1.000	1.234	23.4	123.4
PFOA	1.000	1.059	5.9	105.9
PFOS	1.000	1.121	12.1	112.1

Continuing Calibration Summary

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Sample: S4Q209-CC207
Lab FileID: 4Q15039.D

PFPeA	1.000	1.080	8.0	108.0
PFPeS	1.000	1.107	10.7	110.7
PFTeDA	1.000	1.103	10.3	110.3
PFTrDA	1.000	1.053	5.3	105.3
PFUnDA	1.000	1.023	2.3	102.3
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	1.000	1.057	5.7	105.7
13C3-HFPO-DA	20.000	19.575	-2.1	97.9
9Cl-PF3ONS	1.000	0.963	-3.7	96.3
ADONA	1.000	1.036	3.6	103.6
HFPO-DA	1.000	1.042	4.2	104.2
M3-HFPO-DA	---	--ISTD--		
d3-MeFOSA	20.000	20.439	2.2	102.2
MeFOSA	1.000	1.142	14.2	114.2
M3-MeFOSA	---	--ISTD--		
M5-EtFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.475	12.4	112.4

CC Criteria: +/- 30%

Run Sequence Report

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Run ID: S4Q207 **Method:** EPA 537M QSM5.3 B-1 **Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S4Q207-IC207	4Q14851.D	05/12/21 15:30	n/a	Mass Calibration Verification
S4Q207-IC207	4Q14852.D	05/12/21 15:45	n/a	Initial cal 0.5
S4Q207-IC207	4Q14853.D	05/12/21 16:00	n/a	Initial cal 1
S4Q207-IC207	4Q14854.D	05/12/21 16:15	n/a	Initial cal 2
S4Q207-IC207	4Q14855.D	05/12/21 16:29	n/a	Initial cal 5
S4Q207-IC207	4Q14856.D	05/12/21 16:44	n/a	Initial cal 10
S4Q207-ICC207	4Q14857.D	05/12/21 16:59	n/a	Initial cal 20
S4Q207-IC207	4Q14858.D	05/12/21 17:14	n/a	Initial cal 50
S4Q207-IC207	4Q14859.D	05/12/21 17:29	n/a	Initial cal 100
S4Q207-IBLK	4Q14860.D	05/12/21 17:44	n/a	Method Blank
S4Q207-IBLK	4Q14860.D	05/12/21 17:44	n/a	Method Blank
S4Q207-ICV207	4Q14861.D	05/12/21 17:59	n/a	Initial cal verification 20
S4Q207-ICV207	4Q14862.D	05/12/21 18:14	n/a	Initial cal verification 20
S4Q207-CC207	4Q14863.D	05/12/21 18:29	n/a	Continuing cal 1.0LL
FA85171-1	4Q14864.D	05/12/21 18:44	OP85298	(used for QC only; not part of job FA85205)
ZZZZZZ	4Q14865.D	05/12/21 18:59	OP85294	(unrelated sample)
ZZZZZZ	4Q14866.D	05/12/21 19:14	OP85294	(unrelated sample)
OP85342-BS	4Q14867.D	05/12/21 19:29	OP85342	Blank Spike
OP85342-MB	4Q14868.D	05/12/21 19:44	OP85342	Method Blank
ZZZZZZ	4Q14869.D	05/12/21 19:59	OP85342	(unrelated sample)
ZZZZZZ	4Q14870.D	05/12/21 20:14	OP85342	(unrelated sample)
ZZZZZZ	4Q14871.D	05/12/21 20:29	OP85342	(unrelated sample)
ZZZZZZ	4Q14872.D	05/12/21 20:43	OP85342	(unrelated sample)
ZZZZZZ	4Q14873.D	05/12/21 20:58	OP85342	(unrelated sample)
S4Q207-CC207	4Q14874.D	05/12/21 21:13	n/a	Continuing cal 20
ZZZZZZ	4Q14876.D	05/12/21 21:43	OP85342	(unrelated sample)
JD24179-3	4Q14877.D	05/12/21 21:58	OP85342	(used for QC only; not part of job FA85205)
OP85342-MS	4Q14878.D	05/12/21 22:13	OP85342	Matrix Spike
ZZZZZZ	4Q14879.D	05/12/21 22:28	OP85342	(unrelated sample)
ZZZZZZ	4Q14880.D	05/12/21 22:43	OP85342	(unrelated sample)
JD24179-6	4Q14881.D	05/12/21 22:58	OP85342	(used for QC only; not part of job FA85205)
OP85342-DUP	4Q14882.D	05/12/21 23:13	OP85342	Duplicate
ZZZZZZ	4Q14883.D	05/12/21 23:28	OP85342	(unrelated sample)
ZZZZZZ	4Q14884.D	05/12/21 23:43	OP85342	(unrelated sample)
ZZZZZZ	4Q14885.D	05/12/21 23:58	OP85342	(unrelated sample)
S4Q207-CC207	4Q14886.D	05/13/21 00:13	n/a	Continuing cal 20
S4Q207-CC207	4Q14888.D	05/13/21 00:42	n/a	Continuing cal 1.0LL
ZZZZZZ	4Q14889.D	05/13/21 00:57	OP85342	(unrelated sample)
OP85323-BS	4Q14890.D	05/13/21 01:12	OP85323	Blank Spike
OP85323-MB	4Q14891.D	05/13/21 01:27	OP85323	Method Blank
ZZZZZZ	4Q14892.D	05/13/21 01:42	OP85323	(unrelated sample)
ZZZZZZ	4Q14893.D	05/13/21 01:57	OP85323	(unrelated sample)
ZZZZZZ	4Q14894.D	05/13/21 02:12	OP85323	(unrelated sample)
ZZZZZZ	4Q14895.D	05/13/21 02:27	OP85323	(unrelated sample)
ZZZZZZ	4Q14896.D	05/13/21 02:42	OP85323	(unrelated sample)
ZZZZZZ	4Q14897.D	05/13/21 02:57	OP85323	(unrelated sample)

Run Sequence Report

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Run ID: S4Q207 **Method:** EPA 537M QSM5.3 B-1 **Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ZZZZZZ	4Q14898.D	05/13/21 03:12	OP85323	(unrelated sample)
S4Q207-CC207	4Q14899.D	05/13/21 03:27	n/a	Continuing cal 20
ZZZZZZ	4Q14901.D	05/13/21 03:56	OP85323	(unrelated sample)
ZZZZZZ	4Q14902.D	05/13/21 04:11	OP85323	(unrelated sample)
ZZZZZZ	4Q14903.D	05/13/21 04:26	OP85323	(unrelated sample)
ZZZZZZ	4Q14904.D	05/13/21 04:41	OP85323	(unrelated sample)
ZZZZZZ	4Q14905.D	05/13/21 04:56	OP85323	(unrelated sample)
ZZZZZZ	4Q14906.D	05/13/21 05:11	OP85323	(unrelated sample)
ZZZZZZ	4Q14907.D	05/13/21 05:26	OP85323	(unrelated sample)
ZZZZZZ	4Q14908.D	05/13/21 05:41	OP85323	(unrelated sample)
ZZZZZZ	4Q14909.D	05/13/21 05:56	OP85323	(unrelated sample)
S4Q207-CC207	4Q14910.D	05/13/21 06:11	n/a	Continuing cal 20
FA85174-17	4Q14912.D	05/13/21 06:41	OP85323	(used for QC only; not part of job FA85205)
OP85323-MS	4Q14913.D	05/13/21 06:56	OP85323	Matrix Spike
OP85323-MSD	4Q14914.D	05/13/21 07:11	OP85323	Matrix Spike Duplicate
ZZZZZZ	4Q14915.D	05/13/21 07:25	OP85323	(unrelated sample)
ZZZZZZ	4Q14916.D	05/13/21 07:40	OP85323	(unrelated sample)
ZZZZZZ	4Q14917.D	05/13/21 07:55	OP85323	(unrelated sample)
FA85164-9	4Q14918.D	05/13/21 08:10	OP85296	(used for QC only; not part of job FA85205)
S4Q207-ECC207	4Q14919.D	05/13/21 08:25	n/a	Ending cal 20

Run Sequence Report

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Run ID: S4Q208 **Method:** EPA 537M QSM5.3 B-1 **Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S4Q208-IBLK	4Q14925.D	05/13/21 12:44	n/a	Method Blank
S4Q208-IBLK	4Q14925.D	05/13/21 12:44	n/a	Method Blank
S4Q208-CC207	4Q14926.D	05/13/21 12:59	n/a	Continuing cal 1.0LL
S4Q208-CC207	4Q14927.D	05/13/21 13:14	n/a	Continuing cal 20
OP85360-BS	4Q14928.D	05/13/21 13:29	OP85360	Blank Spike
OP85360-MB	4Q14929.D	05/13/21 13:43	OP85360	Method Blank
FA85205-1	4Q14930.D	05/13/21 13:58	OP85360	MW-2R
OP85360-MS	4Q14931.D	05/13/21 14:13	OP85360	Matrix Spike
FA85205-2	4Q14932.D	05/13/21 14:43	OP85360	MW-5
OP85360-DUP	4Q14933.D	05/13/21 14:58	OP85360	Duplicate
FA85205-3	4Q14934.D	05/13/21 15:13	OP85360	MW-13
FA85205-4	4Q14935.D	05/13/21 15:36	OP85360	MW-30
FA85205-5	4Q14937.D	05/13/21 16:06	OP85360	MW-29
S4Q208-CC207	4Q14938.D	05/13/21 16:21	n/a	Continuing cal 20
FA85205-6	4Q14940.D	05/13/21 16:51	OP85360	MW-32
FA85205-7	4Q14941.D	05/13/21 17:06	OP85360	MW-33R
FA85205-8	4Q14942.D	05/13/21 17:22	OP85360	MW-33R DUP
FA85205-9	4Q14943.D	05/13/21 17:37	OP85360	MW-35
FA85205-10	4Q14944.D	05/13/21 17:52	OP85360	MW-36
FA85205-10	4Q14945.D	05/13/21 18:07	OP85360	MW-36
FA85205-11	4Q14946.D	05/13/21 18:22	OP85360	MW-36 DUP
FA85205-11	4Q14947.D	05/13/21 18:37	OP85360	MW-36 DUP
FA85205-11	4Q14948.D	05/13/21 18:52	OP85360	MW-36 DUP
FA85205-12	4Q14949.D	05/13/21 19:07	OP85360	MW-38
S4Q208-CC207	4Q14950.D	05/13/21 19:22	n/a	Continuing cal 20
FA85205-13	4Q14952.D	05/13/21 19:52	OP85360	MW-39
FA85205-13	4Q14953.D	05/13/21 20:06	OP85360	MW-39
FA85205-14	4Q14954.D	05/13/21 20:21	OP85360	MW-40
FA85205-14	4Q14955.D	05/13/21 20:36	OP85360	MW-40
FA85205-15	4Q14956.D	05/13/21 20:51	OP85360	MW-41
FA85205-15	4Q14957.D	05/13/21 21:06	OP85360	MW-41
FA85205-16	4Q14958.D	05/13/21 21:21	OP85360	MW-42
FA85205-16	4Q14959.D	05/13/21 21:36	OP85360	MW-42
FA85205-17	4Q14960.D	05/13/21 21:51	OP85360	MW-43
S4Q208-CC207	4Q14961.D	05/13/21 22:06	n/a	Continuing cal 20
S4Q208-CC207	4Q14963.D	05/13/21 22:36	n/a	Continuing cal 1.0LL
FA85205-18	4Q14964.D	05/13/21 22:51	OP85360	MW-44
FA85205-18	4Q14965.D	05/13/21 23:06	OP85360	MW-44
FA85205-19	4Q14966.D	05/13/21 23:21	OP85360	MW-45
FA85205-20	4Q14967.D	05/13/21 23:36	OP85360	MW-46
OP85361-BS	4Q14969.D	05/14/21 00:05	OP85361	Blank Spike
OP85361-MB	4Q14970.D	05/14/21 00:21	OP85361	Method Blank
FA85205-21	4Q14971.D	05/14/21 00:35	OP85361	MW-47
FA85205-21	4Q14972.D	05/14/21 00:50	OP85361	MW-47
S4Q208-CC207	4Q14973.D	05/14/21 01:05	n/a	Continuing cal 20
OP85361-MS	4Q14976.D	05/14/21 01:50	OP85361	Matrix Spike

Run Sequence Report

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Run ID: S4Q208 **Method:** EPA 537M QSM5.3 B-1 **Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
FA85205-22	4Q14977.D	05/14/21 02:05	OP85361	MW-48
OP85361-DUP	4Q14978.D	05/14/21 02:20	OP85361	Duplicate
FA85205-23	4Q14979.D	05/14/21 02:35	OP85361	MW-51
FA85205-23	4Q14980.D	05/14/21 02:50	OP85361	MW-51
FA85205-24	4Q14981.D	05/14/21 03:05	OP85361	MW-53
FA85205-25	4Q14982.D	05/14/21 03:20	OP85361	MW-54
FA85205-26	4Q14983.D	05/14/21 03:35	OP85361	MW-55
FA85205-27	4Q14984.D	05/14/21 03:50	OP85361	MW-56
S4Q208-CC207	4Q14985.D	05/14/21 04:05	n/a	Continuing cal 20
FA85205-28	4Q14987.D	05/14/21 04:35	OP85361	MW-60
FA85205-29	4Q14988.D	05/14/21 04:49	OP85361	EQUIPMENT BLANK
FA85205-30	4Q14989.D	05/14/21 05:04	OP85361	MW-58
ZZZZZZ	4Q14990.D	05/14/21 05:19	OP85298	(unrelated sample)
ZZZZZZ	4Q14991.D	05/14/21 05:34	OP85298	(unrelated sample)
ZZZZZZ	4Q14992.D	05/14/21 05:49	OP85294	(unrelated sample)
S4Q208-ECC207	4Q14993.D	05/14/21 06:04	n/a	Ending cal 20

Run Sequence Report

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Run ID: S4Q209 **Method:** EPA 537M BY ID **Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S4Q209-IBLK	4Q14999.D	05/14/21 09:43	n/a	Method Blank
S4Q209-IBLK	4Q14999.D	05/14/21 09:43	n/a	Method Blank
S4Q209-CC207	4Q15000.D	05/14/21 09:58	n/a	Continuing cal 1.0LL
S4Q209-CC207	4Q15001.D	05/14/21 10:13	n/a	Continuing cal 20
OP85328-BS	4Q15002.D	05/14/21 10:28	OP85328	Blank Spike
OP85328-MB	4Q15003.D	05/14/21 10:43	OP85328	Method Blank
OP85323-BS	4Q15004.D	05/14/21 10:58	OP85323	Blank Spike
ZZZZZZ	4Q15005.D	05/14/21 11:43	OP85328	(unrelated sample)
FA85411-19	4Q15006.D	05/14/21 11:58	OP85328	(used for QC only; not part of job FA85205)
OP85328-MS	4Q15007.D	05/14/21 12:13	OP85328	Matrix Spike
OP85328-MSD	4Q15008.D	05/14/21 12:28	OP85328	Matrix Spike Duplicate
ZZZZZZ	4Q15009.D	05/14/21 12:43	OP85328	(unrelated sample)
ZZZZZZ	4Q15010.D	05/14/21 12:58	OP85328	(unrelated sample)
ZZZZZZ	4Q15011.D	05/14/21 13:13	OP85328	(unrelated sample)
S4Q209-CC207	4Q15013.D	05/14/21 13:43	n/a	Continuing cal 20
ZZZZZZ	4Q15015.D	05/14/21 14:13	OP85328	(unrelated sample)
ZZZZZZ	4Q15016.D	05/14/21 14:28	OP85328	(unrelated sample)
ZZZZZZ	4Q15017.D	05/14/21 14:43	OP85328	(unrelated sample)
ZZZZZZ	4Q15018.D	05/14/21 14:58	OP85328	(unrelated sample)
ZZZZZZ	4Q15019.D	05/14/21 15:13	OP85328	(unrelated sample)
ZZZZZZ	4Q15020.D	05/14/21 15:28	OP85328	(unrelated sample)
ZZZZZZ	4Q15021.D	05/14/21 15:41	OP85342	(unrelated sample)
ZZZZZZ	4Q15022.D	05/14/21 15:56	OP85328	(unrelated sample)
ZZZZZZ	4Q15023.D	05/14/21 16:11	OP85328	(unrelated sample)
ZZZZZZ	4Q15024.D	05/14/21 16:26	OP85328	(unrelated sample)
S4Q209-CC207	4Q15025.D	05/14/21 16:41	n/a	Continuing cal 20
ZZZZZZ	4Q15027.D	05/14/21 17:11	OP85328	(unrelated sample)
ZZZZZZ	4Q15028.D	05/14/21 17:26	OP85328	(unrelated sample)
ZZZZZZ	4Q15029.D	05/14/21 17:41	OP85328	(unrelated sample)
ZZZZZZ	4Q15030.D	05/14/21 17:55	OP85328	(unrelated sample)
FA85205-10	4Q15031.D	05/14/21 18:10	OP85360	MW-36
FA85205-20	4Q15032.D	05/14/21 18:25	OP85360	MW-46
ZZZZZZ	4Q15033.D	05/14/21 18:40	OP85342	(unrelated sample)
ZZZZZZ	4Q15036.D	05/14/21 19:25	OP85342	(unrelated sample)
S4Q209-CC207	4Q15037.D	05/14/21 19:40	n/a	Continuing cal 20
S4Q209-CC207	4Q15039.D	05/14/21 20:10	n/a	Continuing cal 1.0LL
ZZZZZZ	4Q15040.D	05/14/21 20:25	OP85342	(unrelated sample)
JD24179-6	4Q15041.D	05/14/21 20:40	OP85342	(used for QC only; not part of job FA85205)
OP85353-BS	4Q15042.D	05/14/21 20:55	OP85353	Blank Spike
OP85353-MB	4Q15043.D	05/14/21 21:10	OP85353	Method Blank
ZZZZZZ	4Q15044.D	05/14/21 21:25	OP85353	(unrelated sample)
ZZZZZZ	4Q15045.D	05/14/21 21:40	OP85353	(unrelated sample)
JD24705-3A	4Q15046.D	05/14/21 21:54	OP85353	(used for QC only; not part of job FA85205)
OP85353-MS	4Q15047.D	05/14/21 22:09	OP85353	Matrix Spike
OP85353-MSD	4Q15048.D	05/14/21 22:24	OP85353	Matrix Spike Duplicate
ZZZZZZ	4Q15049.D	05/14/21 22:39	OP85353	(unrelated sample)

Run Sequence Report

Job Number: FA85205
Account: TKKMAB TK&K Services
Project: DFSP; 5449 W Main St, Verona, NY

Run ID: S4Q209	**Method:** EPA 537M BY ID	**Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S4Q209-CC207	4Q15050.D	05/14/21 22:54	n/a	Continuing cal 20
ZZZZZZ	4Q15052.D	05/14/21 23:24	OP85353	(unrelated sample)
ZZZZZZ	4Q15053.D	05/14/21 23:39	OP85353	(unrelated sample)
ZZZZZZ	4Q15054.D	05/14/21 23:54	OP85353	(unrelated sample)
ZZZZZZ	4Q15055.D	05/15/21 00:09	OP85353	(unrelated sample)
ZZZZZZ	4Q15056.D	05/15/21 00:24	OP85353	(unrelated sample)
ZZZZZZ	4Q15057.D	05/15/21 00:39	OP85353	(unrelated sample)
ZZZZZZ	4Q15058.D	05/15/21 00:54	OP85353	(unrelated sample)
ZZZZZZ	4Q15059.D	05/15/21 01:09	OP85353	(unrelated sample)
ZZZZZZ	4Q15060.D	05/15/21 01:24	OP85353	(unrelated sample)
ZZZZZZ	4Q15061.D	05/15/21 01:39	OP85353	(unrelated sample)
S4Q209-CC207	4Q15062.D	05/15/21 01:54	n/a	Continuing cal 20
ZZZZZZ	4Q15064.D	05/15/21 02:23	OP85353	(unrelated sample)
ZZZZZZ	4Q15065.D	05/15/21 02:38	OP85353	(unrelated sample)
ZZZZZZ	4Q15066.D	05/15/21 02:53	OP85353	(unrelated sample)
ZZZZZZ	4Q15067.D	05/15/21 03:08	OP85353	(unrelated sample)
ZZZZZZ	4Q15069.D	05/15/21 03:38	OP85328	(unrelated sample)
ZZZZZZ	4Q15070.D	05/15/21 03:53	OP85328	(unrelated sample)
S4Q209-ECC207	4Q15071.D	05/15/21 04:08	n/a	Ending cal 20