



**2018 PFAS SAMPLING SUMMARY REPORT
RUTLAND SOUTHERN VERMONT REGIONAL AIRPORT
1022 AIRPORT DRIVE
CLARENDON, VT**

ATC PROJECT NO. 280EM00212

December 14, 2018

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BUILDING SCIENCES • MATERIALS TESTING

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VIA ELECTRONIC MAIL Michael.Nahmias@vermont.gov , Andy.Shively@vermont.gov

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Hazardous Materials & Waste Coordinator
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RE: 2018 PFAS Water Supply Well Sampling Report – RUT Vicinity Supply Wells, 2018
 Clarendon, Vermont

Dear Mr. Nahmias and Mr. Shively:

ATC Group Services, LLC (ATC) is pleased to present this summary of supply well sampling results for 87 drinking water samples collected from 70 locations in the vicinity of the Rutland – Southern Vermont Regional Airport (RUT) in North Clarendon, Vermont (Figure 1). Brief written summaries of water supply sampling results were previously submitted to VTrans and the VTDEC by email immediately following receipt of the laboratory data. The samples were collected from bedrock supply wells that serve residences and businesses located on Airport Drive, Gorge Road, Vermont Route 7B Central, Middle Road, Maple Ridge Road, East Street, Jones Lane, Cobb Road, Menard Road, and Brenda Road, which are all located in the vicinity of the RUT in Clarendon, Vermont. This work was performed under ATC's VTrans Contract PS0672.

This summary report supplements a previous Site Investigation (SI) Report completed by ATC in September 2018 of the RUT. The RUT is the suspected source of poly- and perfluoroalkyl substances (PFAS) from the previous use of aqueous film forming foam (AFFF) during fire fighter training at the airport.

The supply well sampling was completed in accordance with work plans and cost estimates approved in March, April, May, June, July, August and October 2018. Seventeen of the 87 residences were sampled twice, at the owners' request, and to confirm PFAS concentrations. Six of the residences have granulated activated carbon (GAC) point-of-entry treatment systems (POET) due to the exceedance of the Drinking Water Health Advisory (DWHA) of 20 parts-per-trillion (ppt)/nanograms per liter (ng/L). Additionally, the Rutland Airport Business Park (RABP) had PFAS GAC treatment installed as part of their water system, which serves seven buildings.

The five DWHA regulated PFAS compounds are perfluoroheptanoic acid (PFHpA), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), perfluorohexanesulfonic acid (PFHxS) and



perfluorooctane sulfonate (PFOS). DWHA exceedances ranged from 23.1 to 202.8 ppt. Drinking water analysis was completed for the 12 or 21 PFAS compound list in accordance EPA Method 537, all of which include the five regulated DWHA compounds.

Possible contaminants associated with the potential AFFF sources could include perfluorobutanoic acid (PFBA), perfluoropentanoic acid (PFPeA), perfluorohexanoic acid (PFHxA), perfluoroheptanoic acid (PFHpA), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), perfluorodecanoic acid (PFDA), perfluoroundecanoic acid (PFUnA), perfluorododecanoic acid (PFDoA), perfluorotridecanoic Acid (PFTriA), perfluorotetradecanoic acid (PFTeA), perfluorobutanesulfonic acid (PFBS), perfluorohexanesulfonic acid (PFHxS), perfluoroheptanesulfonic Acid (PFHpS), perfluorooctanesulfonic acid (PFOS), perfluorodecanesulfonic acid (PFDS), perfluorooctane Sulfonamide (FOSA), N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA), N-ethyl perfluorooctane, sulfonamidoacetic acid (NEtFOSAA), 6:2FTS, 8:2FTS, perfluoropentanesulfonic acid (PFPeS), perfluorononanesulfonic acid (PFNS), 4:2 FTS, fluoroteleomers and precursors, which are collectively known as PFASs.

Drinking Water Results Summary

On March 28, 2018, drinking water samples were collected for PFAS laboratory analysis from the two supply wells (Well #1 and Well #2) serving the RABP. Well #1 and Well #2 analysis results exceeded the DWHA at 202.8 and 58.3 ppt, respectively. The RABP water system had GAC PFAS filtration installed and there are no user restrictions on the drinking water. A summary of the results reported in ppt are shown in the below table. Grey shading indicates an exceedance of the DWHA.

Location	PFHpA	PFOA	PFNA	PFHxS	PFOS	Total Regulated PFAS
RABP - Well 1	19	16	1.8	140	26	202.8
RABP - Well 2	28	17	2.7	4.5	6.1	58.3
RABP - Combined	31	21	2.9	110	19	183.9

On April 12, 2018, drinking water samples were collected from 375 Gorge Road, 1480 Gorge Road, 30 Jones Lane, 82 Jones Lane, 742 VT Route 7B, 832 VT Route 7B and 916 VT Route 7B. The 1480 Gorge Road sample had no detections above the laboratory method detection limit. The 375 Gorge Road, 30 and 82 Jones Lane and 742 VT Route 7B analysis results ranged between 6.2 and 15.1 ppt, which are below the DWHA. The 832 and 916 VT Route 7B analysis results were 71.1 and 38.5 ppt, which are above the DWHA. The 832 and 916 VT Route 7B supply wells now have GAC POET system installed and functioning and there are no restrictions on drinking water usage. A summary of the results reported in ppt are shown in the below table. Grey shading indicates an exceedance of the DWHA.



Location	PFHpA	PFOA	PFNA	PFHxS	PFOS	Total Regulated PFAS
1480 Gorge Rd	ND<1.8	ND<1.8	ND<1.8	ND<1.8	ND<1.8	ND
375 Gorge Rd	4.7	2.2	ND<1.7	ND<1.7	2.7	9.6
30 Jones Ln	1.9	4.3	ND<1.8	1.9	4.7	12.8
82 Jones Ln	6.3	5.2	ND<1.7	ND<1.7	3.6	15.1
742 Rt 7B	ND<1.9	2.8	ND<1.9	ND<1.9	3.4	6.2
832 Rt 7B	15.0	38.0	ND<2.0	2.1	16.0	71.1
916 Rt 7B	6.6	17.0	ND<1.7	1.9	13.0	38.5

On May 9, 2018, drinking water samples were collected from 111, 279 and 940 Middle Road, 1420 and 92 Gorge Road, 84, 129, 205, 339, 443, 452, 581, 656, 705, 767, 859, 886, 895 and 1375 VT Route 7B. The 84, 111, 279, 339, 443, 581, 859, 886, and 1375 VT Route 7B samples results had no detections above laboratory method detection limits. The 767 VT Route 7B sample analysis result exceeded the DWHA at 26 ppt. The remaining supply wells had PFAS detections ranging between 1.9 and 13.3 ppt. A summary of the results reported in ppt are shown in the below table. Grey shading indicates an exceedance of the DWHA.

Location	PFHpA	PFOA	PFNA	PFHxS	PFOS	Total Regulated PFAS
111 Middle Rd	ND	ND	ND	ND	ND	ND
279 Middle Rd	ND	ND	ND	ND	ND	ND
Frito Lay Rt 7B	ND	ND	ND	ND	ND	ND
1420 Gorge Rd	ND	ND	ND	ND	ND	ND
84 Rt 7B	ND	ND	ND	ND	ND	ND
443 Rt 7B	ND	ND	ND	ND	ND	ND
339 Rt 7B	ND	ND	ND	ND	ND	ND
452 Rt 7B	4.0	3.6	ND	ND	1.9	9.5
581 Rt 7B	ND	ND	ND	ND	ND	ND



859 Rt 7B	ND	2.2	ND	ND	2.1	4.3
656 Rt 7B	ND	ND	ND	ND	ND	ND
205 Rt 7B	ND	ND	ND	ND	3.7	3.7
886 Rt 7B	ND	ND	ND	ND	ND	ND
705 Rt 7B	ND	2.7	ND	ND	4.5	7.2
767 Rt 7B	2.4	6.8	ND	1.8	15.0	26.0
895 Rt 7B	ND	ND	ND	ND	2.2	2.2
92 Gorge Rd	ND	1.9	ND	ND	ND	1.9
129 Rt 7B	ND	5.7	ND	ND	7.6	13.3
940 Middle Rd	ND	2.2	ND	ND	ND	2.2

On June 12, 2018, drinking water samples were collected from 251, 298, 341, 447, 473, 871, 970, 993, 1039, 1040, 1083, 1191, 1391 and 2321 Middle Road, 113 and 475 Gorge Road, 48 and 49 Minard Road and 263 Maple Ridge Road. The 49 Minard Road and 475 Gorge Road samples had PFAS detections below the DWHA at 11.5 and 3.0 ppt, respectively. All the additional sample locations had no detections above laboratory method detection limits for the DWHA regulated compounds. A summary of the results reported in ppt are shown in the below table. Grey shading indicates an exceedance of the DWHA.

Location	PFHpA	PFOA	PFNA	PFHxS	PFOS	Total Regulated PFAS
970 Middle Rd	ND	ND	ND	ND	ND	ND
1040 Middle Rd	ND	ND	ND	ND	ND	ND
251 Middle Rd	ND	ND	ND	ND	ND	ND
263 Maple Ridge	ND	ND	ND	ND	ND	ND
Mill River HS	ND	ND	ND	ND	ND	ND
1391 Middle Rd	ND	ND	ND	ND	ND	ND
993 Middle Rd	ND	ND	ND	ND	ND	ND
871 Middle Rd	ND	ND	ND	ND	ND	ND
473 Middle Rd	ND	ND	ND	ND	ND	ND



49 Minard Rd	1.8	4.2	ND	ND	5.5	11.5
298 Middle Rd	ND	ND	ND	ND	ND	ND
475 Gorge Rd	3.0	ND	ND	ND	ND	3.0
113 Gorge Rd	ND	ND	ND	ND	ND	ND
48 Minard Rd	ND	ND	ND	ND	ND	ND
1191 Middle Rd	ND	ND	ND	ND	ND	ND
341 Middle Rd	ND	ND	ND	ND	ND	ND
447 Middle Rd	ND	ND	ND	ND	ND	ND
1039 Middle Rd	ND	ND	ND	ND	ND	ND
1083 Middle Rd	ND	ND	ND	ND	ND	ND

On July 24, 2018, drinking water samples were collected from 42, 43 and 118 Middle Road, 29, 71 and 84 Cobb Lane, 2759 East Street, 168 Brenda Road, 337, 429 (two locations), 471, 729, 770, 773, 864, 873, 915 and 1002 Airport Drive (OMYA well) and 383 and 452 VT Route 7B. The 42 and 43 Middle Road samples had PFAS detections below the DWHA at 2.1 and 5.1 ppt, respectively. The 452 VT Route 7B, 429 Airport Road (Dairy) and 337 Airport Road samples all exceeded the DWHA at 29.8, 46.8 and 202.4 ppt, respectively. The 429 VT Route 7B and 429 Airport Road (Dairy) supply wells have POET system installed. The 337 Airport Road sample is associated with the 429 Airport Road property owners, and is a spring. The owners decided to decommission the spring and will not be using this water for any purposes. All the additional sample locations had no detections above laboratory method detection limits for the DWHA regulated compounds. A summary of the results reported in ppt are shown in the below table. Grey shading indicates an exceedance of the DWHA.

Location	PFHpA	PFOA	PFNA	PFHxS	PFOS	Total Regulated PFAS
864 Airport Dr	ND	ND	ND	ND	ND	ND
452 Rt 7B	19	3.8	ND	4.5	2.5	29.8
873 Airport Dr	ND	ND	ND	ND	ND	ND
429 Airport Dr, Main	ND	ND	ND	ND	ND	ND
429 Airport Dr, Dairy	30	13	ND	3.8	ND	46.8



471 Airport Dr	ND	ND	ND	ND	ND	ND
337 Airport Dr, Spring	120	70	8.6	3.8	ND	202.4
915 Airport Dr	ND	ND	ND	ND	ND	ND
729 Airport Dr	ND	ND	ND	ND	ND	ND
770 Airport Dr	ND	ND	ND	ND	ND	ND
773 Airport Dr	ND	ND	ND	ND	ND	ND
168 Brenda Rd	ND	ND	ND	ND	ND	ND
2759 East St	ND	ND	ND	ND	ND	ND
383 Rt 7B	ND	ND	ND	ND	ND	ND
1002 Airport Dr, OMYA	ND	ND	ND	ND	ND	ND
71 Cobb Ln	ND	ND	ND	ND	ND	ND
84 Cobb Ln	ND	ND	ND	ND	ND	ND
56 Pars (29 Cobb)	ND	ND	ND	ND	ND	ND
43 Middle Rd	ND	2.7	ND	ND	2.4	5.1
42 Middle Rd	ND	ND	ND	ND	2.1	2.1
118 Middle Rd	ND	ND	ND	ND	ND	ND

On August 21, 2018, drinking water samples were collected from 84, 205, 339, 443, 581, 656, 705, 742, 859, 866 895 and 1628 (VTrans Garage) VT Route 7B, 940 Middle Road, 30 and 82 Jones Lane, and 375 and 475 Gorge Road. The 205, 705, 742, 859, 866, 895, and 1628 (VTrans Garage) VT Route 7B, 375 Gorge Road and 30 Jones Lane samples had PFAS detections below the DWHA, which ranged between 1.8 and 12.1 ppt. The 82 Jones Lane sample exceeded the DWHA at 59.2 ppt. The 4282 Jones Lane supply well has a POET system installed. All the additional sample locations had no detections above laboratory method detection limits for the DWHA regulated compounds. A summary of the results reported in ppt are shown in the below table. Grey shading indicates an exceedance of the DWHA.

Location	PFHpA	PFOA	PFNA	PFHxS	PFOS	Total Regulated PFAS
656 Rt. 7B	ND	ND	ND	ND	ND	ND



705 Rt. 7B	ND	2.1	ND	ND	5.1	7.2
205 Rt. 7B	ND	ND	ND	ND	7.7	7.7
1628 Rt 7B (VTrans)	ND	3.0	ND	4.3	2.0	9.3
859 Rt. 7B	ND	ND	ND	ND	2.5	2.5
443 Rt. 7B	ND	ND	ND	ND	ND	ND
940 Middle Road	ND	ND	ND	ND	ND	ND
866 Rt. 7B	ND	ND	ND	ND	1.8	1.8
84 Rt. 7B	ND	ND	ND	ND	ND	ND
339 Rt. 7B	ND	ND	ND	ND	ND	ND
742 Rt. 7B	2.5	4.5	ND	ND	4.6	11.6
30 Jones Lane	2.0	4.3	ND	ND	5.8	12.1
82 Jones Lane	28.0	16.0	4.5	3.6	7.1	59.2
895 Rt. 7B	ND	ND	ND	ND	2.3	2.3
475 Gorge Rd.	ND	ND	ND	ND	ND	ND
375 Gorge Rd.	4.6	2.2	ND	ND	2.8	9.6
581 Rt. 7B	ND	ND	ND	ND	ND	ND

On August 23, 2018, a drinking water sample was collected from 129 VT Route 7B. The 129 VT Route 7B sample exceeded the DWHA at 23.1 ppt, and the supply well has a GAC POET system installed. A summary of the result is shown in the below table. Grey shading indicates an exceedance of the DWHA.

Location	PFHpA	PFOA	PFNA	PFHxS	PFOS	Total Regulated PFAS
129 Rt 7B	2.4	6.3	ND	2.4	12.0	23.1

On October 3, 2018, drinking water samples were collected from 1770 VT Route 7B and 65 Middle Road. Both sample locations had no detections above laboratory method detection limits for the DWHA regulated compounds. A summary of the result reported in ppt is shown in the below table. Grey shading indicates an exceedance of the DWHA.

Location	PFHpA	PFOA	PFNA	PFHxS	PFOS	Total Regulated PFAS
1770 Rt 7B	ND	ND	ND	ND	ND	ND
65 Middle Rd	ND	ND	ND	ND	ND	ND

A field blank sample quality assurance/quality control (QA/QC) sample was collected at each sample location. No PFAS compounds were detected above laboratory method detection limits in the field blank samples, which were only analyzed if co-location sample had any PFAS compound detections. ATC adhered to its VT DEC approved Standard Operating Procedures (SOPs) for PFAS sample collection. The drinking water samples were transported under chain-of-custody in an ice-filled cooler to TestAmerica Laboratory of South Burlington, Vermont for analysis by EPA Method 537 (modified). Copies of the laboratory analytical results are attached in Appendix A. Field notes and where available, sample field sheets, were completed for the sample locations and are included in Appendix B. A summary of the above tables by location (as 17 supply wells were sampled twice) can be seen in the attached Table 1. A map showing all sample locations and associated DWHA regulated PFAS concentrations can be seen in the attached Figure 2. Three focused maps, which were combined to create the Figure 2 overview map, depicting the sample locations and regulated PFAS concentrations, can be seen in the attached Figure 3 (Section 1), Figure 4 (Section 2) and Figure 5 (Section 3).

Based on the presence of PFAS at the locations depicted on Figure 2, ATC created a PFAS Groundwater Concentration Contour map, which is attached as Figure 6. Figure 6 shows an obvious northeast to southwest orientation of DWHA exceedances, with diminishing concentrations north and south of the highest concentrations. The PFAS plume extends from the supply well at 429 Airport Road southwest to 129 VT Route 7B, which is a distance of approximately two miles. There is insufficient data at this time to determine if the PFAS concentrations if bedrock fractures link the locations and/or if different source areas influence the PFAS distribution. Many supply wells adjacent to other wells with elevated PFAS concentrations had no PFAS present above laboratory method detection limits.

Surficial and Bedrock Area Geology

Based on information provided by VTrans, it appears that PFAS entered the soils and groundwater at several locations during airport fire training. A site investigation (SI) was completed by ATC at suspected PFAS source areas: the Airport Fire Department and the Bravo location. The SI report, dated September 25, 2018, identified low concentrations of PFAS compounds were present in soils from ground surface to the top of bedrock. High concentrations of PFAS were detected in overburden and bedrock aquifers at the Bravo and Fire Department locations. The SI did not identify the mechanism of PFAS migration to the surrounding bedrock supply wells, but bedrock infiltration and migration through fractures is suspected.

The primary surficial geology is listed on the online ANR Natural Resources Atlas as moraine, glacial deposits (assumed recessional), which is un-stratified deposited till material. Additionally, the ANR Atlas depicts kame moraine glaciofluvial deposits on the southeastern corner of the airport property. Glaciofluvial material is glacial melt deposits and it typically stratified. The dominant bedrock geology in the immediate vicinity is listed on the online ANR Natural Resources Atlas as dolostone consisting of well-bedded dolostone weathering beige, cream, and buff, with green, red, or gray

phyllite, siliceous partings, and thin beds of blue-quartz-pebble conglomerate and quartzite. The secondary bedrock feature is listed as phyllite.

Soil boring data completed during the SI, indicated soil generally consisted of fine to coarse sand with some silt, gravel and cobbles encountered from ground surface to approximately 15 fbg, some of which could be contributed to fill material during the construction of the runways. Clayey-silt and fine sand, likely lacustrine deposition, was generally encountered from 15 fbg to approximately 32 fbg in the well to top of bedrock, with dense silty-sand, fine to coarse gravel and some cobbles (glacial till) to the borings maximum depth of 33.5 fbg, where presumed bedrock refusal was encountered. Very dense glacial till was encountered from 10 to 18 fbg in a soil boring adjacent to the RABP supply wells.

Maps created with the ANR Natural Resources Atlas, depicting surficial soil lithology, feature type, and rock line are included in Appendix C. Maps depicting bedrock feature type, outcrops and faults and contacts are also included in Appendix C. A topographical map of the vicinity is also included in Appendix C.

No obvious surficial soil lithology or feature type correlate to the PFAS contaminant plumes orientation. However, the rock line map (surface bedrock ridges) does appear to depict a “funnel” shape at the southwest half of the PFAS plume, which appears to correlate with the plume orientation at this location. No rock line features appear to correlate to the northeastern portion of the contaminant plume. No bedrock feature, type, outcrops of faults and contacts appear to correlate with the contaminant plumes orientation.

ATC also completed a bedrock fracture trace at the University of Vermont (UVM) Map Room, to determine if any obvious bedrock fracture orientation could be observed through the study of surficial features. ATC used a Stereo-Scope to create a 3-D image of the orthographic photos of the airport and its vicinity. ATC analyzed Stereo-Scope maps VT H 31-62 and VT H 31-63 from 5-19-1962 and maps VT 62 H 30-169 and VT 62 H 30-170 from 5-13-1962. Due to the relatively flat terrain in the immediate area combined with a limited scale and major disturbance of the area to construct the airport, no obvious fracture trace lineations were observed.

Supply Well Locations and Depths

ATC utilized the ANR Natural Resources Atlas map to gather information on supply wells in the vicinity of the PFAS sampled wells. The private well layer on the mapping program depicts supply well locations, but is notoriously inaccurate in well placement locations, and address locations are not supplied. The supply well information page provides: depth of well, depth to bedrock, drillers yield, static level and some overburden and bedrock information provided by the driller. Very few of the well information provided bedrock fracture information. Unfortunately, very few wells were able to be definitively linked to PFAS sampled supply wells. During the ATC supply well sampling events, the scientist attempted to capture well locations and well tag numbers. The majority of the supply wells did not have wells tags present, thus making the residences supply well difficult to match to the ANR maps private well information. A table showing PFAS sampling locations with the best fit nearby supply well is included as Table 2. The table also provides the DWHHA compound concentrations for each of the supply well locations. To assist in determining if there are common bedrock fractures that connect the affected wells, additional investigations would be needed, such as, but not limited to, geophysical investigations.

The assumed onsite supply well depths, based on closest likely listed well to the sampled addresses, range from 91 (205 VT Route 7B) to 960 (RABP Well #2) feet below ground surface

(fbgs). The two deepest well, which are the two RABP supply wells, are 580 and 960 fbgs, and are the only two affected wells with definitive available supply well data.

Supply well depth-to-bedrock, according to the ANR mapping program, range between 5 (1480 Gorge Road) and 225 (730 Airport Road) fbgs. However, most supply well bedrock depths range between 20 and 80 fbgs.

Data Gaps

ATC has determined that inadequate supply well information is a limiting data gap that does not allow for a complete analysis of bedrock fractures and fate and transport, as related to the sampled supply wells and their locations. Additionally, the 337 Airport Road spring sample, which exceeds the DWHA at 202.4 ppt, is an anomaly that will need further investigation. This spring is supplied by shallow overburden groundwater, which is unlikely to be impacted by the airports Bravo and Fire Department source areas. There is a possible source area related to an airplane crash north of the northern end of the main runway. It was reported by VTrans that AFFF was used at the crashed psite, and could be the source for the shallow spring location. Further investigation is recommended. Additionally, the PFAS source areas have not yet been fully investigated or delineated.

Supply Well Locations and PFAS Results Interpretation

ATC completed an analysis of the sample locations and results, nearby ANR listed supply wells and the vicinity geology to determine if any conclusions can be drawn about bedrock PFAS contaminant infiltration, pathways and associated source area(s). However, there are several limiting factors to completing a full analysis, with the most important being a lack of supply well construction information. It does appear that the highest PFAS concentrations (except for the shallow spring) are deep wells with 225, 425, 480, 580 and 960 fbgs depths. The average well depth in the area is 332 fbgs compared to the affected deep well average of 534 fbgs. Additionally, the SI for the airport is in its early stages, and full source area delineation has not yet been completed. That being said the 580 fbgs RABP Well #1 has a PFAS concentration (202.8 ppt) four times that of the 960 fbgs RABP Well #2 (58.3 ppt). The boring logs for these two wells state that the 580 fbgs Well #1 has bedrock fractures at 169, 222 and 564 fbgs; and the Well #2 had a bedrock fracture at 865 fbgs. This perhaps indicates that the 169 to 565 fbgs fractures are the primary transport depths.

It is likely that the primary transport mechanism for the dissolved-phase PFAS are bedrock fractures, as it is the most likely connection between the well locations, which are almost two miles apart from northeast to southwest. Overburden aquifer transport is less likely to travel this distance, due to topography, dispersion, sorbtion and geologic impediments to flow, such as till soils. However, it could be that overburden aquifer transport is responsible for some of the high PFAS concentrations, based on the 767 VT Route 7B well, which had a regulated PFAS compound concentration of 26 ppt, which exceeds the DWHA. The supply well to the immediate north and south range between 2.3 and 7.4 ppt, with non-detects north and south of these locations. The 767 VT Route 7B residence matches up with a gap in the surfacing bedrock ridges depicted in Appendix C rock line map. This gap could be allowing for shallow aquifer flow to the 767 VT Route 7B location. Additional investigation would be required to determine this statements accuracy.

In the majority of the supply well samples, PFAS was not detected above laboratory method detection limits. Many of the non-detect samples are in very close proximity to wells containing high concentrations of PFAS, further indicating that the affected fractures are localized.

Conclusions and Recommendations

Based on a review of available supply well information, PFAS concentrations and sample locations, and area geology, ATC concludes that additional investigation is required to determine by what mechanism and location the dissolved-phase PFAS is migrating to the affected wells. Based on the location of the affected supply wells and the amount of non-detect supply wells in their vicinity, ATC believes that the bedrock sampling has generally done a good job at delineated the bedrock lateral PFAS plume extent, with possible additional sampling to the south of Gorge Road and north of 337 Airport Road.

Based on the report conclusions, ATC recommends the following:

1. Geophysical investigations of the PFAS affected, and some nearby non-affected supply wells, is required to determine at what depth the water bearing bedrock fractures are present and their orientation, which should allow a linkage of supply wells to specific fractures and help to determine if additional supply wells are at risk of impact.
2. Additional investigation and delineation of the suspected PFAS source areas, which includes the Delta and airplane crash locations. An additional SI should be completed at the Bravo and Fire Department source area locations, to determine if/how PFAS is entering the bedrock at these locations.
3. The 337 Airport Road spring location and its vicinity should be further investigated for the possible presence of shallow overburden aquifer PFAS impacts. The airplane crash location should also be investigated to determine is this is the likely source area for any bedrock or shallow overburden aquifer PFAS impacts.
4. Other recommendations in ATC's SI report should be completed.

This report has been prepared by the employees of ATC Group Services, LLC whose signatures appear below. Request for information on the contents of this report should be directed to these individuals.

Sincerely,

ATC Group Services LLC



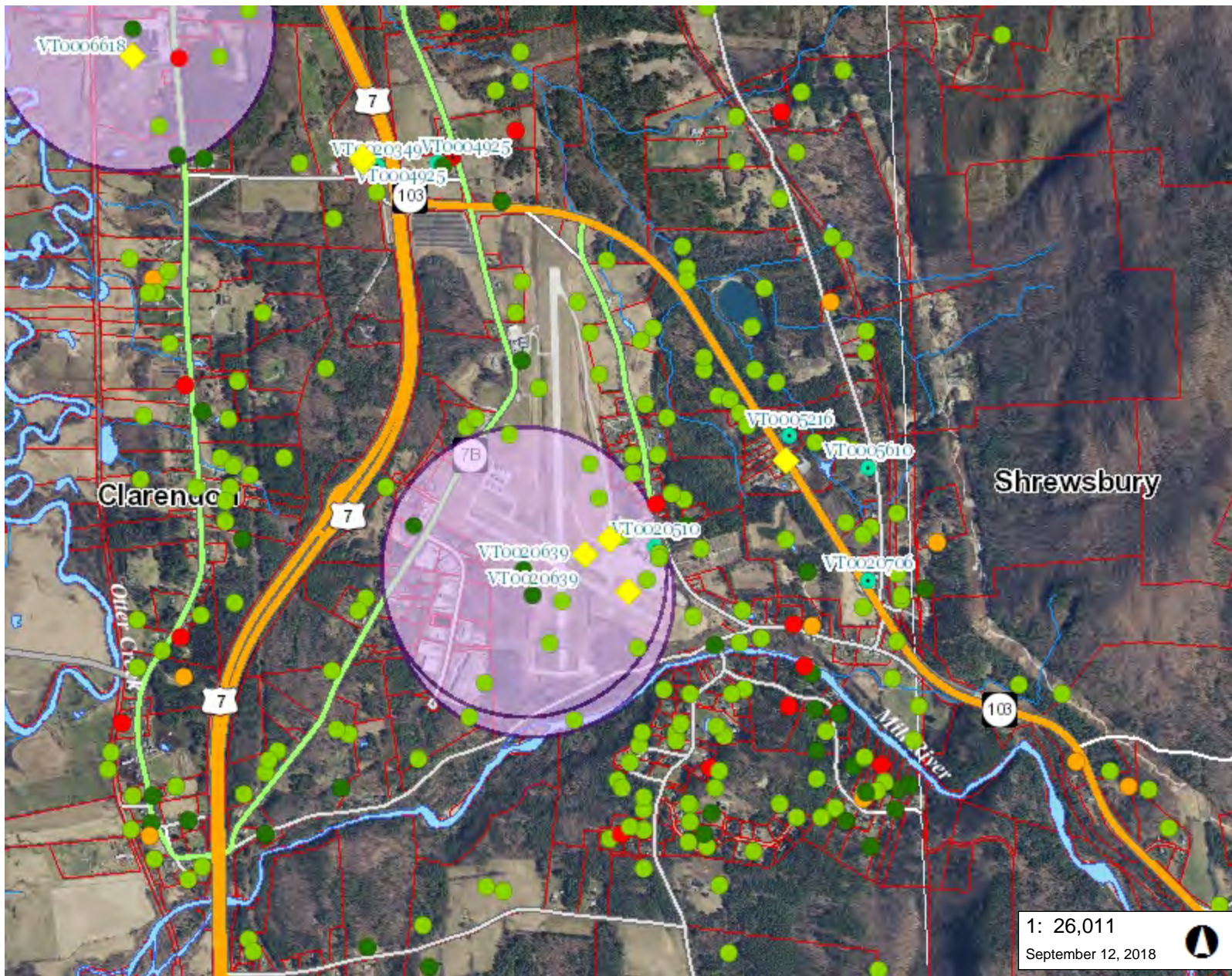
James Gascoyne,
Senior Project Manager



Joseph Hayes, C.P.G., P.G.
Branch Manager

Figures 1-6
Table 1 & 2
Appendix A – Supply Well Laboratory Reports
Appendix B – Sampling Field Notes
Appendix C – ANR Natural Resources Maps

FIGURES



LEGEND

- Hazardous Site
- Brownfields
- Dry Cleaner
- Private Wells
 - GPS Location
 - screen digitized
 - E911 Address
 - Map
 - Unknown
- Public Water Sources
 - Active
 - Proposed
 - Inactive
- Surface Water SPA
 - Active
 - Inactive
- Ground Water SPA
 - Active
 - Proposed
 - Inactive
- Parcels (Standardized)
- Roads
 - Interstate
 - Principal Arterial
 - Minor Arterial
 - Major Collector
 - Minor Collector

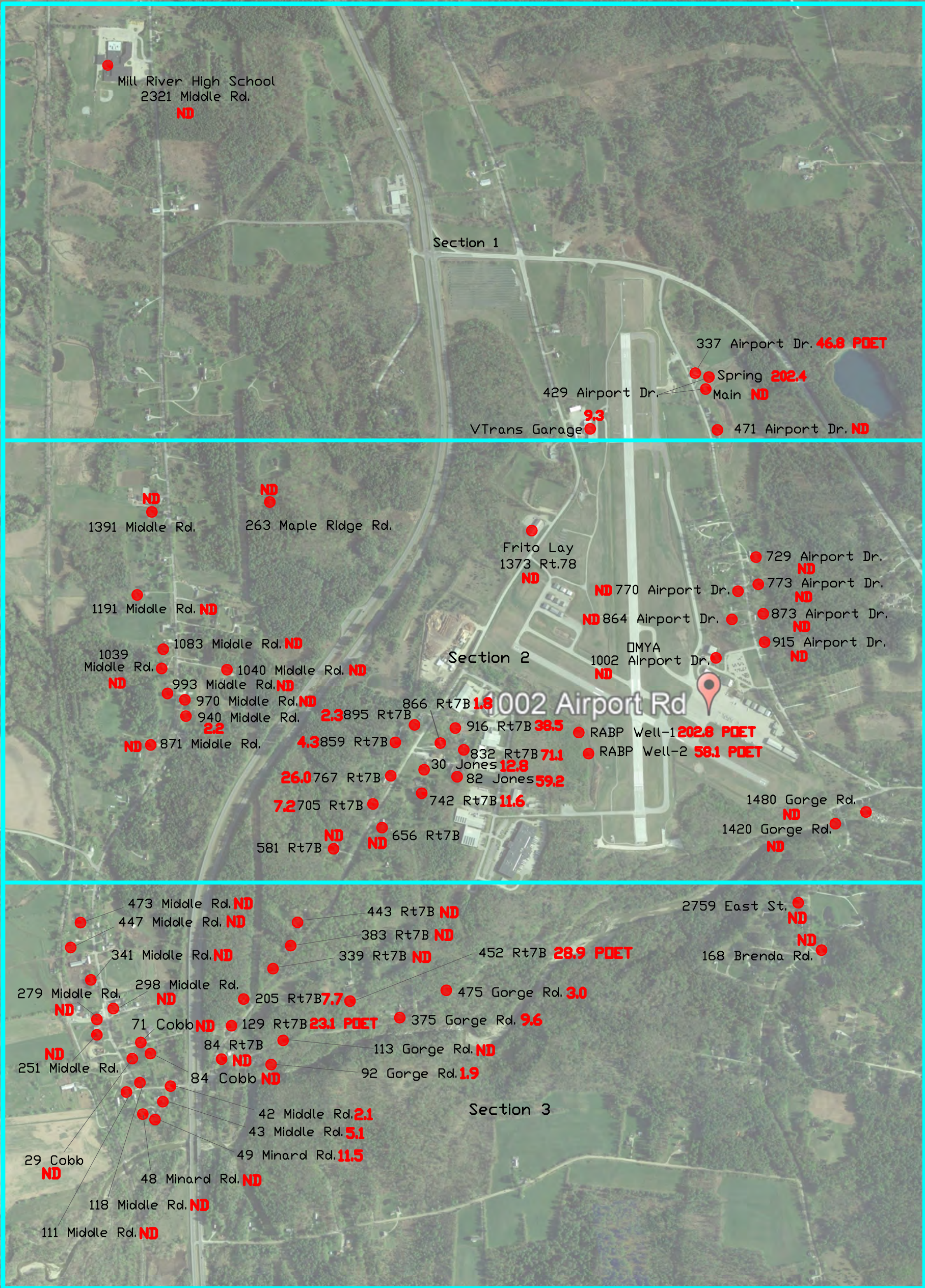
1: 26,011
September 12, 2018

NOTES

Map created using ANR's Natural Resources Atlas
Clarendon, VT
SMS No. 2018-4763

1,321.0 0 660.00 1,321.0 Meters
WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 2168 Ft. 1cm = 260 Meters
© Vermont Agency of Natural Resources THIS MAP IS NOT TO BE USED FOR NAVIGATION

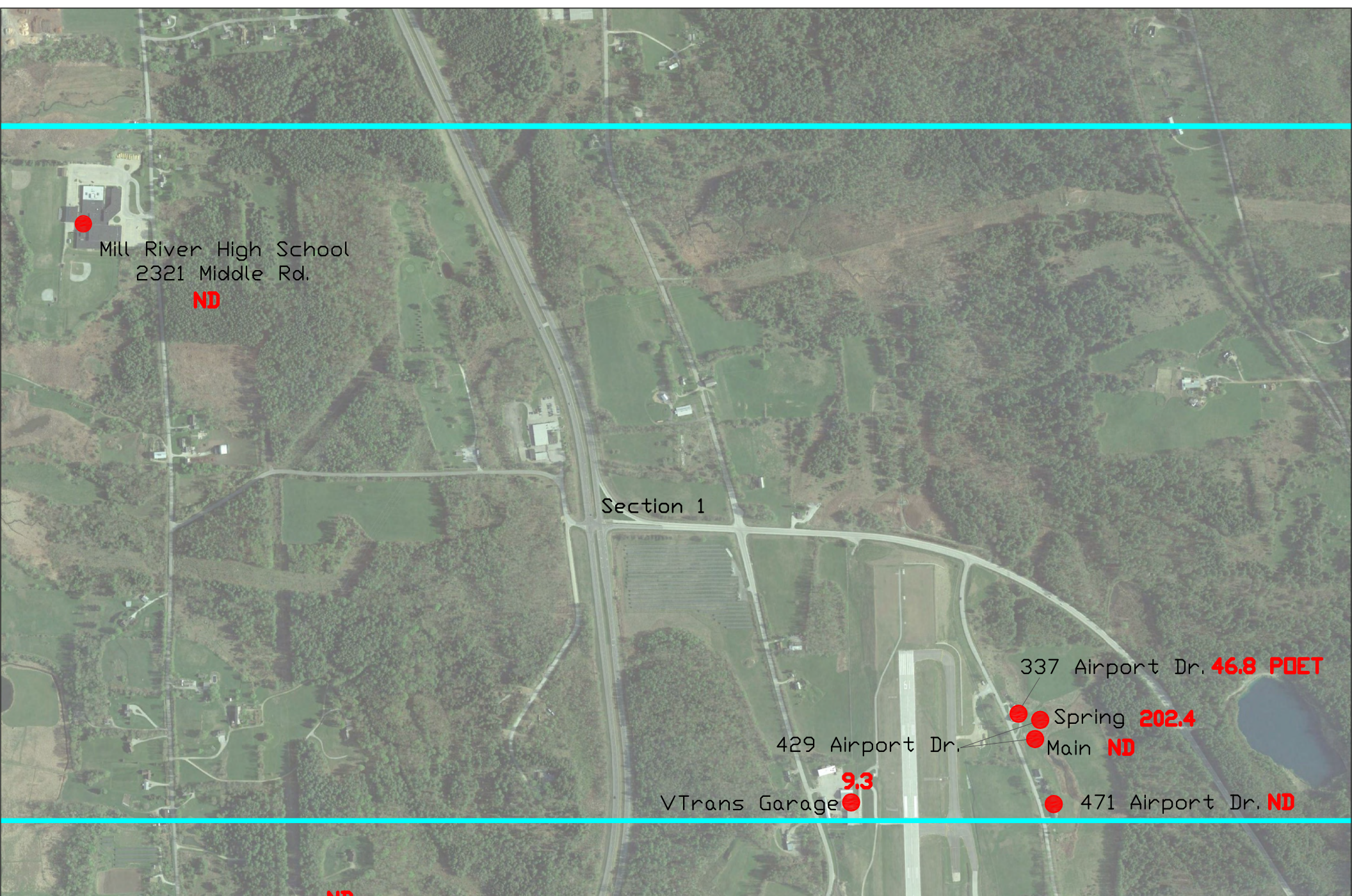
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1 Elm Street, Suite 3 * Waterbury, VT 05676
Phone: 802-241-4131 Fax: 802-244-6894

PROJECT:	RUTLAND SVRA Clarendon, VT
CLIENT:	VTRANS
TITLE:	Supply Well Sampling - Location Overview

CADFILE: V:\BX\U-Z\VTRANS\RUTLANDAIRPORT\CADD			
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
AC	JG	JG	JH
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
SHOWN	11/14/18	280EM00312	2



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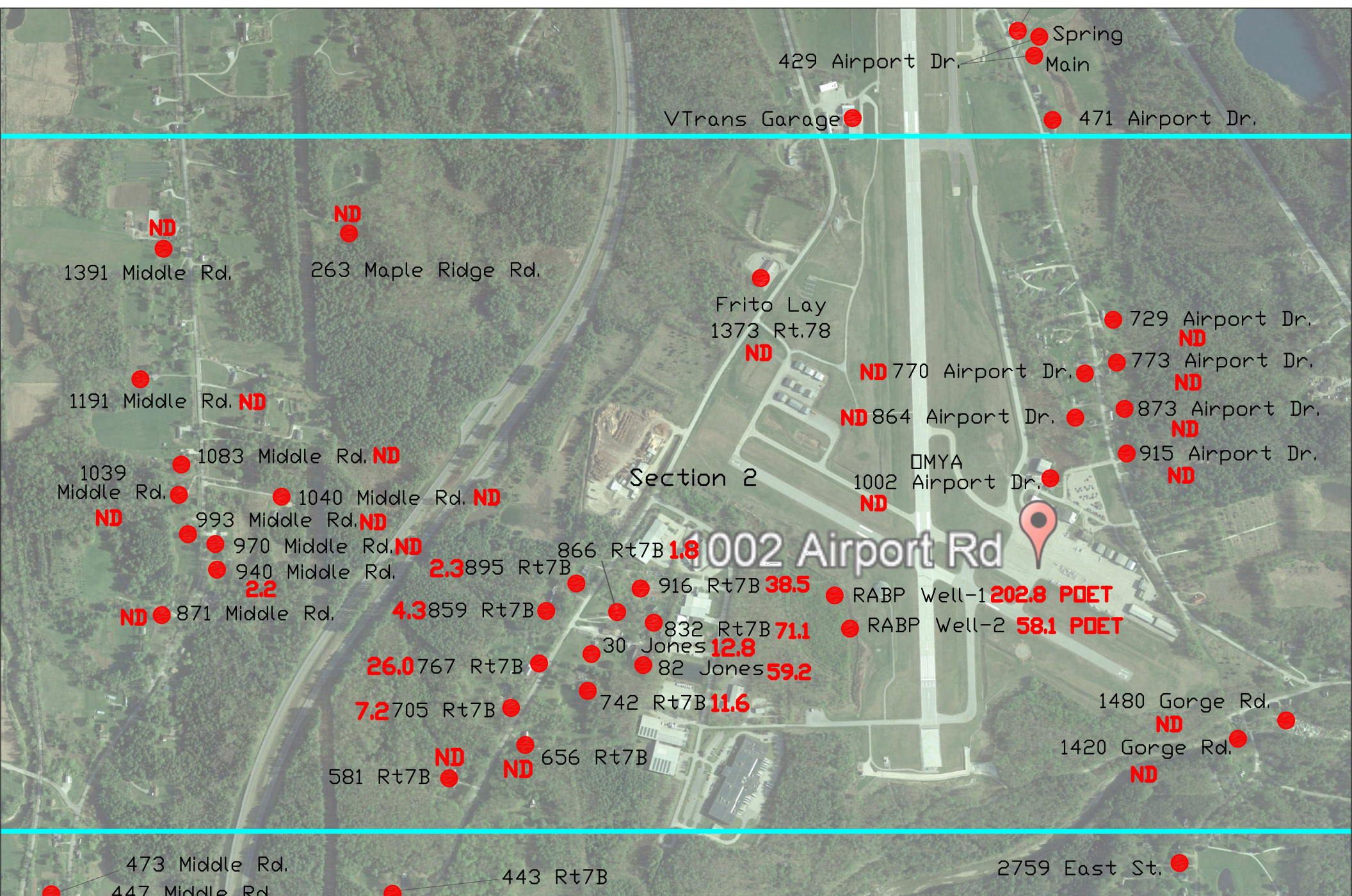
NOTES

- 9.3ppt PFAS in ppt (ppt - parts per trillion)
- Sample location

PROJECT:
 Rutland SVRA
 Clarendon, VT

TITLE:
 Supply Well Sampling - Section 1

COMPUTER CADFILE : V\U-Z\VTrans\RutlandAirport\CADD			
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
AC	JG	JG	JH
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
NTS	11/14/18	280EM00312	3



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 Phone: 802-241-4131 Fax: 802-244-6894

NOTES

9.3ppt PFAS in ppt
 (ppt - parts per trillion)
 ● Sample location

PROJECT:

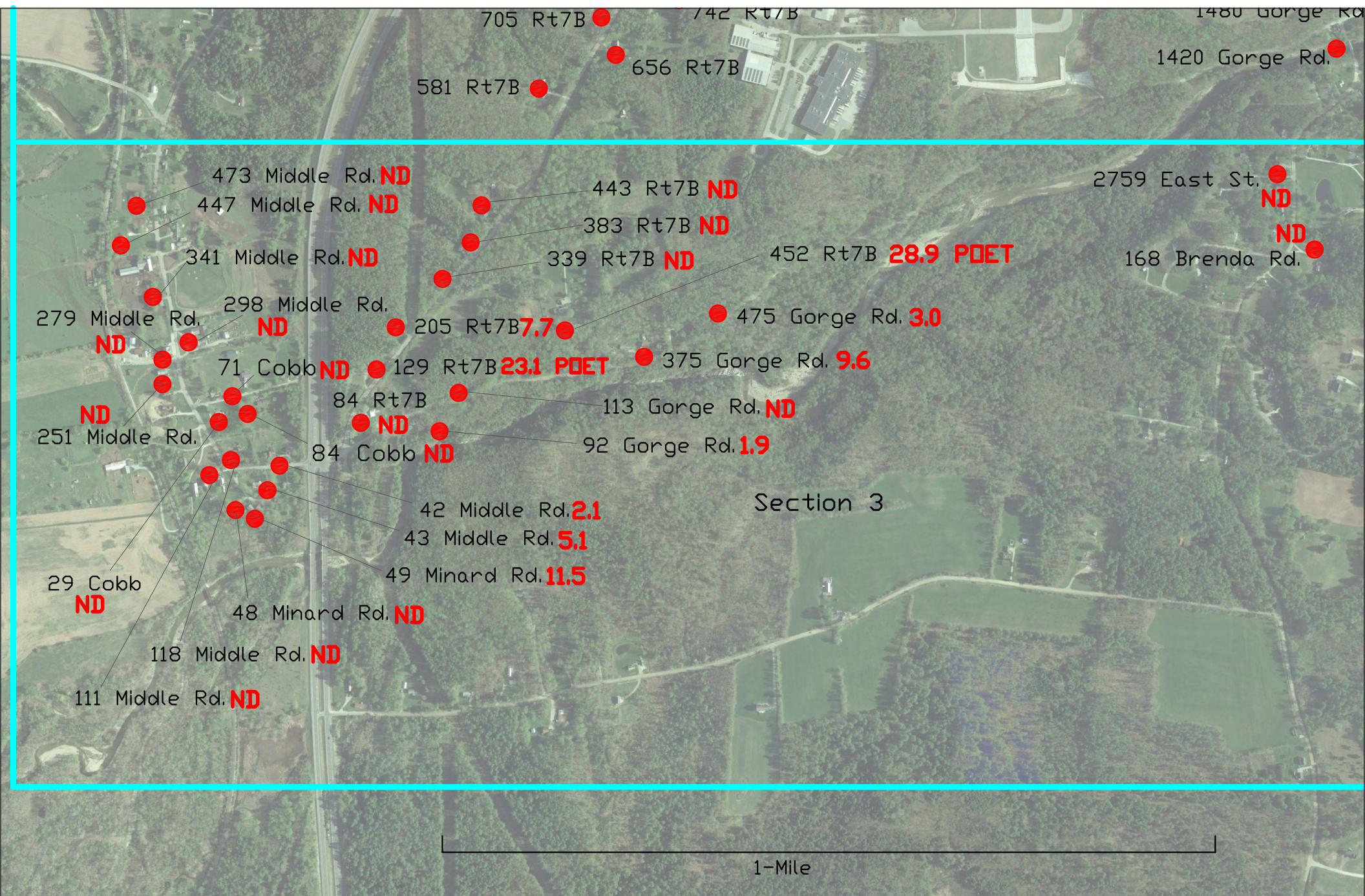
Rutland SVRA
 Clarendon, VT

TITLE:

Supply Well Sampling - Section 2

COMPUTER CADFILE : V\U-Z\VTrans\RutlandAirport\CADD

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
AC	JG	JG	JH
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
NTS	11/14/18	280EM00312	4



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 Phone: 802-241-4131 Fax: 802-244-6894

NOTES

9.3ppt PFAS in ppt (ppt - parts per trillion)
 ● Sample location

PROJECT:

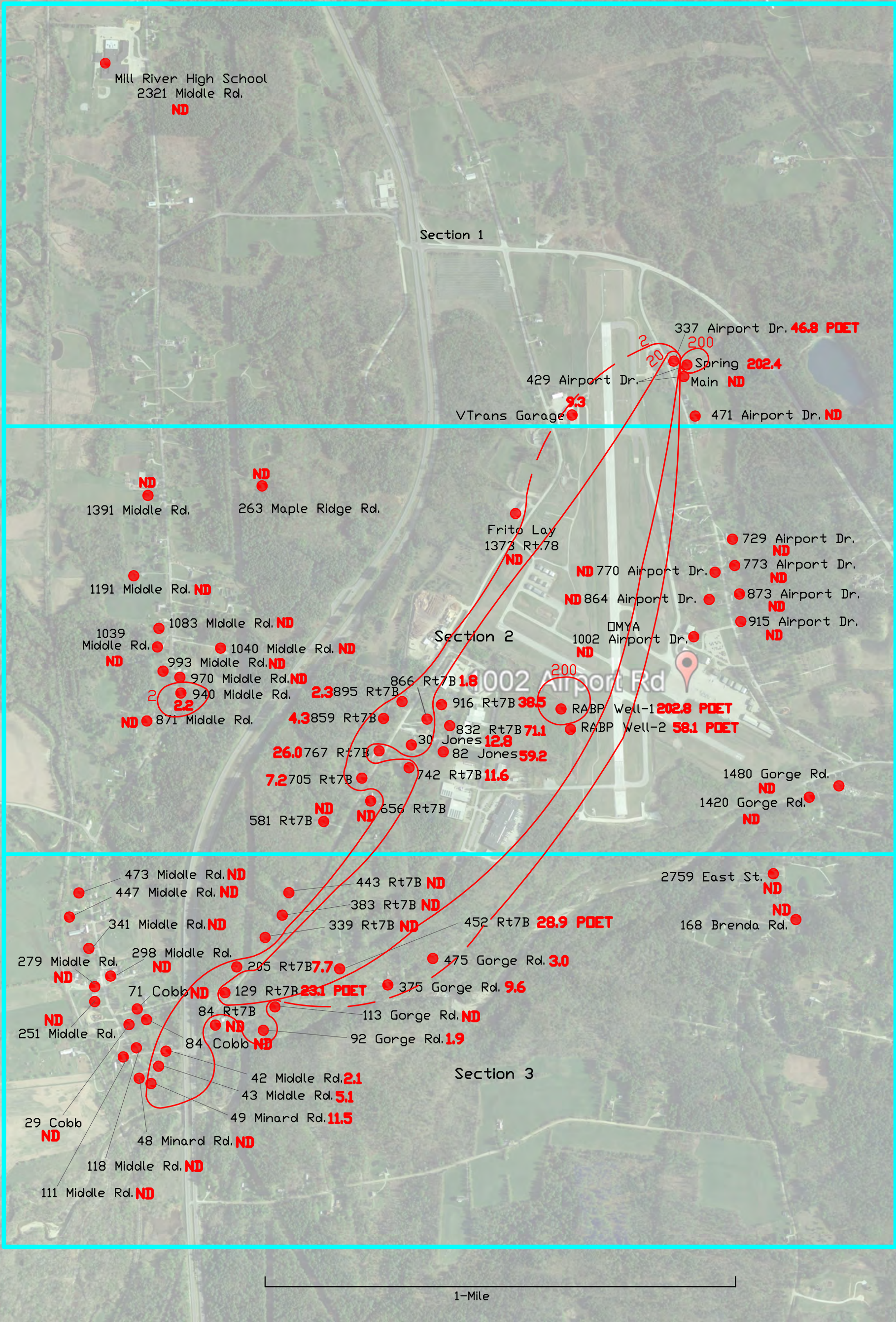
Rutland SVRA
 Clarendon, VT

TITLE:

Supply Well Sampling - Section 3

COMPUTER CADFILE : V:\U-Z\VT\Trans\RutlandAirport\CADD

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
AC	JG	JG	JH
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
NTS	11/14/18	280EM00312	5



LEGEND
 200 PFAS CONCENTRATION - REPORTED IN PARTS PER TRILLION (PPT)
 CONCENTRATION CONTOUR (PPT)



1 Elm Street, Suite 3 * Waterbury, VT 05676
 Phone: 802-241-4131 Fax: 802-244-6894

PROJECT:	RUTLAND SVRA Clarendon, VT
CLIENT:	VTRANS
TITLE:	2018 PFAS CONCENTRATION CONTOURS

CADFILE: V:\BX\U-Z\VTRANS\RUTLANDAIRPORT\CADD			
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
AC	JG	JG	JH
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
SHOWN	11/14/18	280EM00312	6

TABLES

Table 1
 Drinking Water Analysis Results by Location
 Clarendon, VT

All 2018 Drinking Water Sampling Results for DWHA Compounds

Date	Location	PFHpA	PFOA	PFNA	PFHxS	PFOS	Total Regulated PFAS
3/28/2018	RABP - Well 1	19	16	1.8	140	26	202.8
3/28/2018	RABP - Well 2	28	17	2.7	4.5	6.1	58.3
3/28/2018	RABP - Combined	31	21	2.9	110	19	183.9
4/12/2018	1480 Gorge Rd	ND<1.8	ND<1.8	ND<1.8	ND<1.8	ND<1.8	ND
4/12/2018	375 Gorge Rd	4.7	2.2	ND<1.7	ND<1.7	2.7	9.6
8/21/2018	375 Gorge Rd.	4.6	2.2	ND	ND	2.8	9.6
4/12/2018	30 Jones Ln	1.9	4.3	ND<1.8	1.9	4.7	12.8
8/21/2018	30 Jones Ln	2.0	4.3	ND	ND	5.8	12.1
4/12/2018	82 Jones Ln	6.3	5.2	ND<1.7	ND<1.7	3.6	15.1
8/21/2018	82 Jones Ln	28.0	16.0	4.5	3.6	7.1	59.2
4/12/2018	742 Rt 7B	ND<1.9	2.8	ND<1.9	ND<1.9	3.4	6.2
8/21/2018	742 Rt. 7B	2.5	4.5	ND	ND	4.6	11.6
4/12/2018	832 Rt 7B	15.0	38.0	ND<2.0	2.1	16.0	71.1
4/12/2018	916 Rt 7B	6.6	17.0	ND<1.7	1.9	13.0	38.5
5/9/2018	111 Middle Rd	ND	ND	ND	ND	ND	ND
5/9/2018	279 Middle Rd	ND	ND	ND	ND	ND	ND
5/9/2018	Frito Lay Rt 7B	ND	ND	ND	ND	ND	ND
5/9/2018	1420 Gorge Rd	ND	ND	ND	ND	ND	ND
5/9/2018	84 Rt 7B	ND	ND	ND	ND	ND	ND
8/21/2018	84 Rt. 7B	ND	ND	ND	ND	ND	ND
5/9/2018	443 Rt 7B	ND	ND	ND	ND	ND	ND
8/21/2018	443 Rt. 7B	ND	ND	ND	ND	ND	ND
5/9/2018	339 Rt 7B	ND	ND	ND	ND	ND	ND

Table 1
 Drinking Water Analysis Results by Location
 Clarendon, VT

All 2018 Drinking Water Sampling Results for DWHA Compounds

8/21/2018	339 Rt. 7B	ND	ND	ND	ND	ND	ND
5/9/2018	452 Rt 7B	4.0	3.6	ND	ND	1.9	9.5
7/24/2018	452 Rt 7B	19	3.8	ND	4.5	2.5	29.8
5/9/2018	581 Rt 7B	ND	ND	ND	ND	ND	ND
8/21/2018	581 Rt. 7B	ND	ND	ND	ND	ND	ND
5/9/2018	859 Rt 7B	ND	2.2	ND	ND	2.1	4.3
8/21/2018	859 Rt. 7B	ND	ND	ND	ND	2.5	2.5
5/9/2018	656 Rt 7B	ND	ND	ND	ND	ND	ND
8/21/2018	656 Rt. 7B	ND	ND	ND	ND	ND	ND
5/9/2018	205 Rt 7B	ND	ND	ND	ND	3.7	3.7
8/21/2018	205 Rt. 7B	ND	ND	ND	ND	7.7	7.7
5/9/2018	886 Rt 7B	ND	ND	ND	ND	ND	ND
5/9/2018	705 Rt 7B	ND	2.7	ND	ND	4.5	7.2
8/21/2018	705 Rt. 7B	ND	2.1	ND	ND	5.1	7.2
5/9/2018	767 Rt 7B	2.4	6.8	ND	1.8	15.0	26.0
5/9/2018	895 Rt 7B	ND	ND	ND	ND	2.2	2.2
8/21/2018	895 Rt. 7B	ND	ND	ND	ND	2.3	2.3
5/9/2018	92 Gorge Rd	ND	1.9	ND	ND	ND	1.9
5/9/2018	129 Rt 7B	ND	5.7	ND	ND	7.6	13.3
8/23/2018	129 Rt 7B	2.4	6.3	ND	2.4	12.0	23.1
5/9/2018	940 Middle Rd	ND	2.2	ND	ND	ND	2.2
8/21/2018	940 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	970 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	1040 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	251 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	263 Maple Ridge	ND	ND	ND	ND	ND	ND
6/12/2018	Mill River HS	ND	ND	ND	ND	ND	ND

Table 1
 Drinking Water Analysis Results by Location
 Clarendon, VT

All 2018 Drinking Water Sampling Results for DWHA Compounds

6/12/2018	1391 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	993 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	871 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	473 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	49 Minard Rd	1.8	4.2	ND	ND	5.5	11.5
6/12/2018	298 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	475 Gorge Rd	3.0	ND	ND	ND	ND	3.0
8/21/2018	475 Gorge Rd.	ND	ND	ND	ND	ND	ND
6/12/2018	113 Gorge Rd	ND	ND	ND	ND	ND	ND
6/12/2018	48 Minard Rd	ND	ND	ND	ND	ND	ND
6/12/2018	1191 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	341 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	447 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	1039 Middle Rd	ND	ND	ND	ND	ND	ND
6/12/2018	1083 Middle Rd	ND	ND	ND	ND	ND	ND
7/24/2018	864 Airport Dr	ND	ND	ND	ND	ND	ND
7/24/2018	873 Airport Dr	ND	ND	ND	ND	ND	ND
7/24/2018	429 Airport Dr, Main	ND	ND	ND	ND	ND	ND
7/24/2018	429 Airport Dr, Dairy	30	13	ND	3.8	ND	46.8
7/24/2018	471 Airport Dr	ND	ND	ND	ND	ND	ND
7/24/2018	337 Airport Dr, Spring	120	70	8.6	3.8	ND	202.4
7/24/2018	915 Airport Dr	ND	ND	ND	ND	ND	ND
7/24/2018	729 Airport Dr	ND	ND	ND	ND	ND	ND
7/24/2018	770 Airport Dr	ND	ND	ND	ND	ND	ND
7/24/2018	773 Airport Dr	ND	ND	ND	ND	ND	ND

Table 1
 Drinking Water Analysis Results by Location
 Clarendon, VT

All 2018 Drinking Water Sampling Results for DWHA Compounds

7/24/2018	168 Brenda Rd	ND	ND	ND	ND	ND	0.0
7/24/2018	2759 East St	ND	ND	ND	ND	ND	ND
7/24/2018	383 Rt 7B	ND	ND	ND	ND	ND	ND
7/24/2018	1002 Airport Dr, OMYA	ND	ND	ND	ND	ND	ND
7/24/2018	71 Cobb Ln	ND	ND	ND	ND	ND	ND
7/24/2018	84 Cobb Ln	ND	ND	ND	ND	ND	ND
7/24/2018	56 Pars (29 Cobb)	ND	ND	ND	ND	ND	ND
7/24/2018	43 Middle Rd	ND	2.7	ND	ND	2.4	5.1
7/24/2018	42 Middle Rd	ND	ND	ND	ND	2.1	2.1
7/24/2018	118 Middle Rd	ND	ND	ND	ND	ND	ND
8/21/2018	Vtrans Garage	ND	3.0	ND	4.3	2.0	9.3
8/21/2018	866 Rt. 7B	ND	ND	ND	ND	1.8	1.8
10/3/2018	1770 Rt 7B	ND	ND	ND	ND	ND	ND
10/3/2018	65 Middle Rd	ND	ND	ND	ND	ND	ND

Notes:

Colored addresses indicate the supply well was sampled twice, with dates provided.

Single sample supply well locations are by date.

DWHA - Drinking Water Health Advisory

Regulated PFAS - per-/polyfluoroalkyl substances below

perfluoroheptanoic acid (PFHpA) perfluorohexanesulfonic acid (PFHxS)

perfluorooctanoic acid (PFOA) perfluorooctanesulfonic acid (PFOS)

perfluorononanoic acid (PFNA)

**Table 2
Supply Well Details and PFAS Concentrations
Clarendon, Vermont**

Closest 911 Address	Well Tag/ Report	Total Well Depth	Depth to Bedrock	Casing Depth	Casing diameter (inches)	yield (GPM)	Static WL	PFAS Concentrations
337 Airport Dr - Spring	shallow spring - not being used by residents.							202.4
429 Airport Dr - Main (?)	116	325	75	95	6	8	NP	ND
429 Airport Dr - Dairy (?)	305	480	NP	40	6	3	NP	46.8
471 Airport Dr	88	190	29	40	6	11	18	ND
730 Airport Dr (?)	33	230	225	225	6	20	30	not sampled
773 Airport Dr (?)	41	109	68	74	6	7	5	ND
864 Airport Dr	117	405	100	115	6	6	50	ND
873 Airport Dr	42509	425	64	75	6	20	45	ND
915 Airport Dr	128	225	40	52	6	15	20	ND
1002 Airport Dr	26	200	30	55	6	30	NP	--
1002 Airport Dr	164	485	160	166	6	20	40	--
1002 Airport Dr	81	205	38	47	6	8	4	--
1002 Airport Dr	WSID 20510	565	NP	166	6	NP	NP	ND
1420 Gorge Rd	19957	505	28	60	6	1.5	54	ND
1480 Gorge Rd	99	265	5	20	6	20	NP	ND
475 Gorge Rd	32	247	20	31	6	NP	7	3.0
92 Gorge Rd	19974	505	13	25	6	2	87	1.9
205 Rt 7B	46	91	14	20	6	4	5	7.7
339 Rt 7B	257	285	19	21	6	7	25	ND
383 Rt 7B	56	96	24	28	6	6	3	ND
443 Rt 7B	104	138	8	18	6	9	9	ND
Closest 911 Address	Well Tag/ Report	Total Well Depth	Depth to Bedrock	Casing Depth	Casing diameter (inches)	yield (GPM)	Static WL	
452 Rt 7B	56495	425	40	60	6	5	30	29.8
581 Rt 7B	22	111	8	14	6	5	NP	ND
767 or 859 Rt 7B	147	225	10	20	6	20	20	26.0
859 or 895 Rt 7B	218	225	46	51	6	30	30	4.3
RABP Wtr System Well 1	205	580	23	43	6	25	2	202.8
RABP Wtr System Well 2	206	960	25	43	6	27	2	58.3
1375 Rt 7B Wood Pellet	44	220	30	40	6	30	NP	ND
1375 Rt 7B Wood Pellet	140	265	10	20	6	6	20	ND
Vtrans Garage	47820	445	12	80	6	2.75	43	9.3
48 Minard Ln	151	265	10	20	6	4	NP	ND
43 Middle Rd	115	185	37	42	6	5	30	5.1
near 111 Middle Rd	351	265	70	78	6	30	20	ND
71 Cobb Ln	56796	705	45	67	6	5	35	ND
279 Middle Rd	129	305	67	67	6	10	30	ND
298 Middle Rd	34392	325	89	110	6	15	12	ND
473 Middle Rd	44115	265	76	100	6	6	50	ND
							DWHA	20.0 ppt

Notes:

Grey shading indicates a DWHA exceedance

DWHA - Drinking Water Health Advisory

Regulated PFAS - per-/polyfluoroalkyl substances below

perfluoroheptanoic acid (PFHpA)

perfluorohexanesulfonic acid (PFHxS)

perfluorooctanoic acid (PFOA)

perfluorooctanesulfonic acid (PFOS)

perfluorononanoic acid (PFNA)

APPENDIX A

SUPPLY WELL LABORATORY REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Burlington

30 Community Drive

Suite 11

South Burlington, VT 05403

Tel: (802)660-1990

TestAmerica Job ID: 200-42831-1

TestAmerica Sample Delivery Group: 200-42831-1

Client Project/Site: PFAS, SVRA

For:

ATC Group Services LLC

1 Elm Street, Suite 3

Waterbury, Vermont 05676

Attn: Mr. James Gascoyne



Authorized for release by:

4/5/2018 4:25:07 PM

Kristine Dusablon, Project Manager II

(802)660-1990

kris.dusablon@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Glossary

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

Case Narrative

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Job ID: 200-42831-1

Laboratory: TestAmerica Burlington

Narrative

CASE NARRATIVE

Client: ATC Group Services LLC

Project: PFAS, SVRA

Report Number: 200-42831-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

RECEIPT

The samples were received on 03/28/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.9 C.

PERFLUORINATED HYDROCARBONS

Samples SVRA- FIELD BLANK (200-42831-1), SVRA- WELL-01 (200-42831-2), SVRA- WELL-02 (200-42831-3) and SVRA- WELL COMBINED (200-42831-4) were analyzed for Perfluorinated Hydrocarbons in accordance with TAL SOP WS-LC-0025. The samples were prepared on 04/03/2018 and analyzed on 04/05/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Client Sample ID: SVRA- FIELD BLANK

Lab Sample ID: 200-42831-1

No Detections.

Client Sample ID: SVRA- WELL-01

Lab Sample ID: 200-42831-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	19		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	16		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.8		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	14		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	140		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	26		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	45		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: SVRA- WELL-02

Lab Sample ID: 200-42831-3

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	28		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	17		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.7		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.5		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	6.1		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	83		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: SVRA- WELL COMBINED

Lab Sample ID: 200-42831-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	31		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	21		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	11		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	110		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	19		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	80		1.7	1.7	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Client Sample ID: SVRA- FIELD BLANK

Lab Sample ID: 200-42831-1

Date Collected: 03/28/18 09:25

Matrix: Water

Date Received: 03/28/18 16:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:12	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
18O2 PFHxS	92		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C4-PFHpA	78		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C4 PFOA	83		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C4 PFOS	98		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C5 PFNA	86		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C2 PFHxA	79		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C3-PFBS	101		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C2 PFDoA	76		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C2-PFTeDA	58		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C2 PFDA	79		25 - 150			04/03/18 13:15	04/05/18 01:12	1
13C2 PFUnA	89		25 - 150			04/03/18 13:15	04/05/18 01:12	1

Client Sample ID: SVRA- WELL-01

Lab Sample ID: 200-42831-2

Date Collected: 03/28/18 09:30

Matrix: Water

Date Received: 03/28/18 16:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	19		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorooctanoic acid (PFOA)	16		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorononanoic acid (PFNA)	1.8		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorobutanesulfonic acid (PFBS)	14		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorohexanesulfonic acid (PFHxS)	140		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorooctanesulfonic acid (PFOS)	26		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorohexanoic acid (PFHxA)	45		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:27	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
18O2 PFHxS	99		25 - 150			04/03/18 13:15	04/05/18 01:27	1
13C4-PFHpA	69		25 - 150			04/03/18 13:15	04/05/18 01:27	1
13C4 PFOA	80		25 - 150			04/03/18 13:15	04/05/18 01:27	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Client Sample ID: SVRA- WELL-01

Date Collected: 03/28/18 09:30

Date Received: 03/28/18 16:40

Lab Sample ID: 200-42831-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	107		25 - 150	04/03/18 13:15	04/05/18 01:27	1
13C5 PFNA	84		25 - 150	04/03/18 13:15	04/05/18 01:27	1
13C2 PFHxA	79		25 - 150	04/03/18 13:15	04/05/18 01:27	1
13C3-PFBS	102		25 - 150	04/03/18 13:15	04/05/18 01:27	1
13C2 PFDoA	66		25 - 150	04/03/18 13:15	04/05/18 01:27	1
13C2-PFTeDA	57		25 - 150	04/03/18 13:15	04/05/18 01:27	1
13C2 PFDA	74		25 - 150	04/03/18 13:15	04/05/18 01:27	1
13C2 PFUnA	77		25 - 150	04/03/18 13:15	04/05/18 01:27	1

Client Sample ID: SVRA- WELL-02

Date Collected: 03/28/18 10:05

Date Received: 03/28/18 16:40

Lab Sample ID: 200-42831-3

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	28		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorooctanoic acid (PFOA)	17		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorononanoic acid (PFNA)	2.7		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorohexanesulfonic acid (PFHxS)	4.5		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorooctanesulfonic acid (PFOS)	6.1		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorohexanoic acid (PFHxA)	83		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8 ng/L		04/03/18 13:15	04/05/18 01:42	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	98		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C4-PFHpA	76		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C4 PFOA	81		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C4 PFOS	94		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C5 PFNA	87		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C2 PFHxA	71		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C3-PFBS	98		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C2 PFDoA	79		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C2-PFTeDA	60		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C2 PFDA	78		25 - 150	04/03/18 13:15	04/05/18 01:42	1
13C2 PFUnA	87		25 - 150	04/03/18 13:15	04/05/18 01:42	1

Client Sample ID: SVRA- WELL COMBINED

Date Collected: 03/28/18 10:35

Date Received: 03/28/18 16:40

Lab Sample ID: 200-42831-4

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	31		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluorooctanoic acid (PFOA)	21		1.7	1.7 ng/L		04/03/18 13:15	04/05/18 01:58	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Client Sample ID: SVRA- WELL COMBINED

Lab Sample ID: 200-42831-4

Date Collected: 03/28/18 10:35

Matrix: Water

Date Received: 03/28/18 16:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	2.9		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluorobutanesulfonic acid (PFBS)	11		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluorohexanesulfonic acid (PFHxS)	110		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluorooctanesulfonic acid (PFOS)	19		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluorohexanoic acid (PFHxA)	80		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		04/03/18 13:15	04/05/18 01:58	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	99		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C4-PFHxA	73		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C4 PFOA	85		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C4 PFOS	105		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C5 PFNA	89		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C2 PFHxA	78		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C3-PFBS	104		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C2 PFDoA	68		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C2-PFTeDA	60		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C2 PFDA	83		25 - 150				04/03/18 13:15	04/05/18 01:58	1
13C2 PFUnA	81		25 - 150				04/03/18 13:15	04/05/18 01:58	1

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
 SDG: 200-42831-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFHxS (25-150)	PFHpA (25-150)	PFOA (25-150)	PFOS (25-150)	PFNA (25-150)	PFHxA (25-150)	3C3-PFBs (25-150)	PFDoA (25-150)
200-42831-1	SVRA- FIELD BLANK	92	78	83	98	86	79	101	76
200-42831-2	SVRA- WELL-01	99	69	80	107	84	79	102	66
200-42831-3	SVRA- WELL-02	98	76	81	94	87	71	98	79
200-42831-4	SVRA- WELL COMBINED	99	73	85	105	89	78	104	68
LCS 200-128083/2-A	Lab Control Sample	87	80	87	93	85	80	95	87
MB 200-128083/1-A	Method Blank	94	86	92	101	92	93	102	70

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFTDA (25-150)	PFDA (25-150)	PFUnA (25-150)
200-42831-1	SVRA- FIELD BLANK	58	79	89
200-42831-2	SVRA- WELL-01	57	74	77
200-42831-3	SVRA- WELL-02	60	78	87
200-42831-4	SVRA- WELL COMBINED	60	83	81
LCS 200-128083/2-A	Lab Control Sample	59	78	93
MB 200-128083/1-A	Method Blank	51	81	94

Surrogate Legend

PFHxS = 18O2 PFHxS
 PFHpA = 13C4-PFHpA
 PFOA = 13C4 PFOA
 PFOS = 13C4 PFOS
 PFNA = 13C5 PFNA
 PFHxA = 13C2 PFHxA
 13C3-PFBS = 13C3-PFBS
 PFDoA = 13C2 PFDoA
 PFTDA = 13C2-PFTeDA
 PFDA = 13C2 PFDA
 PFUnA = 13C2 PFUnA

QC Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-128083/1-A

Matrix: Water

Analysis Batch: 128139

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 128083

Analyte	MB Result	MB Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0 ng/L		04/03/18 13:15	04/04/18 21:56	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	94		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C4-PFHxA	86		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C4 PFOA	92		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C4 PFOS	101		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C5 PFNA	92		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C2 PFHxA	93		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C3-PFBS	102		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C2 PFDoA	70		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C2-PFTeDA	51		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C2 PFDA	81		25 - 150	04/03/18 13:15	04/04/18 21:56	1
13C2 PFUnA	94		25 - 150	04/03/18 13:15	04/04/18 21:56	1

Lab Sample ID: LCS 200-128083/2-A

Matrix: Water

Analysis Batch: 128139

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 128083

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanoic acid (PFHpA)	40.0	41.3		ng/L		103	60 - 140
Perfluorooctanoic acid (PFOA)	40.0	42.7		ng/L		107	60 - 140
Perfluorononanoic acid (PFNA)	40.0	42.4		ng/L		106	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.4	33.6		ng/L		95	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.4		ng/L		100	60 - 140
Perfluorooctanesulfonic acid (PFOS)	37.1	38.8		ng/L		104	60 - 140
Perfluorohexanoic acid (PFHxA)	40.0	45.8		ng/L		115	60 - 140
Perfluoroundecanoic acid (PFUnA)	40.0	47.6		ng/L		119	60 - 140
Perfluorodecanoic acid (PFDA)	40.0	44.1		ng/L		110	60 - 140
Perfluorododecanoic acid (PFDoA)	40.0	42.2		ng/L		106	60 - 140
Perfluorotridecanoic Acid (PFTriA)	40.0	29.6		ng/L		74	60 - 140
Perfluorotetradecanoic acid (PFTeA)	40.0	35.5		ng/L		89	60 - 140

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
 SDG: 200-42831-1

<i>Isotope Dilution</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>18O2 PFHxS</i>	87		25 - 150
<i>13C4-PFHpA</i>	80		25 - 150
<i>13C4 PFOA</i>	87		25 - 150
<i>13C4 PFOS</i>	93		25 - 150
<i>13C5 PFNA</i>	85		25 - 150
<i>13C2 PFHxA</i>	80		25 - 150
<i>13C3-PFBS</i>	95		25 - 150
<i>13C2 PFDoA</i>	87		25 - 150
<i>13C2-PFTeDA</i>	59		25 - 150
<i>13C2 PFDA</i>	78		25 - 150
<i>13C2 PFUnA</i>	93		25 - 150

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QC Association Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

LCMS

Prep Batch: 128083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-42831-1	SVRA- FIELD BLANK	Total/NA	Water	3535	
200-42831-2	SVRA- WELL-01	Total/NA	Water	3535	
200-42831-3	SVRA- WELL-02	Total/NA	Water	3535	
200-42831-4	SVRA- WELL COMBINED	Total/NA	Water	3535	
MB 200-128083/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-128083/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 128139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-42831-1	SVRA- FIELD BLANK	Total/NA	Water	537 (modified)	128083
200-42831-2	SVRA- WELL-01	Total/NA	Water	537 (modified)	128083
200-42831-3	SVRA- WELL-02	Total/NA	Water	537 (modified)	128083
200-42831-4	SVRA- WELL COMBINED	Total/NA	Water	537 (modified)	128083
MB 200-128083/1-A	Method Blank	Total/NA	Water	537 (modified)	128083
LCS 200-128083/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	128083

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Client Sample ID: SVRA- FIELD BLANK

Date Collected: 03/28/18 09:25

Date Received: 03/28/18 16:40

Lab Sample ID: 200-42831-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128083	04/03/18 13:15	BWC	TAL BUR
Total/NA	Analysis	537 (modified)		1	128139	04/05/18 01:12	BWC	TAL BUR

Client Sample ID: SVRA- WELL-01

Date Collected: 03/28/18 09:30

Date Received: 03/28/18 16:40

Lab Sample ID: 200-42831-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128083	04/03/18 13:15	BWC	TAL BUR
Total/NA	Analysis	537 (modified)		1	128139	04/05/18 01:27	BWC	TAL BUR

Client Sample ID: SVRA- WELL-02

Date Collected: 03/28/18 10:05

Date Received: 03/28/18 16:40

Lab Sample ID: 200-42831-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128083	04/03/18 13:15	BWC	TAL BUR
Total/NA	Analysis	537 (modified)		1	128139	04/05/18 01:42	BWC	TAL BUR

Client Sample ID: SVRA- WELL COMBINED

Date Collected: 03/28/18 10:35

Date Received: 03/28/18 16:40

Lab Sample ID: 200-42831-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128083	04/03/18 13:15	BWC	TAL BUR
Total/NA	Analysis	537 (modified)		1	128139	04/05/18 01:58	BWC	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD ELAP		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-19
Florida	NELAP	4	E87467	06-30-18
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-18
New Jersey	NELAP	2	VT972	06-30-18
New York	NELAP	2	10391	04-01-19
Pennsylvania	NELAP	3	68-00489	04-30-18 *
Rhode Island	State Program	1	LAO00298	12-30-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-18
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-18
Virginia	NELAP	3	460209	12-14-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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Sample Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA

TestAmerica Job ID: 200-42831-1
SDG: 200-42831-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-42831-1	SVRA- FIELD BLANK	Water	03/28/18 09:25	03/28/18 16:40
200-42831-2	SVRA- WELL-01	Water	03/28/18 09:30	03/28/18 16:40
200-42831-3	SVRA- WELL-02	Water	03/28/18 10:05	03/28/18 16:40
200-42831-4	SVRA- WELL COMBINED	Water	03/28/18 10:35	03/28/18 16:40

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Chain of Custody Record

Client Information Client Contact: Mr. James Gascoyne Company: ATC Group Services LLC Address: 1 Elm Street, Suite 3 City: Waterbury State, Zip: VT, 05676 Phone: 802-241-4131 Email: James.Gascoyne@atcassociates.com Project #: 20007877 PFAS, SVRA Site: Rutland-SVRA			Sampler: Chelsea Fellows-Stanley Lab PM: Dusablon, Kristine A Phone: 802-852-1550 E-Mail: kris.dusablon@testamericainc.com			Carrier Tracking No(s): COC No: 200-20780-9083.1 Page: 1 of 1 Job #:																																							
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #:			Analysis Requested Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> MS/MSD Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> MS/MSD Total Number of Containers:			Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)																																							
Sample Identification <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=water/ice)</th> <th>Preservation Code</th> </tr> </thead> <tbody> <tr> <td>3/28/18</td> <td>0925</td> <td>G</td> <td>Water</td> <td>W</td> </tr> <tr> <td>3/28/18</td> <td>0930</td> <td>G</td> <td>Water</td> <td>W</td> </tr> <tr> <td>3/28/18</td> <td>1005</td> <td>G</td> <td>Water</td> <td>W</td> </tr> <tr> <td>3/28/18</td> <td>1035</td> <td>G</td> <td>Water</td> <td>W</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Water</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Water</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Water</td> <td></td> </tr> </tbody> </table>			Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/ice)	Preservation Code	3/28/18	0925	G	Water	W	3/28/18	0930	G	Water	W	3/28/18	1005	G	Water	W	3/28/18	1035	G	Water	W				Water					Water					Water		Special Instructions/Note:  200-42831 COC		
Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/ice)	Preservation Code																																									
3/28/18	0925	G	Water	W																																									
3/28/18	0930	G	Water	W																																									
3/28/18	1005	G	Water	W																																									
3/28/18	1035	G	Water	W																																									
			Water																																										
			Water																																										
			Water																																										
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months																																										
Empty Kit Relinquished by: Relinquished by: <i>Chelsea Fellows-Stanley</i> Date/Time: 3/28/18 1315 Relinquished by: Date/Time: Relinquished by: Date/Time:			Method of Shipment: Relinquished by: <i>ATC</i> Date/Time: 3/28/18 1640 Received by: Date/Time: Received by: Date/Time:																																										
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks: 3.9																																										



Login Sample Receipt Checklist

Client: ATC Group Services LLC

Job Number: 200-42831-1
SDG Number: 200-42831-1

Login Number: 42831
List Number: 1
Creator: Hahl, Victoria L

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Chelsea Fellows-Stanley
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Burlington

30 Community Drive

Suite 11

South Burlington, VT 05403

Tel: (802)660-1990

TestAmerica Job ID: 200-43060-1

TestAmerica Sample Delivery Group: 200-43060-1

Client Project/Site: PFAS, SVRA (12 analytes)

For:

ATC Group Services LLC

1 Elm Street, Suite 3

Waterbury, Vermont 05676

Attn: Mr. James Gascoyne



Authorized for release by:

4/27/2018 3:56:59 PM

Lori Arnold, Manager of Project Management

lori.arnold@testamericainc.com

Designee for

Kristine Dusablon, Project Manager II

(802)660-1990

kris.dusablon@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Glossary

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

Case Narrative

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Job ID: 200-43060-1

Laboratory: TestAmerica Burlington

Narrative

CASE NARRATIVE

Client: ATC Group Services LLC

Project: PFAS, SVRA (12 analytes)

Report Number: 200-43060-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

RECEIPT

The samples were received on 04/12/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 8.4° C.

PERFLUORINATED HYDROCARBONS

Samples FB-1480 GORGE, DW-1480 GORGE, FB-375 GORGE, DW-375 GORGE, DW-DUPLICATE, FB-30 JONES, DW-30 JONES, FB-82 JONES, DW-82 JONES, FB-742 RT 7B, DW-742 RT 7B, FB-832 RT 7B, DW-832 RT 7B, FB-916 RT 7B and DW-916 RT 7B were analyzed for Perfluorinated Compounds in accordance with Method 537 (Modified). The samples were prepared on 04/23/2018 and analyzed on 04/26/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: FB-1480 GORGE

Lab Sample ID: 200-43060-1

No Detections.

Client Sample ID: DW-1480 GORGE

Lab Sample ID: 200-43060-2

No Detections.

Client Sample ID: FB-375 GORGE

Lab Sample ID: 200-43060-3

No Detections.

Client Sample ID: DW-375 GORGE

Lab Sample ID: 200-43060-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	4.7		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.2		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.7		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	4.6		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: DW-DUPLICATE

Lab Sample ID: 200-43060-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	5.0		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.6		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.8		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	4.6		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-30 JONES

Lab Sample ID: 200-43060-6

No Detections.

Client Sample ID: DW-30 JONES

Lab Sample ID: 200-43060-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	1.9		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.3		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.9		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.7		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.8		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-82 JONES

Lab Sample ID: 200-43060-8

No Detections.

Client Sample ID: DW-82 JONES

Lab Sample ID: 200-43060-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	6.3		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.2		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.6		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	12		1.7	1.7	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: FB-742 RT 7B

Lab Sample ID: 200-43060-10

No Detections.

Client Sample ID: DW-742 RT 7B

Lab Sample ID: 200-43060-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	2.8		1.9	1.9	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.6		1.9	1.9	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.4		1.9	1.9	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.9		1.9	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-832 RT 7B

Lab Sample ID: 200-43060-12

No Detections.

Client Sample ID: DW-832 RT 7B

Lab Sample ID: 200-43060-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	15		2.0	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	38		2.0	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.4		2.0	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.1		2.0	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	16		2.0	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	11		2.0	2.0	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-916 RT 7B

Lab Sample ID: 200-43060-14

No Detections.

Client Sample ID: DW-916 RT 7B

Lab Sample ID: 200-43060-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	6.6		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	17		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	13		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
 SDG: 200-43060-1

Client Sample ID: FB-1480 GORGE

Lab Sample ID: 200-43060-1

Date Collected: 04/12/18 09:54

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 17:11	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	69		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C4-PFHpA	79		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C4 PFOA	87		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C4 PFOS	68		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C5 PFNA	83		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C2 PFHxA	86		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C2 PFDA	77		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C2 PFUnA	85		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C2 PFDoA	69		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C2-PFTeDA	51		25 - 150				04/23/18 10:00	04/26/18 17:11	1
13C3-PFBS	75		25 - 150				04/23/18 10:00	04/26/18 17:11	1

Client Sample ID: DW-1480 GORGE

Lab Sample ID: 200-43060-2

Date Collected: 04/12/18 09:55

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 17:27	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	75		25 - 150				04/23/18 10:00	04/26/18 17:27	1
13C4-PFHpA	80		25 - 150				04/23/18 10:00	04/26/18 17:27	1
13C4 PFOA	85		25 - 150				04/23/18 10:00	04/26/18 17:27	1
13C4 PFOS	72		25 - 150				04/23/18 10:00	04/26/18 17:27	1
13C5 PFNA	87		25 - 150				04/23/18 10:00	04/26/18 17:27	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
 SDG: 200-43060-1

Client Sample ID: DW-1480 GORGE

Lab Sample ID: 200-43060-2

Date Collected: 04/12/18 09:55

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	86		25 - 150	04/23/18 10:00	04/26/18 17:27	1
13C2 PFDA	76		25 - 150	04/23/18 10:00	04/26/18 17:27	1
13C2 PFUnA	72		25 - 150	04/23/18 10:00	04/26/18 17:27	1
13C2 PFDoA	60		25 - 150	04/23/18 10:00	04/26/18 17:27	1
13C2-PFTeDA	54		25 - 150	04/23/18 10:00	04/26/18 17:27	1
13C3-PFBS	86		25 - 150	04/23/18 10:00	04/26/18 17:27	1

Client Sample ID: FB-375 GORGE

Lab Sample ID: 200-43060-3

Date Collected: 04/12/18 10:25

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 17:42	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	71		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C4-PFHpA	82		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C4 PFOA	85		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C4 PFOS	69		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C5 PFNA	84		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C2 PFHxA	85		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C2 PFDA	73		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C2 PFUnA	80		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C2 PFDoA	69		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C2-PFTeDA	52		25 - 150	04/23/18 10:00	04/26/18 17:42	1
13C3-PFBS	75		25 - 150	04/23/18 10:00	04/26/18 17:42	1

Client Sample ID: DW-375 GORGE

Lab Sample ID: 200-43060-4

Date Collected: 04/12/18 10:26

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	4.7		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluorooctanoic acid (PFOA)	2.2		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: DW-375 GORGE

Lab Sample ID: 200-43060-4

Date Collected: 04/12/18 10:26

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	2.7		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluorohexanoic acid (PFHxA)	4.6		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 17:57	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	76		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C4-PFHpA	74		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C4 PFOA	78		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C4 PFOS	71		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C5 PFNA	79		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C2 PFHxA	69		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C2 PFDA	65		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C2 PFUnA	68		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C2 PFDoA	59		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C2-PFTeDA	57		25 - 150				04/23/18 10:00	04/26/18 17:57	1
13C3-PFBS	83		25 - 150				04/23/18 10:00	04/26/18 17:57	1

Client Sample ID: DW-DUPLICATE

Lab Sample ID: 200-43060-5

Date Collected: 04/12/18 00:00

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	5.0		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorooctanoic acid (PFOA)	2.6		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorooctanesulfonic acid (PFOS)	2.8		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorohexanoic acid (PFHxA)	4.6		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 18:12	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	72		25 - 150				04/23/18 10:00	04/26/18 18:12	1
13C4-PFHpA	70		25 - 150				04/23/18 10:00	04/26/18 18:12	1
13C4 PFOA	71		25 - 150				04/23/18 10:00	04/26/18 18:12	1
13C4 PFOS	64		25 - 150				04/23/18 10:00	04/26/18 18:12	1
13C5 PFNA	75		25 - 150				04/23/18 10:00	04/26/18 18:12	1
13C2 PFHxA	69		25 - 150				04/23/18 10:00	04/26/18 18:12	1
13C2 PFDA	68		25 - 150				04/23/18 10:00	04/26/18 18:12	1
13C2 PFUnA	71		25 - 150				04/23/18 10:00	04/26/18 18:12	1
13C2 PFDoA	63		25 - 150				04/23/18 10:00	04/26/18 18:12	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: DW-DUPLICATE

Date Collected: 04/12/18 00:00

Date Received: 04/12/18 16:00

Lab Sample ID: 200-43060-5

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-PFTeDA	53		25 - 150	04/23/18 10:00	04/26/18 18:12	1
13C3-PFBS	77		25 - 150	04/23/18 10:00	04/26/18 18:12	1

Client Sample ID: FB-30 JONES

Date Collected: 04/12/18 10:39

Date Received: 04/12/18 16:00

Lab Sample ID: 200-43060-6

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:27	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
18O2 PFHxS	72		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C4-PFHpA	80		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C4 PFOA	81		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C4 PFOS	66		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C5 PFNA	80		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C2 PFHxA	82		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C2 PFDA	76		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C2 PFUnA	84		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C2 PFDoA	66		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C2-PFTeDA	54		25 - 150	04/23/18 10:00	04/26/18 18:27	1			
13C3-PFBS	79		25 - 150	04/23/18 10:00	04/26/18 18:27	1			

Client Sample ID: DW-30 JONES

Date Collected: 04/12/18 10:40

Date Received: 04/12/18 16:00

Lab Sample ID: 200-43060-7

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.9		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorooctanoic acid (PFOA)	4.3		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorohexanesulfonic acid (PFHxS)	1.9		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorooctanesulfonic acid (PFOS)	4.7		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorohexanoic acid (PFHxA)	2.8		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
 SDG: 200-43060-1

Client Sample ID: DW-30 JONES

Lab Sample ID: 200-43060-7

Date Collected: 04/12/18 10:40

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		04/23/18 10:00	04/26/18 18:57	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	76		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C4-PFHpa	71		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C4 PFOA	65		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C4 PFOS	77		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C5 PFNA	70		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C2 PFHxA	68		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C2 PFDA	62		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C2 PFUnA	65		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C2 PFDoA	54		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C2-PFTeDA	53		25 - 150				04/23/18 10:00	04/26/18 18:57	1
13C3-PFBS	82		25 - 150				04/23/18 10:00	04/26/18 18:57	1

Client Sample ID: FB-82 JONES

Lab Sample ID: 200-43060-8

Date Collected: 04/12/18 10:48

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:12	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	74		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C4-PFHpa	73		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C4 PFOA	75		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C4 PFOS	76		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C5 PFNA	77		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C2 PFHxA	89		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C2 PFDA	67		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C2 PFUnA	81		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C2 PFDoA	68		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C2-PFTeDA	57		25 - 150				04/23/18 10:00	04/26/18 19:12	1
13C3-PFBS	84		25 - 150				04/23/18 10:00	04/26/18 19:12	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: DW-82 JONES

Lab Sample ID: 200-43060-9

Date Collected: 04/12/18 10:50

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	6.3		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorooctanoic acid (PFOA)	5.2		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorooctanesulfonic acid (PFOS)	3.6		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorohexanoic acid (PFHxA)	12		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 19:28	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	81		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C4-PFHpA	74		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C4 PFOA	84		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C4 PFOS	81		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C5 PFNA	87		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C2 PFHxA	71		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C2 PFDA	80		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C2 PFUnA	80		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C2 PFDoA	69		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C2-PFTeDA	64		25 - 150				04/23/18 10:00	04/26/18 19:28	1
13C3-PFBS	80		25 - 150				04/23/18 10:00	04/26/18 19:28	1

Client Sample ID: FB-742 RT 7B

Lab Sample ID: 200-43060-10

Date Collected: 04/12/18 11:14

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 19:43	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	71		25 - 150				04/23/18 10:00	04/26/18 19:43	1
13C4-PFHpA	78		25 - 150				04/23/18 10:00	04/26/18 19:43	1
13C4 PFOA	78		25 - 150				04/23/18 10:00	04/26/18 19:43	1
13C4 PFOS	78		25 - 150				04/23/18 10:00	04/26/18 19:43	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: FB-742 RT 7B

Lab Sample ID: 200-43060-10

Date Collected: 04/12/18 11:14

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	81		25 - 150	04/23/18 10:00	04/26/18 19:43	1
13C2 PFHxA	86		25 - 150	04/23/18 10:00	04/26/18 19:43	1
13C2 PFDA	75		25 - 150	04/23/18 10:00	04/26/18 19:43	1
13C2 PFUnA	83		25 - 150	04/23/18 10:00	04/26/18 19:43	1
13C2 PFDoA	76		25 - 150	04/23/18 10:00	04/26/18 19:43	1
13C2-PFTeDA	51		25 - 150	04/23/18 10:00	04/26/18 19:43	1
13C3-PFBS	88		25 - 150	04/23/18 10:00	04/26/18 19:43	1

Client Sample ID: DW-742 RT 7B

Lab Sample ID: 200-43060-11

Date Collected: 04/12/18 11:15

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorooctanoic acid (PFOA)	2.8		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorobutanesulfonic acid (PFBS)	2.6		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorooctanesulfonic acid (PFOS)	3.4		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorohexanoic acid (PFHxA)	1.9		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		04/23/18 10:00	04/26/18 19:58	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	75		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C4-PFHpA	65		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C4 PFOA	70		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C4 PFOS	72		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C5 PFNA	71		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C2 PFHxA	69		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C2 PFDA	66		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C2 PFUnA	65		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C2 PFDoA	60		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C2-PFTeDA	56		25 - 150	04/23/18 10:00	04/26/18 19:58	1
13C3-PFBS	83		25 - 150	04/23/18 10:00	04/26/18 19:58	1

Client Sample ID: FB-832 RT 7B

Lab Sample ID: 200-43060-12

Date Collected: 04/12/18 11:49

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: FB-832 RT 7B

Lab Sample ID: 200-43060-12

Date Collected: 04/12/18 11:49

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:13	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	71		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C4-PFHxA	77		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C4 PFOA	75		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C4 PFOS	72		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C5 PFNA	78		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C2 PFHxA	88		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C2 PFDA	70		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C2 PFUnA	81		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C2 PFDoA	74		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C2-PFTeDA	57		25 - 150				04/23/18 10:00	04/26/18 20:13	1
13C3-PFBS	80		25 - 150				04/23/18 10:00	04/26/18 20:13	1

Client Sample ID: DW-832 RT 7B

Lab Sample ID: 200-43060-13

Date Collected: 04/12/18 11:50

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	15		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorooctanoic acid (PFOA)	38		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorobutanesulfonic acid (PFBS)	2.4		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorohexanesulfonic acid (PFHxS)	2.1		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorooctanesulfonic acid (PFOS)	16		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorohexanoic acid (PFHxA)	11		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:28	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	81		25 - 150				04/23/18 10:00	04/26/18 20:28	1
13C4-PFHxA	75		25 - 150				04/23/18 10:00	04/26/18 20:28	1
13C4 PFOA	76		25 - 150				04/23/18 10:00	04/26/18 20:28	1
13C4 PFOS	80		25 - 150				04/23/18 10:00	04/26/18 20:28	1
13C5 PFNA	82		25 - 150				04/23/18 10:00	04/26/18 20:28	1
13C2 PFHxA	83		25 - 150				04/23/18 10:00	04/26/18 20:28	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: DW-832 RT 7B

Lab Sample ID: 200-43060-13

Date Collected: 04/12/18 11:50

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	74		25 - 150	04/23/18 10:00	04/26/18 20:28	1
13C2 PFUnA	78		25 - 150	04/23/18 10:00	04/26/18 20:28	1
13C2 PFDoA	63		25 - 150	04/23/18 10:00	04/26/18 20:28	1
13C2-PFTeDA	57		25 - 150	04/23/18 10:00	04/26/18 20:28	1
13C3-PFBS	91		25 - 150	04/23/18 10:00	04/26/18 20:28	1

Client Sample ID: FB-916 RT 7B

Lab Sample ID: 200-43060-14

Date Collected: 04/12/18 12:08

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 20:43	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	80		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C4-PFHpA	85		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C4 PFOA	85		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C4 PFOS	79		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C5 PFNA	89		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C2 PFHxA	97		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C2 PFDA	78		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C2 PFUnA	90		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C2 PFDoA	76		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C2-PFTeDA	60		25 - 150	04/23/18 10:00	04/26/18 20:43	1
13C3-PFBS	86		25 - 150	04/23/18 10:00	04/26/18 20:43	1

Client Sample ID: DW-916 RT 7B

Lab Sample ID: 200-43060-15

Date Collected: 04/12/18 12:10

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	6.6		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluorooctanoic acid (PFOA)	17		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluorohexanesulfonic acid (PFHxS)	1.9		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
 SDG: 200-43060-1

Client Sample ID: DW-916 RT 7B

Lab Sample ID: 200-43060-15

Date Collected: 04/12/18 12:10

Matrix: Water

Date Received: 04/12/18 16:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	13		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluorohexanoic acid (PFHxA)	5.9		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		04/23/18 10:00	04/26/18 20:58	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	81		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C4-PFHpA	72		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C4 PFOA	74		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C4 PFOS	76		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C5 PFNA	80		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C2 PFHxA	77		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C2 PFDA	70		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C2 PFUnA	77		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C2 PFDoA	71		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C2-PFTeDA	62		25 - 150	04/23/18 10:00	04/26/18 20:58	1
13C3-PFBS	93		25 - 150	04/23/18 10:00	04/26/18 20:58	1

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
 SDG: 200-43060-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFHxS (25-150)	PFHpA (25-150)	PFOA (25-150)	PFOS (25-150)	PFNA (25-150)	PFHxA (25-150)	PFDA (25-150)	PFUnA (25-150)
200-43060-1	FB-1480 GORGE	69	79	87	68	83	86	77	85
200-43060-2	DW-1480 GORGE	75	80	85	72	87	86	76	72
200-43060-3	FB-375 GORGE	71	82	85	69	84	85	73	80
200-43060-4	DW-375 GORGE	76	74	78	71	79	69	65	68
200-43060-5	DW-DUPLICATE	72	70	71	64	75	69	68	71
200-43060-6	FB-30 JONES	72	80	81	66	80	82	76	84
200-43060-7	DW-30 JONES	76	71	65	77	70	68	62	65
200-43060-8	FB-82 JONES	74	73	75	76	77	89	67	81
200-43060-9	DW-82 JONES	81	74	84	81	87	71	80	80
200-43060-10	FB-742 RT 7B	71	78	78	78	81	86	75	83
200-43060-11	DW-742 RT 7B	75	65	70	72	71	69	66	65
200-43060-12	FB-832 RT 7B	71	77	75	72	78	88	70	81
200-43060-13	DW-832 RT 7B	81	75	76	80	82	83	74	78
200-43060-14	FB-916 RT 7B	80	85	85	79	89	97	78	90
200-43060-15	DW-916 RT 7B	81	72	74	76	80	77	70	77
LCS 200-128728/2-A	Lab Control Sample	76	83	84	77	80	90	79	87
LCSD 200-128728/3-A	Lab Control Sample Dup	69	82	81	72	80	85	75	86
MB 200-128728/1-A	Method Blank	71	81	90	71	86	84	73	73

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	3C3-PFBz (25-150)
200-43060-1	FB-1480 GORGE	69	51	75
200-43060-2	DW-1480 GORGE	60	54	86
200-43060-3	FB-375 GORGE	69	52	75
200-43060-4	DW-375 GORGE	59	57	83
200-43060-5	DW-DUPLICATE	63	53	77
200-43060-6	FB-30 JONES	66	54	79
200-43060-7	DW-30 JONES	54	53	82
200-43060-8	FB-82 JONES	68	57	84
200-43060-9	DW-82 JONES	69	64	80
200-43060-10	FB-742 RT 7B	76	51	88
200-43060-11	DW-742 RT 7B	60	56	83
200-43060-12	FB-832 RT 7B	74	57	80
200-43060-13	DW-832 RT 7B	63	57	91
200-43060-14	FB-916 RT 7B	76	60	86
200-43060-15	DW-916 RT 7B	71	62	93
LCS 200-128728/2-A	Lab Control Sample	71	57	83
LCSD 200-128728/3-A	Lab Control Sample Dup	74	57	82
MB 200-128728/1-A	Method Blank	55	43	80

Surrogate Legend

- PFHxS = 18O2 PFHxS
- PFHpA = 13C4-PFHpA
- PFOA = 13C4 PFOA
- PFOS = 13C4 PFOS
- PFNA = 13C5 PFNA
- PFHxA = 13C2 PFHxA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA

Isotope Dilution Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

PFD_oA = ¹³C₂ PFD_oA
PFTDA = ¹³C₂-PFTeDA
¹³C₃-PFBS = ¹³C₃-PFBS

1

2

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QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
 SDG: 200-43060-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-128728/1-A
Matrix: Water
Analysis Batch: 128885

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 128728

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		04/23/18 10:00	04/26/18 16:26	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	71		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C4-PFHxA	81		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C4 PFOA	90		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C4 PFOS	71		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C5 PFNA	86		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C2 PFHxA	84		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C2 PFDA	73		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C2 PFUnA	73		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C2 PFDoA	55		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C2-PFTeDA	43		25 - 150	04/23/18 10:00	04/26/18 16:26	1
13C3-PFBS	80		25 - 150	04/23/18 10:00	04/26/18 16:26	1

Lab Sample ID: LCS 200-128728/2-A
Matrix: Water
Analysis Batch: 128885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 128728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanoic acid (PFHpA)	40.0	39.5		ng/L		99	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	40.3		ng/L		101	50 - 150
Perfluorononanoic acid (PFNA)	40.0	43.7		ng/L		109	50 - 150
Perfluorobutanesulfonic acid (PFBS)	35.4	35.6		ng/L		101	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.5		ng/L		103	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	36.3		ng/L		98	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	40.4		ng/L		101	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	42.9		ng/L		107	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	41.7		ng/L		104	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	40.6		ng/L		102	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	28.5		ng/L		71	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	30.6		ng/L		76	50 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
 SDG: 200-43060-1

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	76		25 - 150
13C4-PFHpa	83		25 - 150
13C4 PFOA	84		25 - 150
13C4 PFOS	77		25 - 150
13C5 PFNA	80		25 - 150
13C2 PFHxA	90		25 - 150
13C2 PFDA	79		25 - 150
13C2 PFUnA	87		25 - 150
13C2 PFDoA	71		25 - 150
13C2-PFTeDA	57		25 - 150
13C3-PFBS	83		25 - 150

Lab Sample ID: LCSD 200-128728/3-A
Matrix: Water
Analysis Batch: 128885

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 128728

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	
									Limit	Limit
Perfluoroheptanoic acid (PFHpA)	40.0	39.0		ng/L		98	50 - 150	1		30
Perfluorooctanoic acid (PFOA)	40.0	39.9		ng/L		100	50 - 150	1		30
Perfluorononanoic acid (PFNA)	40.0	41.5		ng/L		104	50 - 150	5		30
Perfluorobutanesulfonic acid (PFBS)	35.4	35.4		ng/L		100	50 - 150	0		30
Perfluorohexanesulfonic acid (PFHxS)	36.4	40.9		ng/L		112	50 - 150	9		30
Perfluorooctanesulfonic acid (PFOS)	37.1	39.3		ng/L		106	50 - 150	8		30
Perfluorohexanoic acid (PFHxA)	40.0	41.0		ng/L		102	50 - 150	1		30
Perfluoroundecanoic acid (PFUnA)	40.0	40.5		ng/L		101	50 - 150	6		30
Perfluorodecanoic acid (PFDA)	40.0	43.9		ng/L		110	50 - 150	5		30
Perfluorododecanoic acid (PFDoA)	40.0	39.7		ng/L		99	50 - 150	2		30
Perfluorotridecanoic Acid (PFTriA)	40.0	28.7		ng/L		72	50 - 150	0		30
Perfluorotetradecanoic acid (PFTeA)	40.0	34.9		ng/L		87	50 - 150	13		30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
18O2 PFHxS	69		25 - 150
13C4-PFHpa	82		25 - 150
13C4 PFOA	81		25 - 150
13C4 PFOS	72		25 - 150
13C5 PFNA	80		25 - 150
13C2 PFHxA	85		25 - 150
13C2 PFDA	75		25 - 150
13C2 PFUnA	86		25 - 150
13C2 PFDoA	74		25 - 150
13C2-PFTeDA	57		25 - 150
13C3-PFBS	82		25 - 150

QC Association Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
 SDG: 200-43060-1

LCMS

Prep Batch: 128728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-43060-1	FB-1480 GORGE	Total/NA	Water	3535	
200-43060-2	DW-1480 GORGE	Total/NA	Water	3535	
200-43060-3	FB-375 GORGE	Total/NA	Water	3535	
200-43060-4	DW-375 GORGE	Total/NA	Water	3535	
200-43060-5	DW-DUPLICATE	Total/NA	Water	3535	
200-43060-6	FB-30 JONES	Total/NA	Water	3535	
200-43060-7	DW-30 JONES	Total/NA	Water	3535	
200-43060-8	FB-82 JONES	Total/NA	Water	3535	
200-43060-9	DW-82 JONES	Total/NA	Water	3535	
200-43060-10	FB-742 RT 7B	Total/NA	Water	3535	
200-43060-11	DW-742 RT 7B	Total/NA	Water	3535	
200-43060-12	FB-832 RT 7B	Total/NA	Water	3535	
200-43060-13	DW-832 RT 7B	Total/NA	Water	3535	
200-43060-14	FB-916 RT 7B	Total/NA	Water	3535	
200-43060-15	DW-916 RT 7B	Total/NA	Water	3535	
MB 200-128728/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-128728/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-128728/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 128885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-43060-1	FB-1480 GORGE	Total/NA	Water	537 (modified)	128728
200-43060-2	DW-1480 GORGE	Total/NA	Water	537 (modified)	128728
200-43060-3	FB-375 GORGE	Total/NA	Water	537 (modified)	128728
200-43060-4	DW-375 GORGE	Total/NA	Water	537 (modified)	128728
200-43060-5	DW-DUPLICATE	Total/NA	Water	537 (modified)	128728
200-43060-6	FB-30 JONES	Total/NA	Water	537 (modified)	128728
200-43060-7	DW-30 JONES	Total/NA	Water	537 (modified)	128728
200-43060-8	FB-82 JONES	Total/NA	Water	537 (modified)	128728
200-43060-9	DW-82 JONES	Total/NA	Water	537 (modified)	128728
200-43060-10	FB-742 RT 7B	Total/NA	Water	537 (modified)	128728
200-43060-11	DW-742 RT 7B	Total/NA	Water	537 (modified)	128728
200-43060-12	FB-832 RT 7B	Total/NA	Water	537 (modified)	128728
200-43060-13	DW-832 RT 7B	Total/NA	Water	537 (modified)	128728
200-43060-14	FB-916 RT 7B	Total/NA	Water	537 (modified)	128728
200-43060-15	DW-916 RT 7B	Total/NA	Water	537 (modified)	128728
MB 200-128728/1-A	Method Blank	Total/NA	Water	537 (modified)	128728
LCS 200-128728/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	128728
LCSD 200-128728/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	128728

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: FB-1480 GORGE

Date Collected: 04/12/18 09:54

Date Received: 04/12/18 16:00

Lab Sample ID: 200-43060-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 17:11	BWC	TAL BUR

Client Sample ID: DW-1480 GORGE

Date Collected: 04/12/18 09:55

Date Received: 04/12/18 16:00

Lab Sample ID: 200-43060-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 17:27	BWC	TAL BUR

Client Sample ID: FB-375 GORGE

Date Collected: 04/12/18 10:25

Date Received: 04/12/18 16:00

Lab Sample ID: 200-43060-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 17:42	BWC	TAL BUR

Client Sample ID: DW-375 GORGE

Date Collected: 04/12/18 10:26

Date Received: 04/12/18 16:00

Lab Sample ID: 200-43060-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 17:57	BWC	TAL BUR

Client Sample ID: DW-DUPLICATE

Date Collected: 04/12/18 00:00

Date Received: 04/12/18 16:00

Lab Sample ID: 200-43060-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 18:12	BWC	TAL BUR

Client Sample ID: FB-30 JONES

Date Collected: 04/12/18 10:39

Date Received: 04/12/18 16:00

Lab Sample ID: 200-43060-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 18:27	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: DW-30 JONES

Lab Sample ID: 200-43060-7

Date Collected: 04/12/18 10:40

Matrix: Water

Date Received: 04/12/18 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 18:57	BWC	TAL BUR

Client Sample ID: FB-82 JONES

Lab Sample ID: 200-43060-8

Date Collected: 04/12/18 10:48

Matrix: Water

Date Received: 04/12/18 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 19:12	BWC	TAL BUR

Client Sample ID: DW-82 JONES

Lab Sample ID: 200-43060-9

Date Collected: 04/12/18 10:50

Matrix: Water

Date Received: 04/12/18 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 19:28	BWC	TAL BUR

Client Sample ID: FB-742 RT 7B

Lab Sample ID: 200-43060-10

Date Collected: 04/12/18 11:14

Matrix: Water

Date Received: 04/12/18 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 19:43	BWC	TAL BUR

Client Sample ID: DW-742 RT 7B

Lab Sample ID: 200-43060-11

Date Collected: 04/12/18 11:15

Matrix: Water

Date Received: 04/12/18 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 19:58	BWC	TAL BUR

Client Sample ID: FB-832 RT 7B

Lab Sample ID: 200-43060-12

Date Collected: 04/12/18 11:49

Matrix: Water

Date Received: 04/12/18 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 20:13	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Client Sample ID: DW-832 RT 7B

Lab Sample ID: 200-43060-13

Date Collected: 04/12/18 11:50

Matrix: Water

Date Received: 04/12/18 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 20:28	BWC	TAL BUR

Client Sample ID: FB-916 RT 7B

Lab Sample ID: 200-43060-14

Date Collected: 04/12/18 12:08

Matrix: Water

Date Received: 04/12/18 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 20:43	BWC	TAL BUR

Client Sample ID: DW-916 RT 7B

Lab Sample ID: 200-43060-15

Date Collected: 04/12/18 12:10

Matrix: Water

Date Received: 04/12/18 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			128728	04/23/18 10:00	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	128885	04/26/18 20:58	BWC	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD ELAP		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-19
Florida	NELAP	4	E87467	06-30-18
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-18
New Jersey	NELAP	2	VT972	06-30-18
New York	NELAP	2	10391	04-01-19
Pennsylvania	NELAP	3	68-00489	04-30-18 *
Rhode Island	State Program	1	LAO00298	12-30-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-18
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-18
Virginia	NELAP	3	460209	12-14-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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Sample Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43060-1
SDG: 200-43060-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-43060-1	FB-1480 GORGE	Water	04/12/18 09:54	04/12/18 16:00
200-43060-2	DW-1480 GORGE	Water	04/12/18 09:55	04/12/18 16:00
200-43060-3	FB-375 GORGE	Water	04/12/18 10:25	04/12/18 16:00
200-43060-4	DW-375 GORGE	Water	04/12/18 10:26	04/12/18 16:00
200-43060-5	DW-DUPLICATE	Water	04/12/18 00:00	04/12/18 16:00
200-43060-6	FB-30 JONES	Water	04/12/18 10:39	04/12/18 16:00
200-43060-7	DW-30 JONES	Water	04/12/18 10:40	04/12/18 16:00
200-43060-8	FB-82 JONES	Water	04/12/18 10:48	04/12/18 16:00
200-43060-9	DW-82 JONES	Water	04/12/18 10:50	04/12/18 16:00
200-43060-10	FB-742 RT 7B	Water	04/12/18 11:14	04/12/18 16:00
200-43060-11	DW-742 RT 7B	Water	04/12/18 11:15	04/12/18 16:00
200-43060-12	FB-832 RT 7B	Water	04/12/18 11:49	04/12/18 16:00
200-43060-13	DW-832 RT 7B	Water	04/12/18 11:50	04/12/18 16:00
200-43060-14	FB-916 RT 7B	Water	04/12/18 12:08	04/12/18 16:00
200-43060-15	DW-916 RT 7B	Water	04/12/18 12:10	04/12/18 16:00

INTERNAL CHAIN OF CUSTODY LOG (ICOC)

Project Information:		Method: PFC IDA						
Log In #:	200-43060	200-43060 1-15						
Client:	ATC GROUP SERVICES	LAB IDs: 1-15						
Samples associated with this log-in were placed into storage on 4/12/2018 (Date) 16:20 (Time ²) by: <i>Eleanor Johnson</i> Eleanor Johnson								
Storage Location: WL1 <input checked="" type="checkbox"/> Refrigeration <input type="checkbox"/> Frozen <input type="checkbox"/> Ambient Specify storage location (refrigerator, freezer ID or lab location) for original sample containers Sample Custodian Signature								
Internal Transfer Information								
Sample Type	Lab ID(s)	Transfer Date	Transfer Time ²	Purpose of Transfer		Relinquished By:	Received By:	Storage Location Prepared Sample ¹
				Prep.	Analysis			
X	#1-5 (EXAMPLE)	11/11/2011	1600	X		JWM	JWM	NA
X	#1-5 (EXAMPLE)	11/11/2011	1655			JWM	JWM	Storage
X	200-43060 1-15	4/23/18	0815	X		JWM	JWM	NA
X	"	"	1230			JWM	JWM	Storage
X	"	"	1650		X	JWM	JWM	LC410
X	"	4/26/18	1115		X	JWM	JWM	LC need
X	"	"	1130			JWM	JWM	Storage

¹ Extract, digestate, or any other prepared sample that is no longer in original sample container
² Military Time



TestAmerica Burlington
 30 Community Drive Suite 11
 South Burlington, VT 05403
 Phone (802) 660-1990 Fax (802) 660-1919

Chain of Custody Record

Client Information
 Client Contact: **Chelsea Fellows-Stanley** Lab PM: **Dusablon, Kristine A**
 Mr. James Gascoyne E-Mail: **kris.dusablon@testamericainc.com**
 Company: **ATC Group Services LLC** Phone: **802-241-4131**

Address: **1 Elm Street, Suite 3**
 City: **Waterbury**
 State, Zip: **VT, 05676**
 Project #: **20007895**
 Site: **Rutland - SVRA**
 Due Date Requested:
 TAT Requested (days):
 PO #: **Purchase Order not required**
 WO #:
 Preservation Code: **W**

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil)	Field Filtered Sample (Yes or No)	Perform (MS/MS/SP) (Yes or No)	PF ₆ IDA - (MOD) PFAS, 12 Analytes	Analysis Requested	Total Number of Containers	Special Instructions/Note:
FB-1480 Gorge	4/12/18	0954	G	Water	N	N	2			
DW-1480 Gorge	4/12/18	0955	G	Water	N	N	2			
FB-375 Gorge	4/12/18	1025	G	Water	N	N	2			
DW-375 Gorge	4/12/18	1026	G	W	N	N	2			
DW-Duplicate	4/12/18	0900	G	W	N	N	2			
FB-30 Jones	4/12/18	1039	G	W	N	N	2			
DW-30 Jones	4/12/18	1040	G	W	N	N	2			
FB-82 Jones	4/12/18	1048	G	W	N	N	2			
DW-82 Jones	4/12/18	1050	G	W	N	N	2			
FB-742 RA 7B	4/12/18	1114	G	W	N	N	2			
DW-742 RA 7B	4/12/18	1115	G	W	N	N	2			

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: **Chelsea Fellows-Stanley** Date: **4/12/18 1100**
 Relinquished by: _____ Date/Time: _____
 Relinquished by: _____ Date/Time: _____
 Relinquished by: _____ Date/Time: _____
 Custody Seals Intact: **N/A** Custody Seal No.: **N/A**
 Cooler Temperature(s) °C and Other Remarks: **8.4**



200-43060 Chain of Custody



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TestAmerica Burlington
 30 Community Drive Suite 11
 South Burlington, VT 05403
 Phone (802) 660-1990 Fax (802) 660-1919

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Mr. James Gascoyne Company: ATC Group Services LLC Address: 1 Elm Street, Suite 3 City: Waterbury State: VT Zip: 05676 Phone: 802-241-4131 Email: James.Gascoyne@atcassociates.com Project Name: PFAS, SVRA (12 analytes) Site: RUTLAND-SVRA		Lab PM: Dusatblon, Kristine A E-Mail: kris.dusatblon@testamericainc.com Phone: 817-852-1556 Carrier Tracking No(s): COC No: 200-20855-9098.4 Page: 1 of 2 Job #: 10f2	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 20007895 SOW#:		Analysis Requested Perform (MS/MSD/RCS or No) <input checked="" type="checkbox"/> N Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> N PFC, IDA (MOD) PFAS, 12 Analytes	
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=wastewater, BT=tissue, AA=air) Preservation Code:		Total Number of Containers Special Instructions/Note:	
FB-832 RT 7B DW-832 RT 7B FB-914 RT 7B DW-914 RT 7B		MW 2 MW 2 MW 2 MW 2	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological			
Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by:			
Relinquished by: <i>James Gascoyne</i> Date/Time: 4/12/18 11:00		Relinquished by: <i>[Signature]</i> Date/Time: 4/12/18 16:00	
Relinquished by: <i>[Signature]</i> Date/Time:		Relinquished by: <i>[Signature]</i> Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No: N/A		Cooler Temperature(s) °C and Other Remarks: 8.4	

Login Sample Receipt Checklist

Client: ATC Group Services LLC

Job Number: 200-43060-1
SDG Number: 200-43060-1

Login Number: 43060

List Number: 1

Creator: Johnson, Eleanor E

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	8.4°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	CFS
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Burlington

30 Community Drive

Suite 11

South Burlington, VT 05403

Tel: (802)660-1990

TestAmerica Job ID: 200-43379-1

TestAmerica Sample Delivery Group: 200-43379-1

Client Project/Site: PFAS, SVRA (12 analytes)

For:

ATC Group Services LLC

1 Elm Street, Suite 3

Waterbury, Vermont 05676

Attn: Mr. James Gascoyne



Authorized for release by:

5/24/2018 5:14:28 PM

Kristine Dusablon, Project Manager II

(802)660-1990

kris.dusablon@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Glossary

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

Case Narrative

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Job ID: 200-43379-1

Laboratory: TestAmerica Burlington

Narrative

CASE NARRATIVE

Client: ATC Group Services LLC

Project: PFAS, SVRA (12 analytes)

Report Number: 200-43379-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

RECEIPT

The samples were received on 05/10/2018 and 05/10/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 5.7° C.

PERFLUORINATED HYDROCARBONS

Samples 111 MIDDLE RD (200-43379-1), 279 MIDDLE RD (200-43379-3), FRITO LAY (200-43379-5), 1420 GORGE (200-43379-7), 84 RT 7B (200-43379-9), 443 RT 7B (200-43379-11), 339 RT 7B (200-43379-12), DUP (200-43379-14), 452 RT 7B (200-43379-16), FB-452 RT 7B (200-43379-17), 581 RT 7B (200-43379-18), 859 RT 7B (200-43379-20), FB-859 RT 7B (200-43379-21), 656 RT 7B (200-43379-22), 205 RT 7B (200-43379-24), FB-205 RT 7B (200-43379-25), 886 RT 7B (200-43379-26), 705 RT 7B (200-43379-28), FB-705 RT 7B (200-43379-29), 767 RT 7B (200-43379-30), FB-767 RT 7B (200-43379-31), 895 RT 7B (200-43379-32), FB-895 RT 7B (200-43379-33), 92 GORGE (200-43379-34), FB-92 GORGE (200-43379-35), 129 RT 7B (200-43379-36), FB-129 RT 7B (200-43379-37), 940 MIDDLE RD (200-43379-38) and FB-940 MIDDLE (200-43379-39) were analyzed for Perfluorinated Hydrocarbons in accordance with TAL SOP WS-LC-0025. The samples were prepared on 05/18/2018 and 05/22/2018 and analyzed on 05/22/2018 and 05/23/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 111 MIDDLE RD

Lab Sample ID: 200-43379-1

No Detections.

Client Sample ID: 279 MIDDLE RD

Lab Sample ID: 200-43379-3

No Detections.

Client Sample ID: FRITO LAY

Lab Sample ID: 200-43379-5

No Detections.

Client Sample ID: 1420 GORGE

Lab Sample ID: 200-43379-7

No Detections.

Client Sample ID: 84 RT 7B

Lab Sample ID: 200-43379-9

No Detections.

Client Sample ID: 443 RT 7B

Lab Sample ID: 200-43379-11

No Detections.

Client Sample ID: 339 RT 7B

Lab Sample ID: 200-43379-12

No Detections.

Client Sample ID: DUP

Lab Sample ID: 200-43379-14

No Detections.

Client Sample ID: 452 RT 7B

Lab Sample ID: 200-43379-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	4.0		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.6		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.9		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.9		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-452 RT 7B

Lab Sample ID: 200-43379-17

No Detections.

Client Sample ID: 581 RT 7B

Lab Sample ID: 200-43379-18

No Detections.

Client Sample ID: 859 RT 7B

Lab Sample ID: 200-43379-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	2.2		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1		1.7	1.7	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: FB-859 RT 7B

Lab Sample ID: 200-43379-21

No Detections.

Client Sample ID: 656 RT 7B

Lab Sample ID: 200-43379-22

No Detections.

Client Sample ID: 205 RT 7B

Lab Sample ID: 200-43379-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	3.7		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-205 RT 7B

Lab Sample ID: 200-43379-25

No Detections.

Client Sample ID: 886 RT 7B

Lab Sample ID: 200-43379-26

No Detections.

Client Sample ID: 705 RT 7B

Lab Sample ID: 200-43379-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	2.7		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.5		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-705 RT 7B

Lab Sample ID: 200-43379-29

No Detections.

Client Sample ID: 767 RT 7B

Lab Sample ID: 200-43379-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	2.4		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	6.8		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.8		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	15		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.7		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-767 RT 7B

Lab Sample ID: 200-43379-31

No Detections.

Client Sample ID: 895 RT 7B

Lab Sample ID: 200-43379-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	2.2		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-895 RT 7B

Lab Sample ID: 200-43379-33

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 92 GORGE

Lab Sample ID: 200-43379-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	1.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-92 GORGE

Lab Sample ID: 200-43379-35

No Detections.

Client Sample ID: 129 RT 7B

Lab Sample ID: 200-43379-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	5.7		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.6		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.1		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-129 RT 7B

Lab Sample ID: 200-43379-37

No Detections.

Client Sample ID: 940 MIDDLE RD

Lab Sample ID: 200-43379-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	2.2		1.9	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-940 MIDDLE

Lab Sample ID: 200-43379-39

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 111 MIDDLE RD

Lab Sample ID: 200-43379-1

Date Collected: 05/09/18 10:35

Matrix: Water

Date Received: 05/10/18 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:19	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	92		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C4-PFHpA	89		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C4 PFOA	93		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C4 PFOS	79		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C5 PFNA	85		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C2 PFHxA	103		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C2 PFDA	85		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C2 PFUnA	81		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C2 PFDoA	68		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C2-PFTeDA	70		25 - 150				05/18/18 10:40	05/23/18 17:19	1
13C3-PFBS	107		25 - 150				05/18/18 10:40	05/23/18 17:19	1

Client Sample ID: 279 MIDDLE RD

Lab Sample ID: 200-43379-3

Date Collected: 05/09/18 10:55

Matrix: Water

Date Received: 05/10/18 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:35	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150				05/18/18 10:40	05/23/18 17:35	1
13C4-PFHpA	86		25 - 150				05/18/18 10:40	05/23/18 17:35	1
13C4 PFOA	91		25 - 150				05/18/18 10:40	05/23/18 17:35	1
13C4 PFOS	83		25 - 150				05/18/18 10:40	05/23/18 17:35	1
13C5 PFNA	84		25 - 150				05/18/18 10:40	05/23/18 17:35	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 279 MIDDLE RD

Date Collected: 05/09/18 10:55

Date Received: 05/10/18 09:40

Lab Sample ID: 200-43379-3

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	98		25 - 150	05/18/18 10:40	05/23/18 17:35	1
13C2 PFDA	92		25 - 150	05/18/18 10:40	05/23/18 17:35	1
13C2 PFUnA	85		25 - 150	05/18/18 10:40	05/23/18 17:35	1
13C2 PFDoA	76		25 - 150	05/18/18 10:40	05/23/18 17:35	1
13C2-PFTeDA	74		25 - 150	05/18/18 10:40	05/23/18 17:35	1
13C3-PFBS	104		25 - 150	05/18/18 10:40	05/23/18 17:35	1

Client Sample ID: FRITO LAY

Date Collected: 05/09/18 11:40

Date Received: 05/10/18 09:40

Lab Sample ID: 200-43379-5

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 17:51	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	98		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C4-PFHpA	96		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C4 PFOA	92		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C4 PFOS	84		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C5 PFNA	92		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C2 PFHxA	110		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C2 PFDA	86		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C2 PFUnA	87		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C2 PFDoA	70		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C2-PFTeDA	77		25 - 150	05/18/18 10:40	05/23/18 17:51	1
13C3-PFBS	115		25 - 150	05/18/18 10:40	05/23/18 17:51	1

Client Sample ID: 1420 GORGE

Date Collected: 05/09/18 12:04

Date Received: 05/10/18 09:40

Lab Sample ID: 200-43379-7

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 1420 GORGE

Lab Sample ID: 200-43379-7

Date Collected: 05/09/18 12:04

Matrix: Water

Date Received: 05/10/18 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:07	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	97		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C4-PFHpA	94		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C4 PFOA	90		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C4 PFOS	85		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C5 PFNA	90		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C2 PFHxA	102		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C2 PFDA	88		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C2 PFUnA	94		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C2 PFDoA	83		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C2-PFTeDA	71		25 - 150				05/18/18 10:40	05/23/18 18:07	1
13C3-PFBS	110		25 - 150				05/18/18 10:40	05/23/18 18:07	1

Client Sample ID: 84 RT 7B

Lab Sample ID: 200-43379-9

Date Collected: 05/09/18 12:20

Matrix: Water

Date Received: 05/10/18 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:23	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	97		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C4-PFHpA	107		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C4 PFOA	108		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C4 PFOS	96		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C5 PFNA	106		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C2 PFHxA	120		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C2 PFDA	101		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C2 PFUnA	94		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C2 PFDoA	89		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C2-PFTeDA	92		25 - 150				05/18/18 10:40	05/23/18 18:23	1
13C3-PFBS	123		25 - 150				05/18/18 10:40	05/23/18 18:23	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Client Sample ID: 443 RT 7B

Lab Sample ID: 200-43379-11

Date Collected: 05/09/18 13:10

Matrix: Water

Date Received: 05/10/18 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 18:39	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	98		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C4-PFHpA	104		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C4 PFOA	94		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C4 PFOS	89		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C5 PFNA	101		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C2 PFHxA	115		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C2 PFDA	92		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C2 PFUnA	89		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C2 PFDoA	89		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C2-PFTeDA	91		25 - 150				05/18/18 10:40	05/23/18 18:39	1
13C3-PFBS	121		25 - 150				05/18/18 10:40	05/23/18 18:39	1

Client Sample ID: 339 RT 7B

Lab Sample ID: 200-43379-12

Date Collected: 05/09/18 11:15

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 18:55	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	88		25 - 150				05/18/18 10:40	05/23/18 18:55	1
13C4-PFHpA	94		25 - 150				05/18/18 10:40	05/23/18 18:55	1
13C4 PFOA	102		25 - 150				05/18/18 10:40	05/23/18 18:55	1
13C4 PFOS	76		25 - 150				05/18/18 10:40	05/23/18 18:55	1
13C5 PFNA	88		25 - 150				05/18/18 10:40	05/23/18 18:55	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 339 RT 7B

Lab Sample ID: 200-43379-12

Date Collected: 05/09/18 11:15

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	103		25 - 150	05/18/18 10:40	05/23/18 18:55	1
13C2 PFDA	89		25 - 150	05/18/18 10:40	05/23/18 18:55	1
13C2 PFUnA	88		25 - 150	05/18/18 10:40	05/23/18 18:55	1
13C2 PFDoA	69		25 - 150	05/18/18 10:40	05/23/18 18:55	1
13C2-PFTeDA	76		25 - 150	05/18/18 10:40	05/23/18 18:55	1
13C3-PFBS	99		25 - 150	05/18/18 10:40	05/23/18 18:55	1

Client Sample ID: DUP

Lab Sample ID: 200-43379-14

Date Collected: 05/09/18 12:00

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:11	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C4-PFHpA	96		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C4 PFOA	95		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C4 PFOS	87		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C5 PFNA	96		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C2 PFHxA	100		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C2 PFDA	97		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C2 PFUnA	101		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C2 PFDoA	88		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C2-PFTeDA	86		25 - 150	05/18/18 10:40	05/23/18 19:11	1
13C3-PFBS	108		25 - 150	05/18/18 10:40	05/23/18 19:11	1

Client Sample ID: 452 RT 7B

Lab Sample ID: 200-43379-16

Date Collected: 05/09/18 13:30

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	4.0		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluorooctanoic acid (PFOA)	3.6		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 452 RT 7B

Lab Sample ID: 200-43379-16

Date Collected: 05/09/18 13:30

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	1.9		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluorohexanoic acid (PFHxA)	3.9		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/23/18 19:28	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	97		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C4-PFHpA	100		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C4 PFOA	98		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C4 PFOS	97		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C5 PFNA	97		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C2 PFHxA	113		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C2 PFDA	108		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C2 PFUnA	106		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C2 PFDoA	93		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C2-PFTeDA	87		25 - 150				05/18/18 10:40	05/23/18 19:28	1
13C3-PFBS	115		25 - 150				05/18/18 10:40	05/23/18 19:28	1

Client Sample ID: FB-452 RT 7B

Lab Sample ID: 200-43379-17

Date Collected: 05/09/18 13:25

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:04	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	98		25 - 150				05/22/18 13:40	05/23/18 21:04	1
13C4-PFHpA	103		25 - 150				05/22/18 13:40	05/23/18 21:04	1
13C4 PFOA	111		25 - 150				05/22/18 13:40	05/23/18 21:04	1
13C4 PFOS	94		25 - 150				05/22/18 13:40	05/23/18 21:04	1
13C5 PFNA	104		25 - 150				05/22/18 13:40	05/23/18 21:04	1
13C2 PFHxA	128		25 - 150				05/22/18 13:40	05/23/18 21:04	1
13C2 PFDA	111		25 - 150				05/22/18 13:40	05/23/18 21:04	1
13C2 PFUnA	114		25 - 150				05/22/18 13:40	05/23/18 21:04	1
13C2 PFDoA	82		25 - 150				05/22/18 13:40	05/23/18 21:04	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: FB-452 RT 7B

Lab Sample ID: 200-43379-17

Date Collected: 05/09/18 13:25

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-PFTeDA	69		25 - 150	05/22/18 13:40	05/23/18 21:04	1
13C3-PFBS	114		25 - 150	05/22/18 13:40	05/23/18 21:04	1

Client Sample ID: 581 RT 7B

Lab Sample ID: 200-43379-18

Date Collected: 05/09/18 13:50

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/23/18 19:44	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C4-PFHpA	108		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C4 PFOA	97		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C4 PFOS	85		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C5 PFNA	102		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C2 PFHxA	106		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C2 PFDA	97		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C2 PFUnA	90		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C2 PFDoA	89		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C2-PFTeDA	86		25 - 150				05/18/18 10:40	05/23/18 19:44	1
13C3-PFBS	101		25 - 150				05/18/18 10:40	05/23/18 19:44	1

Client Sample ID: 859 RT 7B

Lab Sample ID: 200-43379-20

Date Collected: 05/09/18 14:15

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluorooctanoic acid (PFOA)	2.2		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluorooctanesulfonic acid (PFOS)	2.1		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Client Sample ID: 859 RT 7B

Lab Sample ID: 200-43379-20

Date Collected: 05/09/18 14:15

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:06	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	103		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C4-PFHpA	99		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C4 PFOA	96		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C4 PFOS	102		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C5 PFNA	97		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C2 PFHxA	123		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C2 PFDA	99		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C2 PFUnA	97		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C2 PFDoA	83		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C2-PFTeDA	84		25 - 150				05/18/18 10:40	05/22/18 02:06	1
13C3-PFBS	131		25 - 150				05/18/18 10:40	05/22/18 02:06	1

Client Sample ID: FB-859 RT 7B

Lab Sample ID: 200-43379-21

Date Collected: 05/09/18 14:10

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:20	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	93		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C4-PFHpA	105		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C4 PFOA	105		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C4 PFOS	97		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C5 PFNA	104		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C2 PFHxA	136		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C2 PFDA	115		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C2 PFUnA	111		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C2 PFDoA	91		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C2-PFTeDA	72		25 - 150				05/22/18 13:40	05/23/18 21:20	1
13C3-PFBS	115		25 - 150				05/22/18 13:40	05/23/18 21:20	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 656 RT 7B

Lab Sample ID: 200-43379-22

Date Collected: 05/09/18 14:30

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 02:22	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	111		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C4-PFHpA	112		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C4 PFOA	111		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C4 PFOS	115		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C5 PFNA	102		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C2 PFHxA	115		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C2 PFDA	119		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C2 PFUnA	111		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C2 PFDoA	88		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C2-PFTeDA	84		25 - 150				05/18/18 10:40	05/22/18 02:22	1
13C3-PFBS	108		25 - 150				05/18/18 10:40	05/22/18 02:22	1

Client Sample ID: 205 RT 7B

Lab Sample ID: 200-43379-24

Date Collected: 05/09/18 14:45

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorooctanesulfonic acid (PFOS)	3.7		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 02:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	93		25 - 150				05/18/18 10:40	05/22/18 02:38	1
13C4-PFHpA	100		25 - 150				05/18/18 10:40	05/22/18 02:38	1
13C4 PFOA	98		25 - 150				05/18/18 10:40	05/22/18 02:38	1
13C4 PFOS	93		25 - 150				05/18/18 10:40	05/22/18 02:38	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 205 RT 7B

Lab Sample ID: 200-43379-24

Date Collected: 05/09/18 14:45

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C5 PFNA	99		25 - 150	05/18/18 10:40	05/22/18 02:38	1
13C2 PFHxA	100		25 - 150	05/18/18 10:40	05/22/18 02:38	1
13C2 PFDA	100		25 - 150	05/18/18 10:40	05/22/18 02:38	1
13C2 PFUnA	93		25 - 150	05/18/18 10:40	05/22/18 02:38	1
13C2 PFDoA	80		25 - 150	05/18/18 10:40	05/22/18 02:38	1
13C2-PFTeDA	87		25 - 150	05/18/18 10:40	05/22/18 02:38	1
13C3-PFBS	90		25 - 150	05/18/18 10:40	05/22/18 02:38	1

Client Sample ID: FB-205 RT 7B

Lab Sample ID: 200-43379-25

Date Collected: 05/09/18 14:40

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 21:36	1

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	92		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C4-PFHpA	105		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C4 PFOA	95		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C4 PFOS	94		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C5 PFNA	93		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C2 PFHxA	123		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C2 PFDA	107		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C2 PFUnA	106		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C2 PFDoA	97		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C2-PFTeDA	84		25 - 150	05/22/18 13:40	05/23/18 21:36	1
13C3-PFBS	113		25 - 150	05/22/18 13:40	05/23/18 21:36	1

Client Sample ID: 886 RT 7B

Lab Sample ID: 200-43379-26

Date Collected: 05/09/18 15:00

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 886 RT 7B

Lab Sample ID: 200-43379-26

Date Collected: 05/09/18 15:00

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 02:54	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	97		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C4-PFHpA	90		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C4 PFOA	88		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C4 PFOS	94		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C5 PFNA	87		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C2 PFHxA	107		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C2 PFDA	95		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C2 PFUnA	89		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C2 PFDoA	76		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C2-PFTeDA	83		25 - 150				05/18/18 10:40	05/22/18 02:54	1
13C3-PFBS	113		25 - 150				05/18/18 10:40	05/22/18 02:54	1

Client Sample ID: 705 RT 7B

Lab Sample ID: 200-43379-28

Date Collected: 05/09/18 15:15

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorooctanoic acid (PFOA)	2.7		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorooctanesulfonic acid (PFOS)	4.5		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:11	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	92		25 - 150				05/18/18 10:40	05/22/18 03:11	1
13C4-PFHpA	95		25 - 150				05/18/18 10:40	05/22/18 03:11	1
13C4 PFOA	88		25 - 150				05/18/18 10:40	05/22/18 03:11	1
13C4 PFOS	85		25 - 150				05/18/18 10:40	05/22/18 03:11	1
13C5 PFNA	84		25 - 150				05/18/18 10:40	05/22/18 03:11	1
13C2 PFHxA	106		25 - 150				05/18/18 10:40	05/22/18 03:11	1
13C2 PFDA	84		25 - 150				05/18/18 10:40	05/22/18 03:11	1
13C2 PFUnA	84		25 - 150				05/18/18 10:40	05/22/18 03:11	1
13C2 PFDoA	66		25 - 150				05/18/18 10:40	05/22/18 03:11	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Client Sample ID: 705 RT 7B

Lab Sample ID: 200-43379-28

Date Collected: 05/09/18 15:15

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-PFTeDA	79		25 - 150	05/18/18 10:40	05/22/18 03:11	1
13C3-PFBS	117		25 - 150	05/18/18 10:40	05/22/18 03:11	1

Client Sample ID: FB-705 RT 7B

Lab Sample ID: 200-43379-29

Date Collected: 05/09/18 15:10

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 21:53	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	93		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C4-PFHpA	99		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C4 PFOA	100		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C4 PFOS	98		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C5 PFNA	97		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C2 PFHxA	129		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C2 PFDA	111		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C2 PFUnA	108		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C2 PFDoA	101		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C2-PFTeDA	80		25 - 150				05/22/18 13:40	05/23/18 21:53	1
13C3-PFBS	105		25 - 150				05/22/18 13:40	05/23/18 21:53	1

Client Sample ID: 767 RT 7B

Lab Sample ID: 200-43379-30

Date Collected: 05/09/18 15:50

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	2.4		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorooctanoic acid (PFOA)	6.8		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorobutanesulfonic acid (PFBS)	1.9		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorohexanesulfonic acid (PFHxS)	1.8		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorooctanesulfonic acid (PFOS)	15		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorohexanoic acid (PFHxA)	2.7		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 767 RT 7B

Lab Sample ID: 200-43379-30

Date Collected: 05/09/18 15:50

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:27	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C4-PFHpa	90		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C4 PFOA	89		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C4 PFOS	86		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C5 PFNA	84		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C2 PFHxA	92		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C2 PFDA	80		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C2 PFUnA	78		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C2 PFDoA	72		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C2-PFTeDA	76		25 - 150				05/18/18 10:40	05/22/18 03:27	1
13C3-PFBS	107		25 - 150				05/18/18 10:40	05/22/18 03:27	1

Client Sample ID: FB-767 RT 7B

Lab Sample ID: 200-43379-31

Date Collected: 05/09/18 15:45

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:09	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C4-PFHpa	107		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C4 PFOA	110		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C4 PFOS	97		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C5 PFNA	104		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C2 PFHxA	140		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C2 PFDA	120		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C2 PFUnA	117		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C2 PFDoA	104		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C2-PFTeDA	82		25 - 150				05/22/18 13:40	05/23/18 22:09	1
13C3-PFBS	110		25 - 150				05/22/18 13:40	05/23/18 22:09	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 895 RT 7B

Lab Sample ID: 200-43379-32

Date Collected: 05/09/18 16:05

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorooctanesulfonic acid (PFOS)	2.2		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 03:43	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	91		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C4-PFHpA	94		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C4 PFOA	95		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C4 PFOS	86		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C5 PFNA	89		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C2 PFHxA	105		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C2 PFDA	86		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C2 PFUnA	84		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C2 PFDoA	69		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C2-PFTeDA	78		25 - 150				05/18/18 10:40	05/22/18 03:43	1
13C3-PFBS	114		25 - 150				05/18/18 10:40	05/22/18 03:43	1

Client Sample ID: FB-895 RT 7B

Lab Sample ID: 200-43379-33

Date Collected: 05/09/18 16:00

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:25	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	94		25 - 150				05/22/18 13:40	05/23/18 22:25	1
13C4-PFHpA	109		25 - 150				05/22/18 13:40	05/23/18 22:25	1
13C4 PFOA	104		25 - 150				05/22/18 13:40	05/23/18 22:25	1
13C4 PFOS	97		25 - 150				05/22/18 13:40	05/23/18 22:25	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Client Sample ID: FB-895 RT 7B

Lab Sample ID: 200-43379-33

Date Collected: 05/09/18 16:00

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	101		25 - 150	05/22/18 13:40	05/23/18 22:25	1
13C2 PFHxA	147		25 - 150	05/22/18 13:40	05/23/18 22:25	1
13C2 PFDA	120		25 - 150	05/22/18 13:40	05/23/18 22:25	1
13C2 PFUnA	112		25 - 150	05/22/18 13:40	05/23/18 22:25	1
13C2 PFDoA	102		25 - 150	05/22/18 13:40	05/23/18 22:25	1
13C2-PFTeDA	89		25 - 150	05/22/18 13:40	05/23/18 22:25	1
13C3-PFBS	115		25 - 150	05/22/18 13:40	05/23/18 22:25	1

Client Sample ID: 92 GORGE

Lab Sample ID: 200-43379-34

Date Collected: 05/09/18 16:20

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorooctanoic acid (PFOA)	1.9		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		05/18/18 10:40	05/22/18 03:59	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C4-PFHpA	90		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C4 PFOA	90		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C4 PFOS	83		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C5 PFNA	85		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C2 PFHxA	104		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C2 PFDA	75		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C2 PFUnA	73		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C2 PFDoA	62		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C2-PFTeDA	72		25 - 150	05/18/18 10:40	05/22/18 03:59	1
13C3-PFBS	112		25 - 150	05/18/18 10:40	05/22/18 03:59	1

Client Sample ID: FB-92 GORGE

Lab Sample ID: 200-43379-35

Date Collected: 05/09/18 16:15

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: FB-92 GORGE

Lab Sample ID: 200-43379-35

Date Collected: 05/09/18 16:15

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		05/22/18 13:40	05/23/18 22:41	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C4-PFHpA	109		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C4 PFOA	108		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C4 PFOS	95		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C5 PFNA	106		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C2 PFHxA	145		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C2 PFDA	122		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C2 PFUnA	120		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C2 PFDoA	108		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C2-PFTeDA	91		25 - 150				05/22/18 13:40	05/23/18 22:41	1
13C3-PFBS	115		25 - 150				05/22/18 13:40	05/23/18 22:41	1

Client Sample ID: 129 RT 7B

Lab Sample ID: 200-43379-36

Date Collected: 05/09/18 16:40

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorooctanoic acid (PFOA)	5.7		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorooctanesulfonic acid (PFOS)	7.6		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorohexanoic acid (PFHxA)	2.1		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/18/18 10:40	05/22/18 04:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	92		25 - 150				05/18/18 10:40	05/22/18 04:15	1
13C4-PFHpA	93		25 - 150				05/18/18 10:40	05/22/18 04:15	1
13C4 PFOA	98		25 - 150				05/18/18 10:40	05/22/18 04:15	1
13C4 PFOS	89		25 - 150				05/18/18 10:40	05/22/18 04:15	1
13C5 PFNA	95		25 - 150				05/18/18 10:40	05/22/18 04:15	1
13C2 PFHxA	78		25 - 150				05/18/18 10:40	05/22/18 04:15	1
13C2 PFDA	93		25 - 150				05/18/18 10:40	05/22/18 04:15	1
13C2 PFUnA	99		25 - 150				05/18/18 10:40	05/22/18 04:15	1
13C2 PFDoA	81		25 - 150				05/18/18 10:40	05/22/18 04:15	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 129 RT 7B

Date Collected: 05/09/18 16:40

Date Received: 05/10/18 10:10

Lab Sample ID: 200-43379-36

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-PFTeDA	85		25 - 150	05/18/18 10:40	05/22/18 04:15	1
13C3-PFBS	83		25 - 150	05/18/18 10:40	05/22/18 04:15	1

Client Sample ID: FB-129 RT 7B

Date Collected: 05/09/18 16:35

Date Received: 05/10/18 10:10

Lab Sample ID: 200-43379-37

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 22:57	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	100		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C4-PFHpA	106		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C4 PFOA	109		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C4 PFOS	102		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C5 PFNA	102		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C2 PFHxA	150		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C2 PFDA	121		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C2 PFUnA	117		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C2 PFDoA	106		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C2-PFTeDA	86		25 - 150	05/22/18 13:40	05/23/18 22:57	1
13C3-PFBS	112		25 - 150	05/22/18 13:40	05/23/18 22:57	1

Client Sample ID: 940 MIDDLE RD

Date Collected: 05/09/18 16:55

Date Received: 05/10/18 10:10

Lab Sample ID: 200-43379-38

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluorooctanoic acid (PFOA)	2.2		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Client Sample ID: 940 MIDDLE RD

Lab Sample ID: 200-43379-38

Date Collected: 05/09/18 16:55

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		05/18/18 10:40	05/22/18 04:31	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	90		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C4-PFHpa	98		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C4 PFOA	102		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C4 PFOS	88		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C5 PFNA	94		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C2 PFHxA	87		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C2 PFDA	83		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C2 PFUnA	79		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C2 PFDoA	64		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C2-PFTeDA	68		25 - 150				05/18/18 10:40	05/22/18 04:31	1
13C3-PFBS	100		25 - 150				05/18/18 10:40	05/22/18 04:31	1

Client Sample ID: FB-940 MIDDLE

Lab Sample ID: 200-43379-39

Date Collected: 05/09/18 16:50

Matrix: Water

Date Received: 05/10/18 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		05/22/18 13:40	05/23/18 23:13	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	89		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C4-PFHpa	106		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C4 PFOA	103		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C4 PFOS	93		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C5 PFNA	97		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C2 PFHxA	147		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C2 PFDA	116		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C2 PFUnA	107		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C2 PFDoA	94		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C2-PFTeDA	85		25 - 150				05/22/18 13:40	05/23/18 23:13	1
13C3-PFBS	108		25 - 150				05/22/18 13:40	05/23/18 23:13	1

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFHxS (25-150)	PFHpA (25-150)	PFOA (25-150)	PFOS (25-150)	PFNA (25-150)	PFHxA (25-150)	PFDA (25-150)	PFUnA (25-150)
200-43379-1	111 MIDDLE RD	92	89	93	79	85	103	85	81
200-43379-3	279 MIDDLE RD	91	86	91	83	84	98	92	85
200-43379-5	FRITO LAY	98	96	92	84	92	110	86	87
200-43379-7	1420 GORGE	91	94	90	85	90	102	88	94
200-43379-9	84 RT 7B	97	107	108	96	106	120	101	94
200-43379-11	443 RT 7B	98	104	94	89	101	115	92	89
200-43379-12	339 RT 7B	88	94	102	76	88	103	89	88
200-43379-14	DUP	96	96	95	87	96	100	97	101
200-43379-16	452 RT 7B	97	100	98	97	97	113	108	106
200-43379-17	FB-452 RT 7B	98	103	111	94	104	128	111	114
200-43379-18	581 RT 7B	91	108	97	85	102	106	97	90
200-43379-20	859 RT 7B	103	99	96	102	97	123	99	97
200-43379-21	FB-859 RT 7B	93	105	105	97	104	136	115	111
200-43379-22	656 RT 7B	111	112	111	115	102	115	119	111
200-43379-24	205 RT 7B	93	100	98	93	99	100	100	93
200-43379-25	FB-205 RT 7B	92	105	95	94	93	123	107	106
200-43379-26	886 RT 7B	97	90	88	94	87	107	95	89
200-43379-28	705 RT 7B	92	95	88	85	84	106	84	84
200-43379-29	FB-705 RT 7B	93	99	100	98	97	129	111	108
200-43379-30	767 RT 7B	96	90	89	86	84	92	80	78
200-43379-31	FB-767 RT 7B	91	107	110	97	104	140	120	117
200-43379-32	895 RT 7B	91	94	95	86	89	105	86	84
200-43379-33	FB-895 RT 7B	94	109	104	97	101	147	120	112
200-43379-34	92 GORGE	91	90	90	83	85	104	75	73
200-43379-35	FB-92 GORGE	96	109	108	95	106	145	122	120
200-43379-36	129 RT 7B	92	93	98	89	95	78	93	99
200-43379-37	FB-129 RT 7B	100	106	109	102	102	150	121	117
200-43379-38	940 MIDDLE RD	90	98	102	88	94	87	83	79
200-43379-39	FB-940 MIDDLE	89	106	103	93	97	147	116	107
LCS 200-129631/2-A	Lab Control Sample	94	103	102	95	99	117	95	106
LCS 200-129758/2-A	Lab Control Sample	96	105	101	102	104	126	107	117
LCSD 200-129631/3-A	Lab Control Sample Dup	102	104	103	93	104	125	103	100
LCSD 200-129758/3-A	Lab Control Sample Dup	97	106	97	102	106	136	112	111
MB 200-129631/1-A	Method Blank	100	100	108	88	96	116	99	94
MB 200-129758/1-A	Method Blank	92	104	105	95	106	124	110	111

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)		
		PFDaA (25-150)	PFTDA (25-150)	3C3-PFB: (25-150)
200-43379-1	111 MIDDLE RD	68	70	107
200-43379-3	279 MIDDLE RD	76	74	104
200-43379-5	FRITO LAY	70	77	115
200-43379-7	1420 GORGE	83	71	110
200-43379-9	84 RT 7B	89	92	123
200-43379-11	443 RT 7B	89	91	121
200-43379-12	339 RT 7B	69	76	99
200-43379-14	DUP	88	86	108
200-43379-16	452 RT 7B	93	87	115
200-43379-17	FB-452 RT 7B	82	69	114
200-43379-18	581 RT 7B	89	86	101

TestAmerica Burlington

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)		
		PFD _o A (25-150)	PFTDA (25-150)	3C3-PFB _s (25-150)
200-43379-20	859 RT 7B	83	84	131
200-43379-21	FB-859 RT 7B	91	72	115
200-43379-22	656 RT 7B	88	84	108
200-43379-24	205 RT 7B	80	87	90
200-43379-25	FB-205 RT 7B	97	84	113
200-43379-26	886 RT 7B	76	83	113
200-43379-28	705 RT 7B	66	79	117
200-43379-29	FB-705 RT 7B	101	80	105
200-43379-30	767 RT 7B	72	76	107
200-43379-31	FB-767 RT 7B	104	82	110
200-43379-32	895 RT 7B	69	78	114
200-43379-33	FB-895 RT 7B	102	89	115
200-43379-34	92 GORGE	62	72	112
200-43379-35	FB-92 GORGE	108	91	115
200-43379-36	129 RT 7B	81	85	83
200-43379-37	FB-129 RT 7B	106	86	112
200-43379-38	940 MIDDLE RD	64	68	100
200-43379-39	FB-940 MIDDLE	94	85	108
LCS 200-129631/2-A	Lab Control Sample	88	80	121
LCS 200-129758/2-A	Lab Control Sample	95	85	115
LCSD 200-129631/3-A	Lab Control Sample Dup	77	76	124
LCSD 200-129758/3-A	Lab Control Sample Dup	94	74	116
MB 200-129631/1-A	Method Blank	81	74	113
MB 200-129758/1-A	Method Blank	94	79	111

Surrogate Legend

- PFH_xS = 18O2 PFH_xS
- PFH_pA = 13C4-PFH_pA
- PFOA = 13C4 PFOA
- PFOS = 13C4 PFOS
- PFNA = 13C5 PFNA
- PFH_xA = 13C2 PFH_xA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA
- PFD_oA = 13C2 PFD_oA
- PFTDA = 13C2-PFTeDA
- 13C3-PFBS = 13C3-PFBS

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-129631/1-A
Matrix: Water
Analysis Batch: 129820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 129631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		05/18/18 10:40	05/23/18 16:30	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	100		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C4-PFHxA	100		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C4 PFOA	108		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C4 PFOS	88		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C5 PFNA	96		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C2 PFHxA	116		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C2 PFDA	99		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C2 PFUnA	94		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C2 PFDoA	81		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C2-PFTeDA	74		25 - 150	05/18/18 10:40	05/23/18 16:30	1
13C3-PFBS	113		25 - 150	05/18/18 10:40	05/23/18 16:30	1

Lab Sample ID: LCS 200-129631/2-A
Matrix: Water
Analysis Batch: 129820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129631

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluoroheptanoic acid (PFHpA)	40.0	41.0		ng/L		102	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	45.7		ng/L		114	50 - 150
Perfluorononanoic acid (PFNA)	40.0	43.4		ng/L		108	50 - 150
Perfluorobutanesulfonic acid (PFBS)	35.4	33.8		ng/L		96	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	36.4	38.0		ng/L		104	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	38.1		ng/L		103	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	43.1		ng/L		108	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	43.7		ng/L		109	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	46.9		ng/L		117	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	41.9		ng/L		105	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	35.8		ng/L		89	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	36.5		ng/L		91	50 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	94		25 - 150
13C4-PFHpA	103		25 - 150
13C4 PFOA	102		25 - 150
13C4 PFOS	95		25 - 150
13C5 PFNA	99		25 - 150
13C2 PFHxA	117		25 - 150
13C2 PFDA	95		25 - 150
13C2 PFUnA	106		25 - 150
13C2 PFDoA	88		25 - 150
13C2-PFTeDA	80		25 - 150
13C3-PFBS	121		25 - 150

Lab Sample ID: LCSD 200-129631/3-A
 Matrix: Water
 Analysis Batch: 129820

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 129631

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit	
									%Rec	RPD
Perfluoroheptanoic acid (PFHpA)	40.0	43.0		ng/L		108	50 - 150	5	30	30
Perfluorooctanoic acid (PFOA)	40.0	45.5		ng/L		114	50 - 150	0	30	30
Perfluorononanoic acid (PFNA)	40.0	40.8		ng/L		102	50 - 150	6	30	30
Perfluorobutanesulfonic acid (PFBS)	35.4	35.9		ng/L		102	50 - 150	6	30	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	38.1		ng/L		105	50 - 150	0	30	30
Perfluorooctanesulfonic acid (PFOS)	37.1	38.7		ng/L		104	50 - 150	2	30	30
Perfluorohexanoic acid (PFHxA)	40.0	44.2		ng/L		111	50 - 150	3	30	30
Perfluoroundecanoic acid (PFUnA)	40.0	41.3		ng/L		103	50 - 150	6	30	30
Perfluorodecanoic acid (PFDA)	40.0	42.5		ng/L		106	50 - 150	10	30	30
Perfluorododecanoic acid (PFDoA)	40.0	46.8		ng/L		117	50 - 150	11	30	30
Perfluorotridecanoic Acid (PFTriA)	40.0	37.9		ng/L		95	50 - 150	6	30	30
Perfluorotetradecanoic acid (PFTeA)	40.0	38.8		ng/L		97	50 - 150	6	30	30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
18O2 PFHxS	102		25 - 150
13C4-PFHpA	104		25 - 150
13C4 PFOA	103		25 - 150
13C4 PFOS	93		25 - 150
13C5 PFNA	104		25 - 150
13C2 PFHxA	125		25 - 150
13C2 PFDA	103		25 - 150
13C2 PFUnA	100		25 - 150
13C2 PFDoA	77		25 - 150
13C2-PFTeDA	76		25 - 150
13C3-PFBS	124		25 - 150

Lab Sample ID: MB 200-129758/1-A
 Matrix: Water
 Analysis Batch: 129820

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 129758

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-129758/1-A
Matrix: Water
Analysis Batch: 129820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 129758

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		05/22/18 13:40	05/23/18 20:16	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	92		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C4-PFHpA	104		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C4 PFOA	105		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C4 PFOS	95		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C5 PFNA	106		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C2 PFHxA	124		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C2 PFDA	110		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C2 PFUnA	111		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C2 PFDoA	94		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C2-PFTeDA	79		25 - 150	05/22/18 13:40	05/23/18 20:16	1
13C3-PFBS	111		25 - 150	05/22/18 13:40	05/23/18 20:16	1

Lab Sample ID: LCS 200-129758/2-A
Matrix: Water
Analysis Batch: 129820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129758

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluoroheptanoic acid (PFHpA)	40.0	39.1		ng/L		98	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	42.1		ng/L		105	50 - 150
Perfluorononanoic acid (PFNA)	40.0	40.5		ng/L		101	50 - 150
Perfluorobutanesulfonic acid (PFBS)	35.4	35.4		ng/L		100	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.1		ng/L		97	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	35.9		ng/L		97	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	40.6		ng/L		102	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	42.2		ng/L		106	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	40.0		ng/L		100	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	38.6		ng/L		97	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	33.6		ng/L		84	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	33.1		ng/L		83	50 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	96		25 - 150
13C4-PFHpa	105		25 - 150
13C4 PFOA	101		25 - 150
13C4 PFOS	102		25 - 150
13C5 PFNA	104		25 - 150
13C2 PFHxA	126		25 - 150
13C2 PFDA	107		25 - 150
13C2 PFUnA	117		25 - 150
13C2 PFDoA	95		25 - 150
13C2-PFTeDA	85		25 - 150
13C3-PFBS	115		25 - 150

Lab Sample ID: LCSD 200-129758/3-A
 Matrix: Water
 Analysis Batch: 129820

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 129758

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	
									Limit	Limit
Perfluoroheptanoic acid (PFHpA)	40.0	41.0		ng/L		103	50 - 150	5	5	30
Perfluorooctanoic acid (PFOA)	40.0	47.9		ng/L		120	50 - 150	13	13	30
Perfluorononanoic acid (PFNA)	40.0	38.6		ng/L		97	50 - 150	5	5	30
Perfluorobutanesulfonic acid (PFBS)	35.4	34.9		ng/L		99	50 - 150	1	1	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.0		ng/L		102	50 - 150	5	5	30
Perfluorooctanesulfonic acid (PFOS)	37.1	35.9		ng/L		97	50 - 150	0	0	30
Perfluorohexanoic acid (PFHxA)	40.0	39.8		ng/L		100	50 - 150	2	2	30
Perfluoroundecanoic acid (PFUnA)	40.0	40.4		ng/L		101	50 - 150	4	4	30
Perfluorodecanoic acid (PFDA)	40.0	41.4		ng/L		104	50 - 150	3	3	30
Perfluorododecanoic acid (PFDoA)	40.0	40.0		ng/L		100	50 - 150	3	3	30
Perfluorotridecanoic Acid (PFTriA)	40.0	31.1		ng/L		78	50 - 150	8	8	30
Perfluorotetradecanoic acid (PFTeA)	40.0	36.2		ng/L		90	50 - 150	9	9	30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
18O2 PFHxS	97		25 - 150
13C4-PFHpa	106		25 - 150
13C4 PFOA	97		25 - 150
13C4 PFOS	102		25 - 150
13C5 PFNA	106		25 - 150
13C2 PFHxA	136		25 - 150
13C2 PFDA	112		25 - 150
13C2 PFUnA	111		25 - 150
13C2 PFDoA	94		25 - 150
13C2-PFTeDA	74		25 - 150
13C3-PFBS	116		25 - 150

QC Association Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

LCMS

Prep Batch: 129631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-43379-1	111 MIDDLE RD	Total/NA	Water	3535	
200-43379-3	279 MIDDLE RD	Total/NA	Water	3535	
200-43379-5	FRITO LAY	Total/NA	Water	3535	
200-43379-7	1420 GORGE	Total/NA	Water	3535	
200-43379-9	84 RT 7B	Total/NA	Water	3535	
200-43379-11	443 RT 7B	Total/NA	Water	3535	
200-43379-12	339 RT 7B	Total/NA	Water	3535	
200-43379-14	DUP	Total/NA	Water	3535	
200-43379-16	452 RT 7B	Total/NA	Water	3535	
200-43379-18	581 RT 7B	Total/NA	Water	3535	
200-43379-20	859 RT 7B	Total/NA	Water	3535	
200-43379-22	656 RT 7B	Total/NA	Water	3535	
200-43379-24	205 RT 7B	Total/NA	Water	3535	
200-43379-26	886 RT 7B	Total/NA	Water	3535	
200-43379-28	705 RT 7B	Total/NA	Water	3535	
200-43379-30	767 RT 7B	Total/NA	Water	3535	
200-43379-32	895 RT 7B	Total/NA	Water	3535	
200-43379-34	92 GORGE	Total/NA	Water	3535	
200-43379-36	129 RT 7B	Total/NA	Water	3535	
200-43379-38	940 MIDDLE RD	Total/NA	Water	3535	
MB 200-129631/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-129631/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-129631/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 129711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-43379-20	859 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-22	656 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-24	205 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-26	886 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-28	705 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-30	767 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-32	895 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-34	92 GORGE	Total/NA	Water	537 (modified)	129631
200-43379-36	129 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-38	940 MIDDLE RD	Total/NA	Water	537 (modified)	129631

Prep Batch: 129758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-43379-17	FB-452 RT 7B	Total/NA	Water	3535	
200-43379-21	FB-859 RT 7B	Total/NA	Water	3535	
200-43379-25	FB-205 RT 7B	Total/NA	Water	3535	
200-43379-29	FB-705 RT 7B	Total/NA	Water	3535	
200-43379-31	FB-767 RT 7B	Total/NA	Water	3535	
200-43379-33	FB-895 RT 7B	Total/NA	Water	3535	
200-43379-35	FB-92 GORGE	Total/NA	Water	3535	
200-43379-37	FB-129 RT 7B	Total/NA	Water	3535	
200-43379-39	FB-940 MIDDLE	Total/NA	Water	3535	
MB 200-129758/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-129758/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-129758/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

TestAmerica Burlington

QC Association Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Analysis Batch: 129820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-43379-1	111 MIDDLE RD	Total/NA	Water	537 (modified)	129631
200-43379-3	279 MIDDLE RD	Total/NA	Water	537 (modified)	129631
200-43379-5	FRITO LAY	Total/NA	Water	537 (modified)	129631
200-43379-7	1420 GORGE	Total/NA	Water	537 (modified)	129631
200-43379-9	84 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-11	443 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-12	339 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-14	DUP	Total/NA	Water	537 (modified)	129631
200-43379-16	452 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-17	FB-452 RT 7B	Total/NA	Water	537 (modified)	129758
200-43379-18	581 RT 7B	Total/NA	Water	537 (modified)	129631
200-43379-21	FB-859 RT 7B	Total/NA	Water	537 (modified)	129758
200-43379-25	FB-205 RT 7B	Total/NA	Water	537 (modified)	129758
200-43379-29	FB-705 RT 7B	Total/NA	Water	537 (modified)	129758
200-43379-31	FB-767 RT 7B	Total/NA	Water	537 (modified)	129758
200-43379-33	FB-895 RT 7B	Total/NA	Water	537 (modified)	129758
200-43379-35	FB-92 GORGE	Total/NA	Water	537 (modified)	129758
200-43379-37	FB-129 RT 7B	Total/NA	Water	537 (modified)	129758
200-43379-39	FB-940 MIDDLE	Total/NA	Water	537 (modified)	129758
MB 200-129631/1-A	Method Blank	Total/NA	Water	537 (modified)	129631
MB 200-129758/1-A	Method Blank	Total/NA	Water	537 (modified)	129758
LCS 200-129631/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	129631
LCS 200-129758/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	129758
LCSD 200-129631/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	129631
LCSD 200-129758/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	129758

Lab Chronicle

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Client Sample ID: 111 MIDDLE RD

Lab Sample ID: 200-43379-1

Date Collected: 05/09/18 10:35

Matrix: Water

Date Received: 05/10/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 17:19	BWC	TAL BUR

Client Sample ID: 279 MIDDLE RD

Lab Sample ID: 200-43379-3

Date Collected: 05/09/18 10:55

Matrix: Water

Date Received: 05/10/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 17:35	BWC	TAL BUR

Client Sample ID: FRITO LAY

Lab Sample ID: 200-43379-5

Date Collected: 05/09/18 11:40

Matrix: Water

Date Received: 05/10/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 17:51	BWC	TAL BUR

Client Sample ID: 1420 GORGE

Lab Sample ID: 200-43379-7

Date Collected: 05/09/18 12:04

Matrix: Water

Date Received: 05/10/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 18:07	BWC	TAL BUR

Client Sample ID: 84 RT 7B

Lab Sample ID: 200-43379-9

Date Collected: 05/09/18 12:20

Matrix: Water

Date Received: 05/10/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 18:23	BWC	TAL BUR

Client Sample ID: 443 RT 7B

Lab Sample ID: 200-43379-11

Date Collected: 05/09/18 13:10

Matrix: Water

Date Received: 05/10/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 18:39	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: 339 RT 7B

Lab Sample ID: 200-43379-12

Date Collected: 05/09/18 11:15

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 18:55	BWC	TAL BUR

Client Sample ID: DUP

Lab Sample ID: 200-43379-14

Date Collected: 05/09/18 12:00

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 19:11	BWC	TAL BUR

Client Sample ID: 452 RT 7B

Lab Sample ID: 200-43379-16

Date Collected: 05/09/18 13:30

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 19:28	BWC	TAL BUR

Client Sample ID: FB-452 RT 7B

Lab Sample ID: 200-43379-17

Date Collected: 05/09/18 13:25

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129758	05/22/18 13:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 21:04	BWC	TAL BUR

Client Sample ID: 581 RT 7B

Lab Sample ID: 200-43379-18

Date Collected: 05/09/18 13:50

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 19:44	BWC	TAL BUR

Client Sample ID: 859 RT 7B

Lab Sample ID: 200-43379-20

Date Collected: 05/09/18 14:15

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 02:06	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: FB-859 RT 7B

Lab Sample ID: 200-43379-21

Date Collected: 05/09/18 14:10

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129758	05/22/18 13:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 21:20	BWC	TAL BUR

Client Sample ID: 656 RT 7B

Lab Sample ID: 200-43379-22

Date Collected: 05/09/18 14:30

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 02:22	BWC	TAL BUR

Client Sample ID: 205 RT 7B

Lab Sample ID: 200-43379-24

Date Collected: 05/09/18 14:45

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 02:38	BWC	TAL BUR

Client Sample ID: FB-205 RT 7B

Lab Sample ID: 200-43379-25

Date Collected: 05/09/18 14:40

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129758	05/22/18 13:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 21:36	BWC	TAL BUR

Client Sample ID: 886 RT 7B

Lab Sample ID: 200-43379-26

Date Collected: 05/09/18 15:00

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 02:54	BWC	TAL BUR

Client Sample ID: 705 RT 7B

Lab Sample ID: 200-43379-28

Date Collected: 05/09/18 15:15

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 03:11	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
 SDG: 200-43379-1

Client Sample ID: FB-705 RT 7B

Lab Sample ID: 200-43379-29

Date Collected: 05/09/18 15:10

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129758	05/22/18 13:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 21:53	BWC	TAL BUR

Client Sample ID: 767 RT 7B

Lab Sample ID: 200-43379-30

Date Collected: 05/09/18 15:50

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 03:27	BWC	TAL BUR

Client Sample ID: FB-767 RT 7B

Lab Sample ID: 200-43379-31

Date Collected: 05/09/18 15:45

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129758	05/22/18 13:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 22:09	BWC	TAL BUR

Client Sample ID: 895 RT 7B

Lab Sample ID: 200-43379-32

Date Collected: 05/09/18 16:05

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 03:43	BWC	TAL BUR

Client Sample ID: FB-895 RT 7B

Lab Sample ID: 200-43379-33

Date Collected: 05/09/18 16:00

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129758	05/22/18 13:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 22:25	BWC	TAL BUR

Client Sample ID: 92 GORGE

Lab Sample ID: 200-43379-34

Date Collected: 05/09/18 16:20

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 03:59	BWC	TAL BUR

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Client Sample ID: FB-92 GORGE

Lab Sample ID: 200-43379-35

Date Collected: 05/09/18 16:15

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129758	05/22/18 13:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 22:41	BWC	TAL BUR

Client Sample ID: 129 RT 7B

Lab Sample ID: 200-43379-36

Date Collected: 05/09/18 16:40

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 04:15	BWC	TAL BUR

Client Sample ID: FB-129 RT 7B

Lab Sample ID: 200-43379-37

Date Collected: 05/09/18 16:35

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129758	05/22/18 13:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 22:57	BWC	TAL BUR

Client Sample ID: 940 MIDDLE RD

Lab Sample ID: 200-43379-38

Date Collected: 05/09/18 16:55

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129631	05/18/18 10:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129711	05/22/18 04:31	BWC	TAL BUR

Client Sample ID: FB-940 MIDDLE

Lab Sample ID: 200-43379-39

Date Collected: 05/09/18 16:50

Matrix: Water

Date Received: 05/10/18 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			129758	05/22/18 13:40	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	129820	05/23/18 23:13	BWC	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD ELAP		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-19
Florida	NELAP	4	E87467	06-30-18
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-18
New Jersey	NELAP	2	VT972	06-30-18
New York	NELAP	2	10391	04-01-19
Pennsylvania	NELAP	3	68-00489	04-30-19
Rhode Island	State Program	1	LAO00298	12-30-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-18
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-18
Virginia	NELAP	3	460209	12-14-18

Method Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990



Sample Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-43379-1
SDG: 200-43379-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-43379-1	111 MIDDLE RD	Water	05/09/18 10:35	05/10/18 09:40
200-43379-3	279 MIDDLE RD	Water	05/09/18 10:55	05/10/18 09:40
200-43379-5	FRITO LAY	Water	05/09/18 11:40	05/10/18 09:40
200-43379-7	1420 GORGE	Water	05/09/18 12:04	05/10/18 09:40
200-43379-9	84 RT 7B	Water	05/09/18 12:20	05/10/18 09:40
200-43379-11	443 RT 7B	Water	05/09/18 13:10	05/10/18 09:40
200-43379-12	339 RT 7B	Water	05/09/18 11:15	05/10/18 10:10
200-43379-14	DUP	Water	05/09/18 12:00	05/10/18 10:10
200-43379-16	452 RT 7B	Water	05/09/18 13:30	05/10/18 10:10
200-43379-17	FB-452 RT 7B	Water	05/09/18 13:25	05/10/18 10:10
200-43379-18	581 RT 7B	Water	05/09/18 13:50	05/10/18 10:10
200-43379-20	859 RT 7B	Water	05/09/18 14:15	05/10/18 10:10
200-43379-21	FB-859 RT 7B	Water	05/09/18 14:10	05/10/18 10:10
200-43379-22	656 RT 7B	Water	05/09/18 14:30	05/10/18 10:10
200-43379-24	205 RT 7B	Water	05/09/18 14:45	05/10/18 10:10
200-43379-25	FB-205 RT 7B	Water	05/09/18 14:40	05/10/18 10:10
200-43379-26	886 RT 7B	Water	05/09/18 15:00	05/10/18 10:10
200-43379-28	705 RT 7B	Water	05/09/18 15:15	05/10/18 10:10
200-43379-29	FB-705 RT 7B	Water	05/09/18 15:10	05/10/18 10:10
200-43379-30	767 RT 7B	Water	05/09/18 15:50	05/10/18 10:10
200-43379-31	FB-767 RT 7B	Water	05/09/18 15:45	05/10/18 10:10
200-43379-32	895 RT 7B	Water	05/09/18 16:05	05/10/18 10:10
200-43379-33	FB-895 RT 7B	Water	05/09/18 16:00	05/10/18 10:10
200-43379-34	92 GORGE	Water	05/09/18 16:20	05/10/18 10:10
200-43379-35	FB-92 GORGE	Water	05/09/18 16:15	05/10/18 10:10
200-43379-36	129 RT 7B	Water	05/09/18 16:40	05/10/18 10:10
200-43379-37	FB-129 RT 7B	Water	05/09/18 16:35	05/10/18 10:10
200-43379-38	940 MIDDLE RD	Water	05/09/18 16:55	05/10/18 10:10
200-43379-39	FB-940 MIDDLE	Water	05/09/18 16:50	05/10/18 10:10

Chain of Custody Record

Client Information Client Contact: Mr. James Gascoyne Company: ATC Group Services LLC Address: 1 Elm Street, Suite 3 City: Waterbury State, Zip: VT, 05676 Phone: 802-241-4131(Tel) Email: james.gascoyne@atcgs.com Project Name: PFAS, SVRA (12 analytes) Site: 280 EM00185		Lab PM: Dusablon, Kristine A E-Mail: kris.dusablon@testamericainc.com Phone: 802 241 4131 Due Date Requested: 10 day TAT Requested (days): 10 day Purchase Order not required PO #: WO #: Project #: 20007895 SSOW#:		Carrier Tracking No(s): COC No: 200-20982-9167.6 Page: Page 6 of 6 Job #: 1/41	
Due Date Requested: TAT Requested (days): Purchase Order not required PO #: WO #: Project #: SSOW#:		Analysis Requested			
Sample Identification		Sample Date		Sample Time	
111 Middle Rd FB-111 Middle 279 Middle Rd FB-279 Middle Frito Lay FB-Frito Lay 1420 Gorge FB-1420 Gorge 84 Rt 7B FB-84 Rt-7B 443 Rt-7B		5.7.18 10.30 10.35 10.50 11.19 11.30 12.14 12.05 12.20 12.15 13.10		G Water Water Water Water Water Water Water Water Water Water	
Field Filtered Sample (Yes or No)		Performance/MSD (Yes or No)		PFC, IGA - (MOD) PFAS, 12 Analytes	
Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)		Preservation Code:		Total Number of containers	
Special Instructions/Note:		Special Instructions/Note:		Special Instructions/Note:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		200-43379 COC	
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact:		Cooler Temperature(s) °C and Other Remarks:		Company:	
Δ Yes Δ No		5.7		Company:	

TestAmerica Burlington
 30 Community Drive Suite 11
 South Burlington, VT 05403
 Phone (802) 660-1990 Fax (802) 660-1919

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Lab P#:		Carrier Tracking No(s):							
Mr. James Gascoyne		Dusablon, Kristine A		COC No: 200-20982-9167.6							
ATC Group Services LLC		E-Mail: kris.dusablon@testamericainc.com		Page: 6 of 6							
Address: 1 Elm Street, Suite 3		Phone: 802 241 4131		Job #: 2/4							
City: Waterbury		Due Date Requested:		Preservation Codes:							
State: VT		TAT Requested (days): 10 day		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)							
Phone: 802-241-4131 (Tel)		PO #:		Other:							
Email: james.gascoyne@atcgs.com		Purchase Order not required									
Project Name: PFAS, SVRA (12 analytes)		WO #:									
Site: 280 E.MD0185		Project #: 20007895									
		SSOW#:									
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, AT=Tissue, AS=Air)	Field Filtered Sample (Yes or No)	Perform MS/MS (Yes or No)	PFC, IDA - (MOD) PFAS, 12 Analytes	Total Number of Containers	Special Instructions/Note:		
339 Rt 7B	5-9-18	1115	G	Water			N				
FB - 339 Rt 7B		1110		Water							
DUP		1200		Water							
FB - 443 Rt 7B		1305		Water							
452 Rt 7B		1330		Water							
FB - 452 Rt 7B		1325		Water							
581 Rt 7B		1350									
FB - 581 Rt 7B		1345									
859 Rt 7B		1415									
FB - 859 Rt 7B		1410									
656 Rt 7B		1430									
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological											
Deliverable Requested: I, II, III, IV, Other (specify)											
Empty Kit Relinquished by:											
Relinquished by: <i>[Signature]</i>		Date: 5-9-18 @ 1900		Company: ATC		Received by: <i>[Signature]</i>		Date/Time: 05/10/18		Company: TMO-W	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 5.7		Returned To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:		Method of Shipment:	

Chain of Custody Record

Client Information Client Contact: Mr. James Gascoyne Company: ATC Group Services LLC Address: 1 Elm Street, Suite 3 City: Waterbury State, Zip: VT, 05676 Phone: 802-241-4131 (Tel) Email: james.gascoyne@atcgs.com Project #: 20007895 Project Name: PFAS, SVRA (12 analytes) Site: 280 E. M00185		Lab PM: Dusablon, Kristine A E-Mail: kris.dusablon@testamericainc.com Phone: 802 241 4131 Carrier Tracking No(s): Lab No: 200-20982-9187.6 Page: Page 6 of 6 Job #: 3/4	
Due Date Requested: TAT Requested (days): 10 day PO #: Purchase Order not required WO #:		Analysis Requested	
Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=waste/oil, ST=stainless, A=alt) Preservation Code:		Field Filtered Sample (Yes or No) Perform MS/MS/IR/Yes/No PFC IDA - (MOD) PFAS, 12 Analytes Total Number of Containers	
Sample Identification FB-656R+7B 205 R+7B FB-205 R+7B 866 R+7B FB-866 R+7B 705 R+7B FB-705 R+7B 767 R+7B FB-767 R+7B 895 R+7B FB-895 R+7B		Special Instructions/Note: Preservation Codes: A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2SO3 Q - Na2SO4 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - PH 4-5 X - EDTA Z - other (specify)	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: [Signature] Relinquished by:		Date/Time: 5.9.18 @ 1900 Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 5.7	



Chain of Custody Record

Client Information Client Contact: <u>James Gascoyne</u> Mr. James Gascoyne Company: <u>ATC Group Services LLC</u> Address: <u>1 Elm Street, Suite 3</u> City: <u>Waterbury</u> State/Zip: <u>VT, 05676</u> Phone: _____ Email: <u>James.Gascoyne@atcassociates.com</u> Project Name: <u>PFAS, SVRA (12 analytes)</u> Site: <u>280 EM00185</u>		Lab P.M.: <u>Dusablon, Kristine A</u> E-Mail: <u>kris.dusablon@testamericainc.com</u> Phone: <u>802 241 4131</u> Company: <u>ATC Group Services LLC</u>		Carrier Tracking No(s): _____ COC No: <u>200-20855-9098.4</u> Page: <u>Page 4 of 4</u> Job #: <u>4/4</u>				
Due Date Requested: _____ TAT Requested (days): <u>10-day</u> PO #: _____ Purchase Order not required W/O #: _____ Project #: <u>20007895</u> SSON#: _____		Analysis Requested						
Sample Identification <u>92 Gauge</u> <u>FB-92 Gauge</u> <u>129 Rt 7B</u> <u>FB-129 Rt 7B</u> <u>940 Middle Rd</u> <u>FB-940 Middle</u>		Sample Date <u>5/9/18</u> <u>16:00</u> <u>16:15</u> <u>16:40</u> <u>16:35</u> <u>16:55</u> <u>16:50</u>	Sample Time <u>G</u> <u>G</u> <u>G</u> <u>G</u> <u>G</u> <u>G</u>	Matrix (W=water, S=solid, O=wastewater, A=air) <u>Water</u> <u>Water</u> <u>Water</u> <u>Water</u> <u>Water</u> <u>Water</u>	Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	PFC, IDA - (MOD) PFAS, 12 Analytes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Total Number of Containers <input checked="" type="checkbox"/> _____ <input type="checkbox"/> _____	Special Instructions/Note: _____ _____
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: _____						
Empty Kit Relinquished by: Relinquished by: _____ Date/Time: <u>5/18 @ 1900</u> Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____		Method of Shipment: Relinquished by: <u>ATC</u> Company Date/Time: <u>5/18</u> Relinquished by: _____ Company Date/Time: <u>1010</u> Relinquished by: _____ Company Date/Time: _____						
Custody Seals Intact: _____ Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: <u>5.7</u>						

Login Sample Receipt Checklist

Client: ATC Group Services LLC

Job Number: 200-43379-1
SDG Number: 200-43379-1

Login Number: 43379
List Number: 1
Creator: Hahl, Victoria L

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	JP
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Burlington

30 Community Drive

Suite 11

South Burlington, VT 05403

Tel: (802)660-1990

TestAmerica Job ID: 200-44503-1

TestAmerica Sample Delivery Group: 200-44503-1

Client Project/Site: PFAS, SVRA (12 analytes)

For:

ATC Group Services LLC

1 Elm Street, Suite 3

Waterbury, Vermont 05676

Attn: Mr. James Gascoyne



Authorized for release by:

8/23/2018 11:03:20 AM

Lori Arnold, Manager of Project Management

(802)923-1043

lori.arnold@testamericainc.com

Designee for

Kristine Dusablon, Project Manager II

(802)660-1990

kris.dusablon@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Glossary

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

Case Narrative

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Job ID: 200-44503-1

Laboratory: TestAmerica Burlington

Narrative

CASE NARRATIVE

Client: ATC Group Services LLC

Project: PFAS, SVRA (12 analytes)

Report Number: 200-44503-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

RECEIPT

The samples were received on 07/26/2018; the samples arrived in good condition, properly preserved and on ice.

PERFLUORINATED HYDROCARBONS

Samples 864 AIRPORT, 452 RT 7B, 873 AIRPORT, 429- MAIN, 429 -DAIRY, 471 AIRPORT, 429-SPRING, 915 AIRPORT, 729 AIRPORT, 770 AIRPORT, DUP, 773 AIRPORT, 168 BRENDA, 2759 EAST, 383 RT 7B, 1002 OMYA, 71 COBB, 84 COBB, 56 PARS, 43 MIDDLE, 42 MIDDLE and 118 MIDDLE were analyzed for Perfluorinated Hydrocarbons in accordance with TAL SOP WS-LC-0025. The samples were prepared on 08/02/2018 and 08/07/2018 and analyzed on 08/09/2018, 08/10/2018 and 08/11/2018.

The low continuing calibration verification (CCVL) associated with batch 200-132678 and 200-132770 recovered outside acceptance criteria, low biased, for 6:2 FTS. This CCV is at a concentration below the reporting limit for this compound; another CCV was acquired prior to sample analysis with this compound at its reporting limit which meets acceptance criteria. Therefore, data analysis continued.

The method blank for preparation batch 200-132576 and analytical batch 200-132770 contained Perfluoroundecanoic acid (PFUnA) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Client Sample ID: 864 AIRPORT

Lab Sample ID: 200-44503-1

No Detections.

Client Sample ID: 452 RT 7B

Lab Sample ID: 200-44503-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	19		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.8		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.5		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.5		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	61		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 873 AIRPORT

Lab Sample ID: 200-44503-3

No Detections.

Client Sample ID: 429- MAIN

Lab Sample ID: 200-44503-4

No Detections.

Client Sample ID: 429 -DAIRY

Lab Sample ID: 200-44503-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	30		2.1	2.1	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	13		2.1	2.1	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.8		2.1	2.1	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	38		2.1	2.1	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 471 AIRPORT

Lab Sample ID: 200-44503-6

No Detections.

Client Sample ID: 429-SPRING

Lab Sample ID: 200-44503-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	120		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	70		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	8.6		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.7		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.8		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	140		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 915 AIRPORT

Lab Sample ID: 200-44503-8

No Detections.

Client Sample ID: 729 AIRPORT

Lab Sample ID: 200-44503-9

No Detections.

Client Sample ID: 770 AIRPORT

Lab Sample ID: 200-44503-10

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Client Sample ID: DUP

Lab Sample ID: 200-44503-11

No Detections.

Client Sample ID: 773 AIRPORT

Lab Sample ID: 200-44503-12

No Detections.

Client Sample ID: 168 BRENDA

Lab Sample ID: 200-44503-13

No Detections.

Client Sample ID: 2759 EAST

Lab Sample ID: 200-44503-14

No Detections.

Client Sample ID: 383 RT 7B

Lab Sample ID: 200-44503-15

No Detections.

Client Sample ID: 1002 OMYA

Lab Sample ID: 200-44503-16

No Detections.

Client Sample ID: 71 COBB

Lab Sample ID: 200-44503-17

No Detections.

Client Sample ID: 84 COBB

Lab Sample ID: 200-44503-18

No Detections.

Client Sample ID: 56 PARS

Lab Sample ID: 200-44503-19

No Detections.

Client Sample ID: 43 MIDDLE

Lab Sample ID: 200-44503-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	2.7		1.9	1.9	ng/L	1			537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		1.9	1.9	ng/L	1			537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.7		1.9	1.9	ng/L	1			537 (modified)	Total/NA

Client Sample ID: 42 MIDDLE

Lab Sample ID: 200-44503-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	2.1		2.1	2.1	ng/L	1			537 (modified)	Total/NA

Client Sample ID: 118 MIDDLE

Lab Sample ID: 200-44503-22

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 864 AIRPORT

Lab Sample ID: 200-44503-1

Date Collected: 07/24/18 09:00

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/02/18 09:38	08/09/18 03:10	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	94		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C4-PFHxA	83		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C4 PFOA	90		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C4 PFOS	91		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C5 PFNA	82		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C2 PFHxA	89		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C2 PFDA	81		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C2 PFUnA	74		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C2 PFDoA	59		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C2-PFTeDA	64		25 - 150				08/02/18 09:38	08/09/18 03:10	1
13C3-PFBS	97		25 - 150				08/02/18 09:38	08/09/18 03:10	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 452 RT 7B

Lab Sample ID: 200-44503-2

Date Collected: 07/24/18 09:25

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	19		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorooctanoic acid (PFOA)	3.8		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorohexanesulfonic acid (PFHxS)	4.5		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorooctanesulfonic acid (PFOS)	2.5		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorohexanoic acid (PFHxA)	61		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:26	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	99		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C4-PFHpA	74		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C4 PFOA	88		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C4 PFOS	100		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C5 PFNA	88		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C2 PFHxA	66		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C2 PFDA	91		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C2 PFUnA	87		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C2 PFDoA	74		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C2-PFTeDA	79		25 - 150	08/02/18 09:38	08/09/18 03:26	1
13C3-PFBS	78		25 - 150	08/02/18 09:38	08/09/18 03:26	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 873 AIRPORT

Lab Sample ID: 200-44503-3

Date Collected: 07/24/18 09:50

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:42	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	99		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C4-PFHxA	86		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C4 PFOA	95		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C4 PFOS	93		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C5 PFNA	91		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C2 PFHxA	78		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C2 PFDA	93		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C2 PFUnA	88		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C2 PFDoA	67		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C2-PFTeDA	67		25 - 150				08/02/18 09:38	08/09/18 03:42	1
13C3-PFBS	94		25 - 150				08/02/18 09:38	08/09/18 03:42	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 429- MAIN

Lab Sample ID: 200-44503-4

Date Collected: 07/24/18 10:25

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/02/18 09:38	08/09/18 03:58	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	101		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C4-PFHpA	80		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C4 PFOA	84		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C4 PFOS	96		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C5 PFNA	83		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C2 PFHxA	82		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C2 PFDA	86		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C2 PFUnA	85		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C2 PFDoA	68		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C2-PFTeDA	69		25 - 150				08/02/18 09:38	08/09/18 03:58	1
13C3-PFBS	98		25 - 150				08/02/18 09:38	08/09/18 03:58	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 429 -DAIRY

Lab Sample ID: 200-44503-5

Date Collected: 07/24/18 10:45

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	30		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorooctanoic acid (PFOA)	13		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorononanoic acid (PFNA)	ND		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorohexanesulfonic acid (PFHxS)	3.8		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorohexanoic acid (PFHxA)	38		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluoroundecanoic acid (PFUnA)	ND		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorodecanoic acid (PFDA)	ND		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorododecanoic acid (PFDoA)	ND		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.1	2.1	ng/L		08/02/18 09:38	08/09/18 04:14	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	104		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C4-PFHxA	81		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C4 PFOA	93		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C4 PFOS	95		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C5 PFNA	89		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C2 PFHxA	74		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C2 PFDA	84		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C2 PFUnA	70		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C2 PFDoA	58		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C2-PFTeDA	61		25 - 150				08/02/18 09:38	08/09/18 04:14	1
13C3-PFBS	73		25 - 150				08/02/18 09:38	08/09/18 04:14	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 471 AIRPORT

Lab Sample ID: 200-44503-6

Date Collected: 07/24/18 10:30

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 20:19	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C4-PFHxA	78		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C4 PFOA	84		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C4 PFOS	94		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C5 PFNA	93		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C2 PFHxA	83		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C2 PFDA	77		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C2 PFUnA	69		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C2 PFDoA	57		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C2-PFTeDA	61		25 - 150				08/07/18 09:30	08/10/18 20:19	1
13C3-PFBS	90		25 - 150				08/07/18 09:30	08/10/18 20:19	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 429-SPRING

Lab Sample ID: 200-44503-7

Date Collected: 07/24/18 10:50

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	120		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorooctanoic acid (PFOA)	70		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorononanoic acid (PFNA)	8.6		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorobutanesulfonic acid (PFBS)	1.7		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorohexanesulfonic acid (PFHxS)	3.8		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorohexanoic acid (PFHxA)	140		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:35	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	90		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C4-PFHpA	71		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C4 PFOA	80		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C4 PFOS	103		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C5 PFNA	90		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C2 PFHxA	74		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C2 PFDA	92		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C2 PFUnA	92		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C2 PFDoA	83		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C2-PFTeDA	89		25 - 150	08/07/18 09:30	08/10/18 20:35	1
13C3-PFBS	77		25 - 150	08/07/18 09:30	08/10/18 20:35	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 915 AIRPORT

Lab Sample ID: 200-44503-8

Date Collected: 07/24/18 11:25

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 20:50	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	86		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C4-PFHxA	83		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C4 PFOA	85		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C4 PFOS	81		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C5 PFNA	90		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C2 PFHxA	82		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C2 PFDA	80		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C2 PFUnA	69		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C2 PFDoA	60		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C2-PFTeDA	66		25 - 150				08/07/18 09:30	08/10/18 20:50	1
13C3-PFBS	78		25 - 150				08/07/18 09:30	08/10/18 20:50	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 729 AIRPORT

Lab Sample ID: 200-44503-9

Date Collected: 07/24/18 11:45

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:06	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	84		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C4-PFHxA	77		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C4 PFOA	82		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C4 PFOS	82		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C5 PFNA	88		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C2 PFHxA	87		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C2 PFDA	77		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C2 PFUnA	74		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C2 PFDoA	62		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C2-PFTeDA	66		25 - 150				08/07/18 09:30	08/10/18 21:06	1
13C3-PFBS	87		25 - 150				08/07/18 09:30	08/10/18 21:06	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 770 AIRPORT

Lab Sample ID: 200-44503-10

Date Collected: 07/24/18 12:00

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 21:22	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	80		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C4-PFHxA	77		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C4 PFOA	82		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C4 PFOS	87		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C5 PFNA	84		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C2 PFHxA	86		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C2 PFDA	84		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C2 PFUnA	84		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C2 PFDoA	63		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C2-PFTeDA	60		25 - 150				08/07/18 09:30	08/10/18 21:22	1
13C3-PFBS	81		25 - 150				08/07/18 09:30	08/10/18 21:22	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: DUP
Date Collected: 07/24/18 08:00
Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-11
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 21:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	83		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C4-PFHxA	76		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C4 PFOA	80		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C4 PFOS	83		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C5 PFNA	85		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C2 PFHxA	88		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C2 PFDA	81		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C2 PFUnA	75		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C2 PFDoA	68		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C2-PFTeDA	68		25 - 150				08/07/18 09:30	08/10/18 21:38	1
13C3-PFBS	85		25 - 150				08/07/18 09:30	08/10/18 21:38	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 773 AIRPORT

Lab Sample ID: 200-44503-12

Date Collected: 07/24/18 12:25

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/10/18 21:54	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	85		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C4-PFHpA	73		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C4 PFOA	81		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C4 PFOS	85		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C5 PFNA	84		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C2 PFHxA	85		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C2 PFDA	80		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C2 PFUnA	72		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C2 PFDoA	64		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C2-PFTeDA	66		25 - 150				08/07/18 09:30	08/10/18 21:54	1
13C3-PFBS	87		25 - 150				08/07/18 09:30	08/10/18 21:54	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 168 BRENDA

Lab Sample ID: 200-44503-13

Date Collected: 07/24/18 13:10

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:10	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	85		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C4-PFHxA	73		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C4 PFOA	76		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C4 PFOS	79		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C5 PFNA	83		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C2 PFHxA	80		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C2 PFDA	63		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C2 PFUnA	71		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C2 PFDoA	99		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C2-PFTeDA	87		25 - 150				08/07/18 09:30	08/10/18 22:10	1
13C3-PFBS	84		25 - 150				08/07/18 09:30	08/10/18 22:10	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 2759 EAST

Lab Sample ID: 200-44503-14

Date Collected: 07/24/18 13:30

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/07/18 09:30	08/10/18 22:26	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	88		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C4-PFHxA	83		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C4 PFOA	88		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C4 PFOS	87		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C5 PFNA	93		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C2 PFHxA	88		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C2 PFDA	86		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C2 PFUnA	80		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C2 PFDoA	70		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C2-PFTeDA	75		25 - 150				08/07/18 09:30	08/10/18 22:26	1
13C3-PFBS	92		25 - 150				08/07/18 09:30	08/10/18 22:26	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 383 RT 7B

Lab Sample ID: 200-44503-15

Date Collected: 07/24/18 14:10

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 22:42	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	84		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C4-PFHxA	74		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C4 PFOA	78		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C4 PFOS	87		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C5 PFNA	86		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C2 PFHxA	78		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C2 PFDA	82		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C2 PFUnA	76		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C2 PFDoA	68		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C2-PFTeDA	71		25 - 150				08/07/18 09:30	08/10/18 22:42	1
13C3-PFBS	76		25 - 150				08/07/18 09:30	08/10/18 22:42	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 1002 OMYA

Lab Sample ID: 200-44503-16

Date Collected: 07/24/18 14:40

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:13	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	86		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C4-PFHxA	89		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C4 PFOA	81		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C4 PFOS	84		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C5 PFNA	90		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C2 PFHxA	96		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C2 PFDA	80		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C2 PFUnA	73		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C2 PFDoA	55		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C2-PFTeDA	60		25 - 150				08/07/18 09:30	08/10/18 23:13	1
13C3-PFBS	85		25 - 150				08/07/18 09:30	08/10/18 23:13	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 71 COBB

Lab Sample ID: 200-44503-17

Date Collected: 07/24/18 15:15

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:29	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C4-PFHpA	80		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C4 PFOA	84		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C4 PFOS	89		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C5 PFNA	91		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C2 PFHxA	95		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C2 PFDA	91		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C2 PFUnA	87		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C2 PFDoA	70		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C2-PFTeDA	71		25 - 150				08/07/18 09:30	08/10/18 23:29	1
13C3-PFBS	92		25 - 150				08/07/18 09:30	08/10/18 23:29	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 84 COBB

Lab Sample ID: 200-44503-18

Date Collected: 07/24/18 15:30

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/10/18 23:45	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	98		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C4-PFHxA	82		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C4 PFOA	85		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C4 PFOS	88		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C5 PFNA	95		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C2 PFHxA	84		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C2 PFDA	83		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C2 PFUnA	80		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C2 PFDoA	70		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C2-PFTeDA	75		25 - 150				08/07/18 09:30	08/10/18 23:45	1
13C3-PFBS	75		25 - 150				08/07/18 09:30	08/10/18 23:45	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 56 PARS

Date Collected: 07/24/18 16:00

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-19

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/07/18 09:30	08/11/18 00:01	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C4-PFHpA	75		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C4 PFOA	84		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C4 PFOS	87		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C5 PFNA	88		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C2 PFHxA	86		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C2 PFDA	82		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C2 PFUnA	75		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C2 PFDoA	70		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C2-PFTeDA	67		25 - 150				08/07/18 09:30	08/11/18 00:01	1
13C3-PFBS	81		25 - 150				08/07/18 09:30	08/11/18 00:01	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 43 MIDDLE

Lab Sample ID: 200-44503-20

Date Collected: 07/24/18 16:25

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorooctanoic acid (PFOA)	2.7		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorooctanesulfonic acid (PFOS)	2.4		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorohexanoic acid (PFHxA)	2.7		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:17	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	93		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C4-PFHpA	78		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C4 PFOA	88		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C4 PFOS	97		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C5 PFNA	94		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C2 PFHxA	77		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C2 PFDA	85		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C2 PFUnA	86		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C2 PFDoA	72		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C2-PFTeDA	72		25 - 150				08/07/18 09:30	08/11/18 00:17	1
13C3-PFBS	68		25 - 150				08/07/18 09:30	08/11/18 00:17	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 42 MIDDLE

Lab Sample ID: 200-44503-21

Date Collected: 07/24/18 16:45

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorooctanoic acid (PFOA)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorononanoic acid (PFNA)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorooctanesulfonic acid (PFOS)	2.1		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorohexanoic acid (PFHxA)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluoroundecanoic acid (PFUnA)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorodecanoic acid (PFDA)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorododecanoic acid (PFDoA)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.1	2.1	ng/L		08/07/18 09:30	08/11/18 00:33	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	84		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C4-PFHpA	75		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C4 PFOA	84		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C4 PFOS	79		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C5 PFNA	91		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C2 PFHxA	74		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C2 PFDA	78		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C2 PFUnA	69		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C2 PFDoA	61		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C2-PFTeDA	62		25 - 150				08/07/18 09:30	08/11/18 00:33	1
13C3-PFBS	70		25 - 150				08/07/18 09:30	08/11/18 00:33	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 118 MIDDLE

Lab Sample ID: 200-44503-22

Date Collected: 07/24/18 17:20

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		08/07/18 09:30	08/11/18 00:48	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	92		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C4-PFHxA	77		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C4 PFOA	83		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C4 PFOS	96		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C5 PFNA	92		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C2 PFHxA	91		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C2 PFDA	78		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C2 PFUnA	78		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C2 PFDoA	63		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C2-PFTeDA	67		25 - 150				08/07/18 09:30	08/11/18 00:48	1
13C3-PFBS	92		25 - 150				08/07/18 09:30	08/11/18 00:48	1

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFHxS (25-150)	PFHpA (25-150)	PFOA (25-150)	PFOS (25-150)	PFNA (25-150)	PFHxA (25-150)	PFDA (25-150)	PFUnA (25-150)
200-44503-1	864 AIRPORT	94	83	90	91	82	89	81	74
200-44503-2	452 RT 7B	99	74	88	100	88	66	91	87
200-44503-3	873 AIRPORT	99	86	95	93	91	78	93	88
200-44503-4	429- MAIN	101	80	84	96	83	82	86	85
200-44503-5	429 -DAIRY	104	81	93	95	89	74	84	70
200-44503-6	471 AIRPORT	91	78	84	94	93	83	77	69
200-44503-7	429-SPRING	90	71	80	103	90	74	92	92
200-44503-8	915 AIRPORT	86	83	85	81	90	82	80	69
200-44503-9	729 AIRPORT	84	77	82	82	88	87	77	74
200-44503-10	770 AIRPORT	80	77	82	87	84	86	84	84
200-44503-11	DUP	83	76	80	83	85	88	81	75
200-44503-12	773 AIRPORT	85	73	81	85	84	85	80	72
200-44503-13	168 BRENDA	85	73	76	79	83	80	63	71
200-44503-14	2759 EAST	88	83	88	87	93	88	86	80
200-44503-15	383 RT 7B	84	74	78	87	86	78	82	76
200-44503-16	1002 OMYA	86	89	81	84	90	96	80	73
200-44503-17	71 COBB	91	80	84	89	91	95	91	87
200-44503-18	84 COBB	98	82	85	88	95	84	83	80
200-44503-19	56 PARS	91	75	84	87	88	86	82	75
200-44503-20	43 MIDDLE	93	78	88	97	94	77	85	86
200-44503-21	42 MIDDLE	84	75	84	79	91	74	78	69
200-44503-22	118 MIDDLE	92	77	83	96	92	91	78	78
LCS 200-132416/2-A	Lab Control Sample	99	81	95	109	86	92	100	107
LCS 200-132576/2-A	Lab Control Sample	92	85	89	103	102	105	94	105
MB 200-132416/1-A	Method Blank	104	91	98	122	101	103	110	116
MB 200-132576/1-A	Method Blank	89	86	92	96	100	106	96	106

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDxA (25-150)	PFTDA (25-150)	3C3-PFB: (25-150)
200-44503-1	864 AIRPORT	59	64	97
200-44503-2	452 RT 7B	74	79	78
200-44503-3	873 AIRPORT	67	67	94
200-44503-4	429- MAIN	68	69	98
200-44503-5	429 -DAIRY	58	61	73
200-44503-6	471 AIRPORT	57	61	90
200-44503-7	429-SPRING	83	89	77
200-44503-8	915 AIRPORT	60	66	78
200-44503-9	729 AIRPORT	62	66	87
200-44503-10	770 AIRPORT	63	60	81
200-44503-11	DUP	68	68	85
200-44503-12	773 AIRPORT	64	66	87
200-44503-13	168 BRENDA	99	87	84
200-44503-14	2759 EAST	70	75	92
200-44503-15	383 RT 7B	68	71	76
200-44503-16	1002 OMYA	55	60	85
200-44503-17	71 COBB	70	71	92
200-44503-18	84 COBB	70	75	75
200-44503-19	56 PARS	70	67	81
200-44503-20	43 MIDDLE	72	72	68

TestAmerica Burlington

Isotope Dilution Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)		
		PFD _o A (25-150)	PFTDA (25-150)	3C3-PFB _s (25-150)
200-44503-21	42 MIDDLE	61	62	70
200-44503-22	118 MIDDLE	63	67	92
LCS 200-132416/2-A	Lab Control Sample	90	66	99
LCS 200-132576/2-A	Lab Control Sample	92	76	92
MB 200-132416/1-A	Method Blank	90	69	105
MB 200-132576/1-A	Method Blank	92	76	85

Surrogate Legend

PFH_xS = 18O₂ PFH_xS
PFH_pA = 13C₄-PFH_pA
PFOA = 13C₄ PFOA
PFOS = 13C₄ PFOS
PFNA = 13C₅ PFNA
PFH_xA = 13C₂ PFH_xA
PFDA = 13C₂ PFDA
PFUnA = 13C₂ PFUnA
PFD_oA = 13C₂ PFD_oA
PFTDA = 13C₂-PFTeDA
13C₃-PFBS = 13C₃-PFBS

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-132416/1-A
Matrix: Water
Analysis Batch: 132678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 132416

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		08/02/18 09:38	08/08/18 21:53	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	104		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C4-PFHxA	91		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C4 PFOA	98		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C4 PFOS	122		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C5 PFNA	101		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C2 PFHxA	103		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C2 PFDA	110		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C2 PFUnA	116		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C2 PFDoA	90		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C2-PFTeDA	69		25 - 150	08/02/18 09:38	08/08/18 21:53	1
13C3-PFBS	105		25 - 150	08/02/18 09:38	08/08/18 21:53	1

Lab Sample ID: LCS 200-132416/2-A
Matrix: Water
Analysis Batch: 132678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 132416

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanoic acid (PFHpA)	40.0	43.6		ng/L		109	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	39.1		ng/L		98	50 - 150
Perfluorononanoic acid (PFNA)	40.0	44.9		ng/L		112	50 - 150
Perfluorobutanesulfonic acid (PFBS)	40.0	44.7		ng/L		112	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	40.0	40.0		ng/L		100	50 - 150
Perfluorooctanesulfonic acid (PFOS)	40.0	41.5		ng/L		104	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	42.9		ng/L		107	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	40.8		ng/L		102	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	40.7		ng/L		102	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	36.3		ng/L		91	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	26.8		ng/L		67	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	32.7		ng/L		82	50 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	99		25 - 150
13C4-PFHpA	81		25 - 150
13C4 PFOA	95		25 - 150
13C4 PFOS	109		25 - 150
13C5 PFNA	86		25 - 150
13C2 PFHxA	92		25 - 150
13C2 PFDA	100		25 - 150
13C2 PFUnA	107		25 - 150
13C2 PFDoA	90		25 - 150
13C2-PFTeDA	66		25 - 150
13C3-PFBS	99		25 - 150

Lab Sample ID: MB 200-132576/1-A
Matrix: Water
Analysis Batch: 132770

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 132576

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		08/07/18 09:30	08/10/18 19:47	1

Isotope Dilution	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
18O2 PFHxS	89		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C4-PFHpA	86		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C4 PFOA	92		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C4 PFOS	96		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C5 PFNA	100		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C2 PFHxA	106		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C2 PFDA	96		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C2 PFUnA	106		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C2 PFDoA	92		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C2-PFTeDA	76		25 - 150	08/07/18 09:30	08/10/18 19:47	1
13C3-PFBS	85		25 - 150	08/07/18 09:30	08/10/18 19:47	1

Lab Sample ID: LCS 200-132576/2-A
Matrix: Water
Analysis Batch: 132770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 132576

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	40.0	45.1		ng/L		113	50 - 150
Perfluorononanoic acid (PFNA)	40.0	42.9		ng/L		107	50 - 150
Perfluorobutanesulfonic acid (PFBS)	40.0	42.9		ng/L		107	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	40.0	40.0		ng/L		100	50 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-132576/2-A
Matrix: Water
Analysis Batch: 132770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 132576

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorooctanesulfonic acid (PFOS)	40.0	42.2		ng/L		106	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	44.4		ng/L		111	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	45.8		ng/L		114	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	42.8		ng/L		107	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	39.6		ng/L		99	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	32.9		ng/L		82	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	37.7		ng/L		94	50 - 150

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	92		25 - 150
13C4-PFHpA	85		25 - 150
13C4 PFOA	89		25 - 150
13C4 PFOS	103		25 - 150
13C5 PFNA	102		25 - 150
13C2 PFHxA	105		25 - 150
13C2 PFDA	94		25 - 150
13C2 PFUnA	105		25 - 150
13C2 PFDoA	92		25 - 150
13C2-PFTeDA	76		25 - 150
13C3-PFBS	92		25 - 150

QC Association Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

LCMS

Prep Batch: 132416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44503-1	864 AIRPORT	Total/NA	Water	3535	
200-44503-2	452 RT 7B	Total/NA	Water	3535	
200-44503-3	873 AIRPORT	Total/NA	Water	3535	
200-44503-4	429- MAIN	Total/NA	Water	3535	
200-44503-5	429 -DAIRY	Total/NA	Water	3535	
MB 200-132416/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-132416/2-A	Lab Control Sample	Total/NA	Water	3535	

Prep Batch: 132576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44503-6	471 AIRPORT	Total/NA	Water	3535	
200-44503-7	429-SPRING	Total/NA	Water	3535	
200-44503-8	915 AIRPORT	Total/NA	Water	3535	
200-44503-9	729 AIRPORT	Total/NA	Water	3535	
200-44503-10	770 AIRPORT	Total/NA	Water	3535	
200-44503-11	DUP	Total/NA	Water	3535	
200-44503-12	773 AIRPORT	Total/NA	Water	3535	
200-44503-13	168 BRENDA	Total/NA	Water	3535	
200-44503-14	2759 EAST	Total/NA	Water	3535	
200-44503-15	383 RT 7B	Total/NA	Water	3535	
200-44503-16	1002 OMYA	Total/NA	Water	3535	
200-44503-17	71 COBB	Total/NA	Water	3535	
200-44503-18	84 COBB	Total/NA	Water	3535	
200-44503-19	56 PARS	Total/NA	Water	3535	
200-44503-20	43 MIDDLE	Total/NA	Water	3535	
200-44503-21	42 MIDDLE	Total/NA	Water	3535	
200-44503-22	118 MIDDLE	Total/NA	Water	3535	
MB 200-132576/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-132576/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 132678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44503-1	864 AIRPORT	Total/NA	Water	537 (modified)	132416
200-44503-2	452 RT 7B	Total/NA	Water	537 (modified)	132416
200-44503-3	873 AIRPORT	Total/NA	Water	537 (modified)	132416
200-44503-4	429- MAIN	Total/NA	Water	537 (modified)	132416
200-44503-5	429 -DAIRY	Total/NA	Water	537 (modified)	132416
MB 200-132416/1-A	Method Blank	Total/NA	Water	537 (modified)	132416
LCS 200-132416/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	132416

Analysis Batch: 132770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44503-6	471 AIRPORT	Total/NA	Water	537 (modified)	132576
200-44503-7	429-SPRING	Total/NA	Water	537 (modified)	132576
200-44503-8	915 AIRPORT	Total/NA	Water	537 (modified)	132576
200-44503-9	729 AIRPORT	Total/NA	Water	537 (modified)	132576
200-44503-10	770 AIRPORT	Total/NA	Water	537 (modified)	132576
200-44503-11	DUP	Total/NA	Water	537 (modified)	132576
200-44503-12	773 AIRPORT	Total/NA	Water	537 (modified)	132576
200-44503-13	168 BRENDA	Total/NA	Water	537 (modified)	132576
200-44503-14	2759 EAST	Total/NA	Water	537 (modified)	132576

TestAmerica Burlington

QC Association Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

LCMS (Continued)

Analysis Batch: 132770 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44503-15	383 RT 7B	Total/NA	Water	537 (modified)	132576
200-44503-16	1002 OMYA	Total/NA	Water	537 (modified)	132576
200-44503-17	71 COBB	Total/NA	Water	537 (modified)	132576
200-44503-18	84 COBB	Total/NA	Water	537 (modified)	132576
200-44503-19	56 PARS	Total/NA	Water	537 (modified)	132576
200-44503-20	43 MIDDLE	Total/NA	Water	537 (modified)	132576
200-44503-21	42 MIDDLE	Total/NA	Water	537 (modified)	132576
200-44503-22	118 MIDDLE	Total/NA	Water	537 (modified)	132576
MB 200-132576/1-A	Method Blank	Total/NA	Water	537 (modified)	132576
LCS 200-132576/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	132576

Lab Chronicle

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
 SDG: 200-44503-1

Client Sample ID: 864 AIRPORT

Date Collected: 07/24/18 09:00

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132416	08/02/18 09:38	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132678	08/09/18 03:10	BWC	TAL BUR

Client Sample ID: 452 RT 7B

Date Collected: 07/24/18 09:25

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132416	08/02/18 09:38	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132678	08/09/18 03:26	BWC	TAL BUR

Client Sample ID: 873 AIRPORT

Date Collected: 07/24/18 09:50

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132416	08/02/18 09:38	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132678	08/09/18 03:42	BWC	TAL BUR

Client Sample ID: 429- MAIN

Date Collected: 07/24/18 10:25

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132416	08/02/18 09:38	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132678	08/09/18 03:58	BWC	TAL BUR

Client Sample ID: 429 -DAIRY

Date Collected: 07/24/18 10:45

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132416	08/02/18 09:38	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132678	08/09/18 04:14	BWC	TAL BUR

Client Sample ID: 471 AIRPORT

Date Collected: 07/24/18 10:30

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 20:19	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Client Sample ID: 429-SPRING

Date Collected: 07/24/18 10:50
Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 20:35	BWC	TAL BUR

Client Sample ID: 915 AIRPORT

Date Collected: 07/24/18 11:25
Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 20:50	BWC	TAL BUR

Client Sample ID: 729 AIRPORT

Date Collected: 07/24/18 11:45
Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 21:06	BWC	TAL BUR

Client Sample ID: 770 AIRPORT

Date Collected: 07/24/18 12:00
Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 21:22	BWC	TAL BUR

Client Sample ID: DUP

Date Collected: 07/24/18 08:00
Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 21:38	BWC	TAL BUR

Client Sample ID: 773 AIRPORT

Date Collected: 07/24/18 12:25
Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 21:54	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Client Sample ID: 168 BRENDA

Lab Sample ID: 200-44503-13

Date Collected: 07/24/18 13:10

Matrix: Water

Date Received: 07/26/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 22:10	BWC	TAL BUR

Client Sample ID: 2759 EAST

Lab Sample ID: 200-44503-14

Date Collected: 07/24/18 13:30

Matrix: Water

Date Received: 07/26/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 22:26	BWC	TAL BUR

Client Sample ID: 383 RT 7B

Lab Sample ID: 200-44503-15

Date Collected: 07/24/18 14:10

Matrix: Water

Date Received: 07/26/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 22:42	BWC	TAL BUR

Client Sample ID: 1002 OMYA

Lab Sample ID: 200-44503-16

Date Collected: 07/24/18 14:40

Matrix: Water

Date Received: 07/26/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 23:13	BWC	TAL BUR

Client Sample ID: 71 COBB

Lab Sample ID: 200-44503-17

Date Collected: 07/24/18 15:15

Matrix: Water

Date Received: 07/26/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 23:29	BWC	TAL BUR

Client Sample ID: 84 COBB

Lab Sample ID: 200-44503-18

Date Collected: 07/24/18 15:30

Matrix: Water

Date Received: 07/26/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/10/18 23:45	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Client Sample ID: 56 PARS

Date Collected: 07/24/18 16:00

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/11/18 00:01	BWC	TAL BUR

Client Sample ID: 43 MIDDLE

Date Collected: 07/24/18 16:25

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/11/18 00:17	BWC	TAL BUR

Client Sample ID: 42 MIDDLE

Date Collected: 07/24/18 16:45

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/11/18 00:33	BWC	TAL BUR

Client Sample ID: 118 MIDDLE

Date Collected: 07/24/18 17:20

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			132576	08/07/18 09:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	132770	08/11/18 00:48	BWC	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD ELAP		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-19
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-18
New Hampshire	NELAP	1	2006	12-18-18
New Jersey	NELAP	2	VT972	06-30-19
New York	NELAP	2	10391	04-01-19
Pennsylvania	NELAP	3	68-00489	04-30-19
Rhode Island	State Program	1	LAO00298	12-30-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-19
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-18
Virginia	NELAP	3	460209	12-14-18

Method Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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Sample Summary

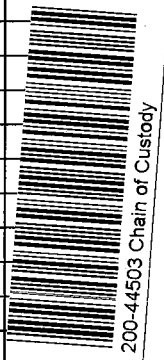
Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-1
SDG: 200-44503-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-44503-1	864 AIRPORT	Water	07/24/18 09:00	07/26/18 11:25
200-44503-2	452 RT 7B	Water	07/24/18 09:25	07/26/18 11:25
200-44503-3	873 AIRPORT	Water	07/24/18 09:50	07/26/18 11:25
200-44503-4	429- MAIN	Water	07/24/18 10:25	07/26/18 11:25
200-44503-5	429 -DAIRY	Water	07/24/18 10:45	07/26/18 11:25
200-44503-6	471 AIRPORT	Water	07/24/18 10:30	07/26/18 11:25
200-44503-7	429-SPRING	Water	07/24/18 10:50	07/26/18 11:25
200-44503-8	915 AIRPORT	Water	07/24/18 11:25	07/26/18 11:25
200-44503-9	729 AIRPORT	Water	07/24/18 11:45	07/26/18 11:25
200-44503-10	770 AIRPORT	Water	07/24/18 12:00	07/26/18 11:25
200-44503-11	DUP	Water	07/24/18 08:00	07/26/18 11:25
200-44503-12	773 AIRPORT	Water	07/24/18 12:25	07/26/18 11:25
200-44503-13	168 BRENDA	Water	07/24/18 13:10	07/26/18 11:25
200-44503-14	2759 EAST	Water	07/24/18 13:30	07/26/18 11:25
200-44503-15	383 RT 7B	Water	07/24/18 14:10	07/26/18 11:25
200-44503-16	1002 OMYA	Water	07/24/18 14:40	07/26/18 11:25
200-44503-17	71 COBB	Water	07/24/18 15:15	07/26/18 11:25
200-44503-18	84 COBB	Water	07/24/18 15:30	07/26/18 11:25
200-44503-19	56 PARS	Water	07/24/18 16:00	07/26/18 11:25
200-44503-20	43 MIDDLE	Water	07/24/18 16:25	07/26/18 11:25
200-44503-21	42 MIDDLE	Water	07/24/18 16:45	07/26/18 11:25
200-44503-22	118 MIDDLE	Water	07/24/18 17:20	07/26/18 11:25

Regulatory Program: DW NPDES RCRA Other:

Client Contact Your Company Name here Address City/State/Zip (xxx) xxx-xxxx (xxx) xxx-xxxx Project Name: Site: P O #		Project Manager: <u>James Gascoyne</u> Tel/Fax: <u>241-4131</u> Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Date: <u>7/24/18</u> Carrier: COC No: <u>4</u> of <u>4</u> COCs Sampler: <u>Jo Palmer</u> For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:	
Site Identification		Lab Contact: <u>67</u> Site Contact: <u>537 PRC5-12</u>		Sample Specific Notes:	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.
864 Airport	7/24/18	0900	G	DW 2	2
452 Rt 7B		0925			
873 Airport		0950			
429 - main		1025			
429 - Dairy		1045			
471 Airport		1030			
429 - Spring		1050			
915 Airport		1125			
729 Airport		1145			
770 Airport		1200			
DUP		0800			
773 Airport		1225			



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments: Commercial B w/ case narrative to James Gascoyne @ ategs.com

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

Custody Seal No.: _____
Company: ATC
Date/Time: 7/24/18 10:30

Relinquished by: [Signature]
Relinquished by: [Signature]
Relinquished by: [Signature]

Received by: James Gascoyne
Received by: [Signature]
Received in Laboratory by: [Signature]

Company: ATC
Company: ATC
Company: ATC

Date/Time: 7/24/18 10:30
Date/Time: 7/24/18 10:30
Date/Time: 7/24/18 10:30



Regulatory Program: DW NPDES RCRA Other:

Project Manager: James Gaskey Site Contact: KD Date: 7/24/18 of 4 COCs
 Tel/Fax: Carrier:

Your Company Name here ATC Group Services
 Address 1 Elm St Suite 3
 City/State/Zip Wardsbury VT 05676
 (xxx) xxx-xxxx Phone 241 4131
 (xxx) xxx-xxxx FAX
 Project Name: Just Land DW SVRA
 Site: Swanton
 P.O.# 80007895

Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Analysis Turnaround Time		Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
					CALENDAR DAYS	WORKING DAYS			
7/24/18	1310	G	W	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(N)	(N)	
	1330			2					
	1410			2					
	1440			2					
	1575			2					
	1530			2					
	1600			2					
	1605			2					
	1645			2					
	1720			2					
	0902			1					
	0924			1					

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification:
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments: see coc-1

Return to Client Disposal by Lab Archive for Months

Custody Seal No.:	Company:	Received by:	Company:	Therm ID No.:
	ATC	<u>James Gaskey</u>	ATC	
Relinquished by:	Date/Time:	Relinquished by:	Date/Time:	
<u>James Gaskey</u>	7/24/18 1600	<u>James Gaskey</u>	7/26/18 10:50	
Relinquished by:	Date/Time:	Relinquished by:	Date/Time:	
<u>James Gaskey</u>		<u>James Gaskey</u>	7/26/18 1125	



Regulatory Program: DW NPDES RCRA Other:

Your Company Name here ATC Ground Services Client Contact
 Address 1 Elm St, Suite B
 City/State/Zip Waterbury VT 05670
 (xxx) xxx-xxxx Phone 802 241 4131
 (xxx) xxx-xxxx FAX
 Project Name: Burton Dredging
 Site: Clarendon
 P O # 20007895

Project Manager: James Geary Site Contact: RD
 Lab Contact: RD
 Date: 7/24/18 Carrier: 4 COCs

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
 TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
FB-873 Airport	7/24/18	0948	G	W	1			
FB-429 Main	1024							
FB-471 Airport	1028							
FB-429 Dairy	1044							
FB-429 Spring	1048							
FB-915 Airport	1124							
FB-729 Airport	1144							
FB-772 Airport	1158							
FB-773 Airport	1224							
FB-168 Brenda	1308							
FB-2759 East	1328							
FB-383 Rt 7B	1408							

Preservation Used: 1=Ice; 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Special Instructions/QC Requirements & Comments: see coc-1

Custody Seals Intact: Yes No
 Relinquished by: John Parn Company: ATC
 Relinquished by: James Geary Company: ATC
 Relinquished by: RD Company: TAS

Regulatory Program: DW NPDES RCRA Other:

Your Company Name here ATC Group Services 1 Elm St, Suite 3 Waterbury VT 05670 Phone 802-241-4131 FAX		Client Contact		Project Manager: James Gassway		Date: 7/24/18		COC No: 4 of 4 COCs	
City/State/Zip		Analysis Turnaround Time		Site Contact:		Carrier:		Sampler:	
(xxx) xxx-xxxx		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Lab Contact: KD				For Lab Use Only:	
(xxx) xxx-xxxx		TAT if different from Below		Perform MS / MSD (Y/N)				Walk-in Client:	
Project Name: Rutland JW SVRA		2 weeks		Filtered Sample (Y/N)				Lab Sampling:	
Site: Clarendon		1 week						Job / SDG No.:	
PO # 20007895		2 days							
		1 day							
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:			
FB-1002 OMYA	7/24/18	1438	G	W	1				
FB-71 Cobb		1514			1				
FB-84 Cobb		1528			1				
FB-526 Pars		1601			1				
FB-43 Middle		1624			1				
FB-42 Middle		1644			1				
FB-118 Middle		1721			1				

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Preservation: Used: 1=Ice; 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazardous Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments: see COC-1

Return to Client Disposal by Lab Archive for Months

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Cooler Temp. (°C): Obs'd:	Therm ID No.:
Relinquished by: John P...	Received by: James Gassway	Date/Time: 7/25/18 1600
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received in Laboratory by: Saw...	Date/Time: 7/26/18 10:30
	Company: ATC	Date/Time: 7/26/18 10:30
	Company: TA3A	Date/Time: 7/26/18 1125



Login Sample Receipt Checklist

Client: ATC Group Services LLC

Job Number: 200-44503-1
SDG Number: 200-44503-1

Login Number: 44503
List Number: 1
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Refer to Job Narrative for details.
Cooler Temperature is recorded.	True	17.2°C, 14.9°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Burlington

30 Community Drive

Suite 11

South Burlington, VT 05403

Tel: (802)660-1990

TestAmerica Job ID: 200-44503-2

TestAmerica Sample Delivery Group: 200-44503-1

Client Project/Site: PFAS, SVRA (12 analytes)

For:

ATC Group Services LLC

1 Elm Street, Suite 3

Waterbury, Vermont 05676

Attn: Mr. James Gascoyne



Authorized for release by:

8/27/2018 3:47:13 PM

Kristine Dusablon, Project Manager II

(802)660-1990

kris.dusablon@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

Qualifiers

LCMS

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

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

Case Narrative

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

Job ID: 200-44503-2

Laboratory: TestAmerica Burlington

Narrative

CASE NARRATIVE

Client: ATC Group Services LLC

Project: PFAS, SVRA (12 analytes)

Report Number: 200-44503-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

RECEIPT

The samples were received on 07/26/2018; the samples arrived in good condition. The temperatures of the two coolers at receipt time were 14.9° C and 17.2° C. The samples were received at the laboratory outside the required temperature criteria.

PERFLUORINATED HYDROCARBONS

Samples FB-452 RT 7B (200-44503-24), FB-429 DAIRY (200-44503-28), FB-429 SPRING (200-44503-29), FB-43 MIDDLE (200-44503-41) and FB-42 MIDDLE (200-44503-42) were analyzed for Perfluorinated Hydrocarbons in accordance with TAL SOP WS-LC-0025. The samples were prepared outside of holding time on 08/23/2018 and analyzed on 08/24/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

Client Sample ID: FB-452 RT 7B

Lab Sample ID: 200-44503-24

No Detections.

Client Sample ID: FB-429 DAIRY

Lab Sample ID: 200-44503-28

No Detections.

Client Sample ID: FB-429 SPRING

Lab Sample ID: 200-44503-29

No Detections.

Client Sample ID: FB-43 MIDDLE

Lab Sample ID: 200-44503-41

No Detections.

Client Sample ID: FB-42 MIDDLE

Lab Sample ID: 200-44503-42

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington



Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
 SDG: 200-44503-1

Client Sample ID: FB-452 RT 7B

Lab Sample ID: 200-44503-24

Date Collected: 07/24/18 09:24

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorooctanoic acid (PFOA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorononanoic acid (PFNA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorodecanoic acid (PFDA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:25	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	104		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C4-PFHpA	92		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C4 PFOA	99		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C4 PFOS	104		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C5 PFNA	101		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C2 PFHxA	105		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C2 PFDA	111		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C2 PFUnA	112		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C2 PFDoA	84		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C2-PFTeDA	70		25 - 150				08/23/18 10:23	08/24/18 18:25	1
13C3-PFBS	98		25 - 150				08/23/18 10:23	08/24/18 18:25	1

Client Sample ID: FB-429 DAIRY

Lab Sample ID: 200-44503-28

Date Collected: 07/24/18 10:44

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorooctanoic acid (PFOA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorononanoic acid (PFNA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorodecanoic acid (PFDA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.9	1.9	ng/L		08/23/18 10:23	08/24/18 18:41	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	100		25 - 150				08/23/18 10:23	08/24/18 18:41	1
13C4-PFHpA	90		25 - 150				08/23/18 10:23	08/24/18 18:41	1
13C4 PFOA	107		25 - 150				08/23/18 10:23	08/24/18 18:41	1
13C4 PFOS	111		25 - 150				08/23/18 10:23	08/24/18 18:41	1
13C5 PFNA	103		25 - 150				08/23/18 10:23	08/24/18 18:41	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

Client Sample ID: FB-429 DAIRY

Date Collected: 07/24/18 10:44

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-28

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	96		25 - 150	08/23/18 10:23	08/24/18 18:41	1
13C2 PFDA	113		25 - 150	08/23/18 10:23	08/24/18 18:41	1
13C2 PFUnA	113		25 - 150	08/23/18 10:23	08/24/18 18:41	1
13C2 PFDoA	93		25 - 150	08/23/18 10:23	08/24/18 18:41	1
13C2-PFTeDA	70		25 - 150	08/23/18 10:23	08/24/18 18:41	1
13C3-PFBS	93		25 - 150	08/23/18 10:23	08/24/18 18:41	1

Client Sample ID: FB-429 SPRING

Date Collected: 07/24/18 10:48

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-29

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorooctanoic acid (PFOA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorononanoic acid (PFNA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorodecanoic acid (PFDA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 18:57	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C4-PFHpA	88		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C4 PFOA	100		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C4 PFOS	102		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C5 PFNA	97		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C2 PFHxA	95		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C2 PFDA	111		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C2 PFUnA	103		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C2 PFDoA	82		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C2-PFTeDA	69		25 - 150	08/23/18 10:23	08/24/18 18:57	1
13C3-PFBS	96		25 - 150	08/23/18 10:23	08/24/18 18:57	1

Client Sample ID: FB-43 MIDDLE

Date Collected: 07/24/18 16:24

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-41

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluorooctanoic acid (PFOA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluorononanoic acid (PFNA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

Client Sample ID: FB-43 MIDDLE

Lab Sample ID: 200-44503-41

Date Collected: 07/24/18 16:24

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluorodecanoic acid (PFDA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.8	1.8	ng/L		08/23/18 10:23	08/24/18 19:13	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	112		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C4-PFHpA	101		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C4 PFOA	108		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C4 PFOS	112		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C5 PFNA	106		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C2 PFHxA	106		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C2 PFDA	114		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C2 PFUnA	115		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C2 PFDoA	95		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C2-PFTeDA	68		25 - 150				08/23/18 10:23	08/24/18 19:13	1
13C3-PFBS	105		25 - 150				08/23/18 10:23	08/24/18 19:13	1

Client Sample ID: FB-42 MIDDLE

Lab Sample ID: 200-44503-42

Date Collected: 07/24/18 16:44

Matrix: Water

Date Received: 07/26/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorooctanoic acid (PFOA)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorononanoic acid (PFNA)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorodecanoic acid (PFDA)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.7	1.7	ng/L		08/23/18 10:23	08/24/18 19:29	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	111		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C4-PFHpA	92		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C4 PFOA	102		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C4 PFOS	110		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C5 PFNA	101		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C2 PFHxA	99		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C2 PFDA	111		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C2 PFUnA	114		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C2 PFDoA	88		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C2-PFTeDA	77		25 - 150				08/23/18 10:23	08/24/18 19:29	1
13C3-PFBS	107		25 - 150				08/23/18 10:23	08/24/18 19:29	1

TestAmerica Burlington

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
 SDG: 200-44503-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFHxS (25-150)	PFHpA (25-150)	PFOA (25-150)	PFOS (25-150)	PFNA (25-150)	PFHxA (25-150)	PFDA (25-150)	PFUnA (25-150)
200-44503-24	FB-452 RT 7B	104	92	99	104	101	105	111	112
200-44503-28	FB-429 DAIRY	100	90	107	111	103	96	113	113
200-44503-29	FB-429 SPRING	96	88	100	102	97	95	111	103
200-44503-41	FB-43 MIDDLE	112	101	108	112	106	106	114	115
200-44503-42	FB-42 MIDDLE	111	92	102	110	101	99	111	114
LCS 200-133211/2-A	Lab Control Sample	100	87	99	101	98	101	107	106
LCSD 200-133211/3-A	Lab Control Sample Dup	105	88	95	107	89	103	107	103
MB 200-133211/1-A	Method Blank	99	87	101	110	98	103	112	108

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	3C3-PFBS (25-150)
200-44503-24	FB-452 RT 7B	84	70	98
200-44503-28	FB-429 DAIRY	93	70	93
200-44503-29	FB-429 SPRING	82	69	96
200-44503-41	FB-43 MIDDLE	95	68	105
200-44503-42	FB-42 MIDDLE	88	77	107
LCS 200-133211/2-A	Lab Control Sample	82	70	94
LCSD 200-133211/3-A	Lab Control Sample Dup	81	68	97
MB 200-133211/1-A	Method Blank	79	66	86

Surrogate Legend

- PFHxS = 18O2 PFHxS
- PFHpA = 13C4-PFHpA
- PFOA = 13C4 PFOA
- PFOS = 13C4 PFOS
- PFNA = 13C5 PFNA
- PFHxA = 13C2 PFHxA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA
- PFDoA = 13C2 PFDoA
- PFTDA = 13C2-PFTeDA
- 13C3-PFBS = 13C3-PFBS

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
 SDG: 200-44503-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-133211/1-A
Matrix: Water
Analysis Batch: 133262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 133211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		08/23/18 10:23	08/24/18 16:50	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	99		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C4-PFHxA	87		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C4 PFOA	101		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C4 PFOS	110		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C5 PFNA	98		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C2 PFHxA	103		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C2 PFDA	112		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C2 PFUnA	108		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C2 PFDoA	79		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C2-PFTeDA	66		25 - 150	08/23/18 10:23	08/24/18 16:50	1
13C3-PFBS	86		25 - 150	08/23/18 10:23	08/24/18 16:50	1

Lab Sample ID: LCS 200-133211/2-A
Matrix: Water
Analysis Batch: 133262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluoroheptanoic acid (PFHpA)	40.0	41.8		ng/L		105	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	42.4		ng/L		106	50 - 150
Perfluorononanoic acid (PFNA)	40.0	39.3		ng/L		98	50 - 150
Perfluorobutanesulfonic acid (PFBS)	40.0	41.8		ng/L		104	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	40.0	38.8		ng/L		97	50 - 150
Perfluorooctanesulfonic acid (PFOS)	40.0	43.0		ng/L		108	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	43.3		ng/L		108	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	40.1		ng/L		100	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	41.1		ng/L		103	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	36.6		ng/L		91	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	24.8		ng/L		62	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	32.6		ng/L		81	50 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
 SDG: 200-44503-1

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	100		25 - 150
13C4-PFHpa	87		25 - 150
13C4 PFOA	99		25 - 150
13C4 PFOS	101		25 - 150
13C5 PFNA	98		25 - 150
13C2 PFHxA	101		25 - 150
13C2 PFDA	107		25 - 150
13C2 PFUnA	106		25 - 150
13C2 PFDoA	82		25 - 150
13C2-PFTeDA	70		25 - 150
13C3-PFBS	94		25 - 150

Lab Sample ID: LCSD 200-133211/3-A
 Matrix: Water
 Analysis Batch: 133262

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 133211

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	
									Limit	Limit
Perfluoroheptanoic acid (PFHpA)	40.0	39.7		ng/L		99	50 - 150	5	30	30
Perfluorooctanoic acid (PFOA)	40.0	38.3		ng/L		96	50 - 150	10	30	30
Perfluorononanoic acid (PFNA)	40.0	41.1		ng/L		103	50 - 150	5	30	30
Perfluorobutanesulfonic acid (PFBS)	40.0	37.9		ng/L		95	50 - 150	10	30	30
Perfluorohexanesulfonic acid (PFHxS)	40.0	32.4		ng/L		81	50 - 150	18	30	30
Perfluorooctanesulfonic acid (PFOS)	40.0	38.3		ng/L		96	50 - 150	11	30	30
Perfluorohexanoic acid (PFHxA)	40.0	40.0		ng/L		100	50 - 150	8	30	30
Perfluoroundecanoic acid (PFUnA)	40.0	37.5		ng/L		94	50 - 150	7	30	30
Perfluorodecanoic acid (PFDA)	40.0	38.0		ng/L		95	50 - 150	8	30	30
Perfluorododecanoic acid (PFDoA)	40.0	33.5		ng/L		84	50 - 150	9	30	30
Perfluorotridecanoic Acid (PFTriA)	40.0	26.4		ng/L		66	50 - 150	6	30	30
Perfluorotetradecanoic acid (PFTeA)	40.0	33.7		ng/L		84	50 - 150	3	30	30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
18O2 PFHxS	105		25 - 150
13C4-PFHpa	88		25 - 150
13C4 PFOA	95		25 - 150
13C4 PFOS	107		25 - 150
13C5 PFNA	89		25 - 150
13C2 PFHxA	103		25 - 150
13C2 PFDA	107		25 - 150
13C2 PFUnA	103		25 - 150
13C2 PFDoA	81		25 - 150
13C2-PFTeDA	68		25 - 150
13C3-PFBS	97		25 - 150

QC Association Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

LCMS

Prep Batch: 133211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44503-24	FB-452 RT 7B	Total/NA	Water	3535	
200-44503-28	FB-429 DAIRY	Total/NA	Water	3535	
200-44503-29	FB-429 SPRING	Total/NA	Water	3535	
200-44503-41	FB-43 MIDDLE	Total/NA	Water	3535	
200-44503-42	FB-42 MIDDLE	Total/NA	Water	3535	
MB 200-133211/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-133211/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-133211/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 133262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44503-24	FB-452 RT 7B	Total/NA	Water	537 (modified)	133211
200-44503-28	FB-429 DAIRY	Total/NA	Water	537 (modified)	133211
200-44503-29	FB-429 SPRING	Total/NA	Water	537 (modified)	133211
200-44503-41	FB-43 MIDDLE	Total/NA	Water	537 (modified)	133211
200-44503-42	FB-42 MIDDLE	Total/NA	Water	537 (modified)	133211
MB 200-133211/1-A	Method Blank	Total/NA	Water	537 (modified)	133211
LCS 200-133211/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	133211
LCSD 200-133211/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	133211

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

Client Sample ID: FB-452 RT 7B

Date Collected: 07/24/18 09:24

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133211	08/23/18 10:23	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133262	08/24/18 18:25	BWC	TAL BUR

Client Sample ID: FB-429 DAIRY

Date Collected: 07/24/18 10:44

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-28

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133211	08/23/18 10:23	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133262	08/24/18 18:41	BWC	TAL BUR

Client Sample ID: FB-429 SPRING

Date Collected: 07/24/18 10:48

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133211	08/23/18 10:23	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133262	08/24/18 18:57	BWC	TAL BUR

Client Sample ID: FB-43 MIDDLE

Date Collected: 07/24/18 16:24

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-41

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133211	08/23/18 10:23	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133262	08/24/18 19:13	BWC	TAL BUR

Client Sample ID: FB-42 MIDDLE

Date Collected: 07/24/18 16:44

Date Received: 07/26/18 11:25

Lab Sample ID: 200-44503-42

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133211	08/23/18 10:23	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133262	08/24/18 19:29	BWC	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD ELAP		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-19
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-18
New Hampshire	NELAP	1	2006	12-18-18
New Jersey	NELAP	2	VT972	06-30-19
New York	NELAP	2	10391	04-01-19
Pennsylvania	NELAP	3	68-00489	04-30-19
Rhode Island	State Program	1	LAO00298	12-30-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-19
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-18
Virginia	NELAP	3	460209	12-14-18

Method Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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Sample Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (12 analytes)

TestAmerica Job ID: 200-44503-2
SDG: 200-44503-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-44503-24	FB-452 RT 7B	Water	07/24/18 09:24	07/26/18 11:25
200-44503-28	FB-429 DAIRY	Water	07/24/18 10:44	07/26/18 11:25
200-44503-29	FB-429 SPRING	Water	07/24/18 10:48	07/26/18 11:25
200-44503-41	FB-43 MIDDLE	Water	07/24/18 16:24	07/26/18 11:25
200-44503-42	FB-42 MIDDLE	Water	07/24/18 16:44	07/26/18 11:25

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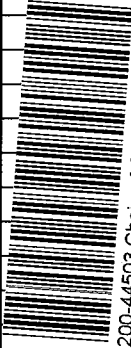
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Regulatory Program: DW NPDES RCRA Other:

Your Company Name here ATC Group Services 1 Elm St, Suite 3 Waterbury VT 05670 (xxx) xxx-xxxx Phone 802.241.4131 FAX		Client Contact Kustford DW SVRA Clerendon 2000 7895		Project Manager: James Gascoyne Tel/Fax: 241-4131		Site Contact: Lab Contact: 67		Date: 7/24/18 Carrier:		COC No: 4 of 4 COCs	
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		TAT if different from Below <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N)		Perform MS / MSD		Sampler: Jo Palmer		For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:					
864 Airport	7/24/18	0900	G	DW	2		 <p>200-44503 Chain of Custody</p>				
452 Rt 7B		0925									
873 Airport		0950									
429 - main		1025									
429 - Dairy		1045									
471 Airport		1030									
429 - Spring		1050									
915 Airport		1125									
729 Airport		1145									
770 Airport		1200									
DUP		0800									
773 Airport		1225									

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments: Commercial B w/ case narrative to James Gascoyne at ategs.com

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temp. (°C):	Obs'd:	Therm ID No.:
Relinquished by: [Signature]	Company: ATC	Received by: James Gascoyne	Company: ATC	Date/Time: 7/26/18 10:30
Relinquished by: [Signature]	Company: ATC	Received by: [Signature]	Company: ATC	Date/Time: [Signature]
Relinquished by: [Signature]	Company: ATC	Received in Laboratory by: [Signature]	Company: ATC	Date/Time: 7/26/18 7:18



TestAmerica Burlington
30 Community Drive
Suite 11

South Burlington, VT 05403-6809
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

Your Company Name here: **ATC Ground Services** Client Contact: **James G. Gagnier**
 Address: **1 Elm St., Suite B** Tel/Fax: **241 4131**
 City/State/Zip: **Waterbury VT 05670**
 (xxx) xxx-xxxx Phone: **802 241 4131**
 (xxx) xxx-xxxx FAX
 Project Name: **Burton D. D. SRA**
 Site: **Clarendon**
 P O #: **20007895**

Project Manager: **James G. Gagnier** Site Contact: **RD**
 Analysis Turnaround Time: CALENDAR DAYS WORKING DAYS
 TAT if different from Below: 2 weeks 1 week 2 days 1 day

Date: **7/24/18** of **4** COCs
 Carrier: **FD**

Sampler: **JB**
 For Lab Use Only:
 Walk-in Client:
 Lab Sampling:
 Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
FB-873 Airport	7/24/18	0948	G	W	1			
FB-429 Main	1024							
FB-471 Airport	1028							
FB-429 Dairy	1044							
FB-429 Spring	1048							
FB-915 Airport	1124							
FB-729 Airport	1144							
FB-772 Airport	1158							
FB-773 Airport	1224							
FB-168 Brenda	1308							
FB-2759 East	1328							
FB-383 Rt 7B	1408							

Preservation Used: 1=Ice; 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other: _____
 Possible Hazard Identification: _____
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Special Instructions/QC Requirements & Comments: **see coc-1**

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for _____ Months

Custody Seals Intact: Yes No
 Relinquished by: **John Parn** Company: **ATC** Date/Time: **7/24/18 1400**
 Relinquished by: **James Gagnier** Company: **ATC** Date/Time: **7/26/18 10:30**
 Relinquished by: **Sean** Company: **TASA** Date/Time: **7/26/18 1125**



Regulatory Program: DW NPDES RCRA Other:

Your Company Name here ATC Group Services 1 Elm St, Suite 3 Waterbury VT 05670 (xxx) xxx-xxxx Phone 241-4131 (xxx) xxx-xxxx FAX		Client Contact		Project Manager: James Gassway		Date: 7/24/18		COC No: 4 of 4 COCs	
Address		City/State/Zip		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		TAT if different from Below		Site Contact: FD	
Project Name: Rutland JW SVRA		P O # 20007895		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)	
Sample Identification		Sample Date		Sample Time		Matrix		# of Cont.	
FB-1002 OMYA		7/24/18 1438		G		W		1	
FB-71 Cobb		1514						1	
FB-84 Cobb		1528						1	
FB-56 Pars		1601						1	
FB-43 Middle		1624						1	
FB-42 Middle		1644						1	
FB-118 Middle		1721						1	
Sample Specific Notes:		Perform MS/MSD (Y/N)		Filtered Sample (Y/N)		Carrier		Sample Specific Notes:	
SAMPLER		WALK-IN CLIENT		LAB SAMPLING		JOB / SDG NO.		Sample Specific Notes:	

Preservation: Used: 1=Ice; 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments: see COC-1

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for Months

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:
Relinquished by: John P.	Company: ASC
Relinquished by: James Gassway	Company: ATC
Relinquished by: Sam	Company: TA3A
Date/Time: 7/25/18 1600	Date/Time: 7/26/18 10:30
Date/Time: 7/25/18 1600	Date/Time: 7/26/18 10:30
Date/Time: 7/25/18 1600	Date/Time: 7/26/18 10:30

Login Sample Receipt Checklist

Client: ATC Group Services LLC

Job Number: 200-44503-2
SDG Number: 200-44503-1

Login Number: 44503
List Number: 1
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Refer to Job Narrative for details.
Cooler Temperature is recorded.	True	17.2°C, 14.9°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Burlington

30 Community Drive

Suite 11

South Burlington, VT 05403

Tel: (802)660-1990

TestAmerica Job ID: 200-44915-1

TestAmerica Sample Delivery Group: 200-44915-1

Client Project/Site: PFAS, SVRA (21/24 analytes)

For:

ATC Group Services LLC

1 Elm Street, Suite 3

Waterbury, Vermont 05676

Attn: Mr. James Gascoyne



Authorized for release by:

9/11/2018 1:16:52 PM

Kristine Dusablon, Project Manager II

(802)660-1990

kris.dusablon@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Qualifiers

LCMS

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
*	Isotope Dilution analyte is outside acceptance limits.

Glossary

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

Case Narrative

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Job ID: 200-44915-1

Laboratory: TestAmerica Burlington

Narrative

CASE NARRATIVE

Client: ATC Group Services LLC

Project: PFAS, SVRA (21/24 analytes)

Report Number: 200-44915-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

RECEIPT

The samples were received on 08/22/2018; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.4° C and 5.3° C.

PERFLUORINATED HYDROCARBONS

Samples 656 7B (200-44915-1), 705 7B (200-44915-3), FB-705 (200-44915-4), 205 7B (200-44915-5), FB-205 (200-44915-6), VTRANS (200-44915-7), FB-VTRANS (200-44915-8), 859 7B (200-44915-9), FB-859 (200-44915-10), 443 7B (200-44915-11), 940 MIDDLE (200-44915-13), FB-940 (200-44915-14), 866 7B (200-44915-15), FB-866 (200-44915-16), 84 7B (200-44915-17), 339 7B (200-44915-19), 742 7B (200-44915-21), DUP (200-44915-22), 30 JONES (200-44915-24), FB-30J (200-44915-25), 82 JONES (200-44915-26), FB-82J (200-44915-27), 895 7B (200-44915-28), FB-895 (200-44915-29), 475 GORGE (200-44915-30), FB-475G (200-44915-31), 375 GORGE (200-44915-32), FB-375G (200-44915-33) and 581 7B (200-44915-34) were analyzed for Perfluorinated Hydrocarbons in accordance with TAL SOP WS-LC-0025. The samples were prepared on 08/28/2018 and 09/05/2018 and analyzed on 08/29/2018 and 09/07/2018.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for sample VTRANS (200-44915-7). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

The analysis of the field samples were completed as requested for this project to determine if the associated field sample would be analyzed. Upon completion of the field samples analysis, the laboratory had insufficient time remaining to perform the analysis within holding time for samples FB-705 (200-44915-4), FB-205 (200-44915-6), FB-VTRANS (200-44915-8), FB-859 (200-44915-10), FB-940 (200-44915-14), FB-866 (200-44915-16), FB-30J (200-44915-25), FB-82J (200-44915-27), FB-895 (200-44915-29) and FB-475G (200-44915-31). These field blanks were prepared outside of holding time, then analyzed and the data has reported and qualified.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Client Sample ID: 656 7B

Lab Sample ID: 200-44915-1

No Detections.

Client Sample ID: 705 7B

Lab Sample ID: 200-44915-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	2.1		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.1		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-705

Lab Sample ID: 200-44915-4

No Detections.

Client Sample ID: 205 7B

Lab Sample ID: 200-44915-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	7.7		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-205

Lab Sample ID: 200-44915-6

No Detections.

Client Sample ID: VTRANS

Lab Sample ID: 200-44915-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	6.0		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.1		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.9		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.0		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.3		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.0		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-VTRANS

Lab Sample ID: 200-44915-8

No Detections.

Client Sample ID: 859 7B

Lab Sample ID: 200-44915-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	1.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.5		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-859

Lab Sample ID: 200-44915-10

No Detections.

Client Sample ID: 443 7B

Lab Sample ID: 200-44915-11

No Detections.

Client Sample ID: 940 MIDDLE

Lab Sample ID: 200-44915-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.2		1.8	1.8	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Client Sample ID: FB-940

Lab Sample ID: 200-44915-14

No Detections.

Client Sample ID: 866 7B

Lab Sample ID: 200-44915-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	1.8		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-866

Lab Sample ID: 200-44915-16

No Detections.

Client Sample ID: 84 7B

Lab Sample ID: 200-44915-17

No Detections.

Client Sample ID: 339 7B

Lab Sample ID: 200-44915-19

No Detections.

Client Sample ID: 742 7B

Lab Sample ID: 200-44915-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.2		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.2		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.5		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.5		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.7		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.6		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: DUP

Lab Sample ID: 200-44915-22

No Detections.

Client Sample ID: 30 JONES

Lab Sample ID: 200-44915-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.1		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.3		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.0		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.3		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.8		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-30J

Lab Sample ID: 200-44915-25

No Detections.

Client Sample ID: 82 JONES

Lab Sample ID: 200-44915-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	22		1.8	1.8	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Client Sample ID: 82 JONES (Continued)

Lab Sample ID: 200-44915-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	79		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	45		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	28		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	16		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	4.5		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.6		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.1		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-82J

Lab Sample ID: 200-44915-27

No Detections.

Client Sample ID: 895 7B

Lab Sample ID: 200-44915-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	2.3		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-895

Lab Sample ID: 200-44915-29

No Detections.

Client Sample ID: 475 GORGE

Lab Sample ID: 200-44915-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	2.9		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.8		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-475G

Lab Sample ID: 200-44915-31

No Detections.

Client Sample ID: 375 GORGE

Lab Sample ID: 200-44915-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	6.8		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.9		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.6		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.2		1.7	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.8		1.7	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-375G

Lab Sample ID: 200-44915-33

No Detections.

Client Sample ID: 581 7B

Lab Sample ID: 200-44915-34

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 656 7B
Date Collected: 08/21/18 09:40
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-1
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:13	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 19:13	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 19:13	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 19:13	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 19:13	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	107		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C4-PFHpA	87		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C4 PFOA	91		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C4 PFOS	106		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C5 PFNA	92		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C4 PFBA	47		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C2 PFHxA	82		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C2 PFDA	111		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C2 PFUnA	111		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C2 PFDoA	84		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C8 FOSA	79		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C5-PFPeA	68		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C2-PFTeDA	82		25 - 150	08/28/18 09:15	08/29/18 19:13	1
d3-NMeFOSAA	102		25 - 150	08/28/18 09:15	08/29/18 19:13	1
d5-NEtFOSAA	108		25 - 150	08/28/18 09:15	08/29/18 19:13	1
M2-6:2FTS	124		25 - 150	08/28/18 09:15	08/29/18 19:13	1
M2-8:2FTS	117		25 - 150	08/28/18 09:15	08/29/18 19:13	1
13C3-PFBS	92		25 - 150	08/28/18 09:15	08/29/18 19:13	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 705 7B
Date Collected: 08/21/18 10:10
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-3
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorooctanoic acid (PFOA)	2.1		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorooctanesulfonic acid (PFOS)	5.1		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 19:29	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 19:29	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 19:29	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 19:29	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 19:29	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	108		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C4-PFHpA	91		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C4 PFOA	94		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C4 PFOS	97		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C5 PFNA	91		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C4 PFBA	68		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C2 PFHxA	95		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C2 PFDA	109		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C2 PFUnA	85		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C2 PFDoA	74		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C8 FOSA	78		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C5-PFPeA	89		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C2-PFTeDA	80		25 - 150				08/28/18 09:15	08/29/18 19:29	1
d3-NMeFOSAA	64		25 - 150				08/28/18 09:15	08/29/18 19:29	1
d5-NEtFOSAA	78		25 - 150				08/28/18 09:15	08/29/18 19:29	1
M2-6:2FTS	142		25 - 150				08/28/18 09:15	08/29/18 19:29	1
M2-8:2FTS	94		25 - 150				08/28/18 09:15	08/29/18 19:29	1
13C3-PFBS	106		25 - 150				08/28/18 09:15	08/29/18 19:29	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-705

Lab Sample ID: 200-44915-4

Date Collected: 08/21/18 10:08

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluoropentanoic acid (PFPeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluoroheptanoic acid (PFHpA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorooctanoic acid (PFOA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorononanoic acid (PFNA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorodecanoic acid (PFDA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:31	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:31	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:31	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:31	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:31	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:31	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	88		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C4-PFHxA	79		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C4 PFOA	95		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C4 PFOS	95		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C5 PFNA	85		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C4 PFBA	76		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C2 PFHxA	92		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C2 PFDA	104		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C2 PFUnA	96		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C2 PFDoA	72		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C8 FOSA	58		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C5-PFPeA	79		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C2-PFTeDA	64		25 - 150	09/05/18 08:30	09/07/18 00:31	1
d3-NMeFOSAA	86		25 - 150	09/05/18 08:30	09/07/18 00:31	1
d5-NEtFOSAA	81		25 - 150	09/05/18 08:30	09/07/18 00:31	1
M2-6:2FTS	107		25 - 150	09/05/18 08:30	09/07/18 00:31	1
M2-8:2FTS	105		25 - 150	09/05/18 08:30	09/07/18 00:31	1
13C3-PFBS	89		25 - 150	09/05/18 08:30	09/07/18 00:31	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 205 7B
Date Collected: 08/21/18 10:35
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-5
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorooctanesulfonic acid (PFOS)	7.7		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 19:45	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 19:45	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 19:45	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 19:45	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 19:45	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	112		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C4-PFHpA	86		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C4 PFOA	96		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C4 PFOS	110		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C5 PFNA	89		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C4 PFBA	38		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C2 PFHxA	67		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C2 PFDA	115		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C2 PFUnA	105		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C2 PFDoA	81		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C8 FOSA	79		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C5-PFPeA	47		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C2-PFTeDA	84		25 - 150				08/28/18 09:15	08/29/18 19:45	1
d3-NMeFOSAA	81		25 - 150				08/28/18 09:15	08/29/18 19:45	1
d5-NEtFOSAA	98		25 - 150				08/28/18 09:15	08/29/18 19:45	1
M2-6:2FTS	136		25 - 150				08/28/18 09:15	08/29/18 19:45	1
M2-8:2FTS	130		25 - 150				08/28/18 09:15	08/29/18 19:45	1
13C3-PFBS	80		25 - 150				08/28/18 09:15	08/29/18 19:45	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-205

Date Collected: 08/21/18 10:34

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-6

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluoropentanoic acid (PFPeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluoroheptanoic acid (PFHpA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorooctanoic acid (PFOA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorononanoic acid (PFNA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorodecanoic acid (PFDA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 00:47	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:47	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:47	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:47	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:47	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 00:47	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	97		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C4-PFHxA	87		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C4 PFOA	98		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C4 PFOS	95		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C5 PFNA	91		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C4 PFBA	73		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C2 PFHxA	88		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C2 PFDA	112		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C2 PFUnA	103		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C2 PFDoA	72		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C8 FOSA	49		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C5-PFPeA	87		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C2-PFTeDA	61		25 - 150				09/05/18 08:30	09/07/18 00:47	1
d3-NMeFOSAA	93		25 - 150				09/05/18 08:30	09/07/18 00:47	1
d5-NEtFOSAA	92		25 - 150				09/05/18 08:30	09/07/18 00:47	1
M2-6:2FTS	110		25 - 150				09/05/18 08:30	09/07/18 00:47	1
M2-8:2FTS	115		25 - 150				09/05/18 08:30	09/07/18 00:47	1
13C3-PFBS	98		25 - 150				09/05/18 08:30	09/07/18 00:47	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: VTRANS

Lab Sample ID: 200-44915-7

Date Collected: 08/21/18 10:55

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	6.0		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluoropentanoic acid (PFPeA)	2.1		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorohexanoic acid (PFHxA)	1.9		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorooctanoic acid (PFOA)	3.0		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorohexanesulfonic acid (PFHxS)	4.3		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorooctanesulfonic acid (PFOS)	2.0		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:00	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:00	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:00	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:00	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:00	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	102		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C4-PFHpA	76		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C4 PFOA	91		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C4 PFOS	94		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C5 PFNA	99		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C4 PFBA	28		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C2 PFHxA	52		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C2 PFDA	107		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C2 PFUnA	91		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C2 PFDoA	75		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C8 FOSA	74		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C5-PFPeA	53		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C2-PFTeDA	83		25 - 150	08/28/18 09:15	08/29/18 20:00	1
d3-NMeFOSAA	85		25 - 150	08/28/18 09:15	08/29/18 20:00	1
d5-NEtFOSAA	85		25 - 150	08/28/18 09:15	08/29/18 20:00	1
M2-6:2FTS	182 *		25 - 150	08/28/18 09:15	08/29/18 20:00	1
M2-8:2FTS	133		25 - 150	08/28/18 09:15	08/29/18 20:00	1
13C3-PFBS	74		25 - 150	08/28/18 09:15	08/29/18 20:00	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-VTRANS

Lab Sample ID: 200-44915-8

Date Collected: 08/21/18 10:54

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluoropentanoic acid (PFPeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluoroheptanoic acid (PFHpA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorooctanoic acid (PFOA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorononanoic acid (PFNA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorodecanoic acid (PFDA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:02	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:02	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:02	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:02	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:02	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:02	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	89		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C4-PFHxA	79		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C4 PFOA	94		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C4 PFOS	92		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C5 PFNA	93		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C4 PFBA	70		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C2 PFHxA	88		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C2 PFDA	112		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C2 PFUnA	103		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C2 PFDoA	81		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C8 FOSA	56		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C5-PFPeA	82		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C2-PFTeDA	72		25 - 150	09/05/18 08:30	09/07/18 01:02	1
d3-NMeFOSAA	95		25 - 150	09/05/18 08:30	09/07/18 01:02	1
d5-NEtFOSAA	90		25 - 150	09/05/18 08:30	09/07/18 01:02	1
M2-6:2FTS	100		25 - 150	09/05/18 08:30	09/07/18 01:02	1
M2-8:2FTS	122		25 - 150	09/05/18 08:30	09/07/18 01:02	1
13C3-PFBS	82		25 - 150	09/05/18 08:30	09/07/18 01:02	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 859 7B
Date Collected: 08/21/18 11:30
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-9
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorobutanesulfonic acid (PFBS)	1.9		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorooctanesulfonic acid (PFOS)	2.5		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 20:16	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 20:16	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 20:16	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 20:16	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 20:16	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	105		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C4-PFHpA	84		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C4 PFOA	89		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C4 PFOS	103		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C5 PFNA	87		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C4 PFBA	59		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C2 PFHxA	77		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C2 PFDA	96		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C2 PFUnA	87		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C2 PFDoA	77		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C8 FOSA	67		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C5-PFPeA	73		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C2-PFTeDA	77		25 - 150	08/28/18 09:15	08/29/18 20:16	1
d3-NMeFOSAA	71		25 - 150	08/28/18 09:15	08/29/18 20:16	1
d5-NEtFOSAA	80		25 - 150	08/28/18 09:15	08/29/18 20:16	1
M2-6:2FTS	142		25 - 150	08/28/18 09:15	08/29/18 20:16	1
M2-8:2FTS	116		25 - 150	08/28/18 09:15	08/29/18 20:16	1
13C3-PFBS	107		25 - 150	08/28/18 09:15	08/29/18 20:16	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-859

Lab Sample ID: 200-44915-10

Date Collected: 08/21/18 11:31

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluoropentanoic acid (PFPeA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorohexanoic acid (PFHxA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluoroheptanoic acid (PFHpA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorooctanoic acid (PFOA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorononanoic acid (PFNA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorodecanoic acid (PFDA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluoroundecanoic acid (PFUnA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorododecanoic acid (PFDoA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:18	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:18	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:18	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:18	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:18	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:18	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	98		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C4-PFHxA	83		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C4 PFOA	94		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C4 PFOS	105		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C5 PFNA	96		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C4 PFBA	74		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C2 PFHxA	92		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C2 PFDA	114		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C2 PFUnA	109		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C2 PFDoA	81		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C8 FOSA	51		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C5-PFPeA	84		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C2-PFTeDA	69		25 - 150				09/05/18 08:30	09/07/18 01:18	1
d3-NMeFOSAA	97		25 - 150				09/05/18 08:30	09/07/18 01:18	1
d5-NEtFOSAA	93		25 - 150				09/05/18 08:30	09/07/18 01:18	1
M2-6:2FTS	115		25 - 150				09/05/18 08:30	09/07/18 01:18	1
M2-8:2FTS	118		25 - 150				09/05/18 08:30	09/07/18 01:18	1
13C3-PFBS	90		25 - 150				09/05/18 08:30	09/07/18 01:18	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 443 7B
Date Collected: 08/21/18 12:15
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-11
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:32	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:32	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:32	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:32	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	106		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C4-PFHpA	86		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C4 PFOA	97		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C4 PFOS	103		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C5 PFNA	89		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C4 PFBA	65		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C2 PFHxA	80		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C2 PFDA	105		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C2 PFUnA	88		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C2 PFDoA	76		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C8 FOSA	77		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C5-PFPeA	88		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C2-PFTeDA	78		25 - 150	08/28/18 09:15	08/29/18 20:32	1
d3-NMeFOSAA	81		25 - 150	08/28/18 09:15	08/29/18 20:32	1
d5-NEtFOSAA	84		25 - 150	08/28/18 09:15	08/29/18 20:32	1
M2-6:2FTS	132		25 - 150	08/28/18 09:15	08/29/18 20:32	1
M2-8:2FTS	110		25 - 150	08/28/18 09:15	08/29/18 20:32	1
13C3-PFBS	95		25 - 150	08/28/18 09:15	08/29/18 20:32	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 940 MIDDLE

Lab Sample ID: 200-44915-13

Date Collected: 08/21/18 12:54

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.2		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 20:48	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:48	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:48	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:48	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 20:48	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	119		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C4-PFHpA	95		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C4 PFOA	100		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C4 PFOS	102		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C5 PFNA	92		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C4 PFBA	53		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C2 PFHxA	77		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C2 PFDA	103		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C2 PFUnA	95		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C2 PFDoA	76		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C8 FOSA	83		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C5-PFPeA	61		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C2-PFTeDA	80		25 - 150	08/28/18 09:15	08/29/18 20:48	1
d3-NMeFOSAA	74		25 - 150	08/28/18 09:15	08/29/18 20:48	1
d5-NEtFOSAA	82		25 - 150	08/28/18 09:15	08/29/18 20:48	1
M2-6:2FTS	114		25 - 150	08/28/18 09:15	08/29/18 20:48	1
M2-8:2FTS	111		25 - 150	08/28/18 09:15	08/29/18 20:48	1
13C3-PFBS	91		25 - 150	08/28/18 09:15	08/29/18 20:48	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-940
Date Collected: 08/21/18 12:53
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-14
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluoropentanoic acid (PFPeA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorohexanoic acid (PFHxA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluoroheptanoic acid (PFHpA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorooctanoic acid (PFOA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorononanoic acid (PFNA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorodecanoic acid (PFDA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluoroundecanoic acid (PFUnA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorododecanoic acid (PFDoA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 01:34	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:34	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:34	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:34	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:34	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 01:34	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	99		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C4-PFHxA	91		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C4 PFOA	101		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C4 PFOS	99		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C5 PFNA	94		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C4 PFBA	77		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C2 PFHxA	91		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C2 PFDA	113		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C2 PFUnA	108		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C2 PFDoA	80		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C8 FOSA	49		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C5-PFPeA	83		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C2-PFTeDA	70		25 - 150				09/05/18 08:30	09/07/18 01:34	1
d3-NMeFOSAA	84		25 - 150				09/05/18 08:30	09/07/18 01:34	1
d5-NEtFOSAA	95		25 - 150				09/05/18 08:30	09/07/18 01:34	1
M2-6:2FTS	106		25 - 150				09/05/18 08:30	09/07/18 01:34	1
M2-8:2FTS	124		25 - 150				09/05/18 08:30	09/07/18 01:34	1
13C3-PFBS	96		25 - 150				09/05/18 08:30	09/07/18 01:34	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 866 7B
Date Collected: 08/21/18 13:10
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-15
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorooctanesulfonic acid (PFOS)	1.8		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:04	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 21:04	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 21:04	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 21:04	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 21:04	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	101		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C4-PFHpA	88		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C4 PFOA	93		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C4 PFOS	109		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C5 PFNA	94		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C4 PFBA	76		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C2 PFHxA	86		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C2 PFDA	102		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C2 PFUnA	95		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C2 PFDoA	76		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C8 FOSA	77		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C5-PFPeA	87		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C2-PFTeDA	77		25 - 150				08/28/18 09:15	08/29/18 21:04	1
d3-NMeFOSAA	84		25 - 150				08/28/18 09:15	08/29/18 21:04	1
d5-NEtFOSAA	84		25 - 150				08/28/18 09:15	08/29/18 21:04	1
M2-6:2FTS	86		25 - 150				08/28/18 09:15	08/29/18 21:04	1
M2-8:2FTS	107		25 - 150				08/28/18 09:15	08/29/18 21:04	1
13C3-PFBS	105		25 - 150				08/28/18 09:15	08/29/18 21:04	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-866

Lab Sample ID: 200-44915-16

Date Collected: 08/21/18 13:08

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluoropentanoic acid (PFPeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluoroheptanoic acid (PFHpA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorooctanoic acid (PFOA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorononanoic acid (PFNA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorodecanoic acid (PFDA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 01:50	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:50	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:50	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:50	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:50	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 01:50	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C4-PFHxA	83		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C4 PFOA	95		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C4 PFOS	91		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C5 PFNA	89		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C4 PFBA	71		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C2 PFHxA	88		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C2 PFDA	108		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C2 PFUnA	99		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C2 PFDoA	74		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C8 FOSA	48		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C5-PFPeA	87		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C2-PFTeDA	60		25 - 150	09/05/18 08:30	09/07/18 01:50	1
d3-NMeFOSAA	90		25 - 150	09/05/18 08:30	09/07/18 01:50	1
d5-NEtFOSAA	79		25 - 150	09/05/18 08:30	09/07/18 01:50	1
M2-6:2FTS	101		25 - 150	09/05/18 08:30	09/07/18 01:50	1
M2-8:2FTS	120		25 - 150	09/05/18 08:30	09/07/18 01:50	1
13C3-PFBS	90		25 - 150	09/05/18 08:30	09/07/18 01:50	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 84 7B
Date Collected: 08/21/18 13:55
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-17
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 21:36	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 21:36	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 21:36	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 21:36	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 21:36	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	109		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C4-PFHpA	86		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C4 PFOA	98		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C4 PFOS	99		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C5 PFNA	96		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C4 PFBA	76		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C2 PFHxA	83		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C2 PFDA	108		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C2 PFUnA	88		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C2 PFDoA	76		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C8 FOSA	82		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C5-PFPeA	87		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C2-PFTeDA	81		25 - 150				08/28/18 09:15	08/29/18 21:36	1
d3-NMeFOSAA	74		25 - 150				08/28/18 09:15	08/29/18 21:36	1
d5-NEtFOSAA	81		25 - 150				08/28/18 09:15	08/29/18 21:36	1
M2-6:2FTS	83		25 - 150				08/28/18 09:15	08/29/18 21:36	1
M2-8:2FTS	109		25 - 150				08/28/18 09:15	08/29/18 21:36	1
13C3-PFBS	101		25 - 150				08/28/18 09:15	08/29/18 21:36	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 339 7B
Date Collected: 08/21/18 14:10
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-19
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 21:52	1
Perfluorooctane Sulfonamide (PFOSA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 21:52	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 21:52	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 21:52	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 21:52	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 21:52	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	99		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C4-PFHpA	83		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C4 PFOA	100		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C4 PFOS	88		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C5 PFNA	88		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C4 PFBA	54		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C2 PFHxA	74		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C2 PFDA	91		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C2 PFUnA	83		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C2 PFDoA	70		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C8 FOSA	59		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C5-PFPeA	81		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C2-PFTeDA	77		25 - 150	08/28/18 09:15	08/29/18 21:52	1
d3-NMeFOSAA	76		25 - 150	08/28/18 09:15	08/29/18 21:52	1
d5-NEtFOSAA	78		25 - 150	08/28/18 09:15	08/29/18 21:52	1
M2-6:2FTS	129		25 - 150	08/28/18 09:15	08/29/18 21:52	1
M2-8:2FTS	95		25 - 150	08/28/18 09:15	08/29/18 21:52	1
13C3-PFBS	89		25 - 150	08/28/18 09:15	08/29/18 21:52	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 742 7B
Date Collected: 08/21/18 14:40
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-21
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.2		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluoropentanoic acid (PFPeA)	2.2		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorohexanoic acid (PFHxA)	2.9		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluoroheptanoic acid (PFHpA)	2.5		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorooctanoic acid (PFOA)	4.5		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorobutanesulfonic acid (PFBS)	2.7		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorooctanesulfonic acid (PFOS)	4.6		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:08	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:08	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:08	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:08	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:08	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	111		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C4-PFHpA	91		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C4 PFOA	89		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C4 PFOS	105		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C5 PFNA	95		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C4 PFBA	68		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C2 PFHxA	83		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C2 PFDA	105		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C2 PFUnA	98		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C2 PFDoA	80		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C8 FOSA	73		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C5-PFPeA	79		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C2-PFTeDA	81		25 - 150	08/28/18 09:15	08/29/18 22:08	1
d3-NMeFOSAA	91		25 - 150	08/28/18 09:15	08/29/18 22:08	1
d5-NEtFOSAA	89		25 - 150	08/28/18 09:15	08/29/18 22:08	1
M2-6:2FTS	124		25 - 150	08/28/18 09:15	08/29/18 22:08	1
M2-8:2FTS	123		25 - 150	08/28/18 09:15	08/29/18 22:08	1
13C3-PFBS	101		25 - 150	08/28/18 09:15	08/29/18 22:08	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: DUP
Date Collected: 08/21/18 12:00
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-22
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:23	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:23	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:23	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:23	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:23	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	105		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C4-PFHpA	84		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C4 PFOA	100		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C4 PFOS	95		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C5 PFNA	94		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C4 PFBA	78		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C2 PFHxA	87		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C2 PFDA	101		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C2 PFUnA	90		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C2 PFDoA	76		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C8 FOSA	77		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C5-PFPeA	80		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C2-PFTeDA	83		25 - 150	08/28/18 09:15	08/29/18 22:23	1
d3-NMeFOSAA	80		25 - 150	08/28/18 09:15	08/29/18 22:23	1
d5-NEtFOSAA	91		25 - 150	08/28/18 09:15	08/29/18 22:23	1
M2-6:2FTS	93		25 - 150	08/28/18 09:15	08/29/18 22:23	1
M2-8:2FTS	102		25 - 150	08/28/18 09:15	08/29/18 22:23	1
13C3-PFBS	98		25 - 150	08/28/18 09:15	08/29/18 22:23	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 30 JONES

Lab Sample ID: 200-44915-24

Date Collected: 08/21/18 15:00

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.9		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluoropentanoic acid (PFPeA)	3.1		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorohexanoic acid (PFHxA)	2.3		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluoroheptanoic acid (PFHpA)	2.0		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorooctanoic acid (PFOA)	4.3		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorobutanesulfonic acid (PFBS)	1.9		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorooctanesulfonic acid (PFOS)	5.8		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 22:39	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:39	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:39	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:39	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 22:39	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	104		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C4-PFHpA	83		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C4 PFOA	88		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C4 PFOS	101		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C5 PFNA	89		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C4 PFBA	62		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C2 PFHxA	81		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C2 PFDA	96		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C2 PFUnA	86		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C2 PFDoA	79		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C8 FOSA	74		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C5-PFPeA	73		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C2-PFTeDA	82		25 - 150	08/28/18 09:15	08/29/18 22:39	1
d3-NMeFOSAA	75		25 - 150	08/28/18 09:15	08/29/18 22:39	1
d5-NEtFOSAA	80		25 - 150	08/28/18 09:15	08/29/18 22:39	1
M2-6:2FTS	82		25 - 150	08/28/18 09:15	08/29/18 22:39	1
M2-8:2FTS	107		25 - 150	08/28/18 09:15	08/29/18 22:39	1
13C3-PFBS	104		25 - 150	08/28/18 09:15	08/29/18 22:39	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-30J

Lab Sample ID: 200-44915-25

Date Collected: 08/21/18 14:58

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluoropentanoic acid (PFPeA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluoroheptanoic acid (PFHpA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorooctanoic acid (PFOA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorononanoic acid (PFNA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorodecanoic acid (PFDA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	1.8	1.8	ng/L		09/05/18 08:30	09/07/18 02:06	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	18	18	ng/L		09/05/18 08:30	09/07/18 02:06	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	18	18	ng/L		09/05/18 08:30	09/07/18 02:06	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	18	18	ng/L		09/05/18 08:30	09/07/18 02:06	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	18	18	ng/L		09/05/18 08:30	09/07/18 02:06	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	18	18	ng/L		09/05/18 08:30	09/07/18 02:06	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	88		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C4-PFHxA	83		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C4 PFOA	100		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C4 PFOS	100		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C5 PFNA	93		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C4 PFBA	75		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C2 PFHxA	90		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C2 PFDA	114		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C2 PFUnA	103		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C2 PFDoA	80		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C8 FOSA	52		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C5-PFPeA	88		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C2-PFTeDA	70		25 - 150				09/05/18 08:30	09/07/18 02:06	1
d3-NMeFOSAA	89		25 - 150				09/05/18 08:30	09/07/18 02:06	1
d5-NEtFOSAA	95		25 - 150				09/05/18 08:30	09/07/18 02:06	1
M2-6:2FTS	106		25 - 150				09/05/18 08:30	09/07/18 02:06	1
M2-8:2FTS	116		25 - 150				09/05/18 08:30	09/07/18 02:06	1
13C3-PFBS	89		25 - 150				09/05/18 08:30	09/07/18 02:06	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 82 JONES

Lab Sample ID: 200-44915-26

Date Collected: 08/21/18 15:20

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	22		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluoropentanoic acid (PFPeA)	79		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorohexanoic acid (PFHxA)	45		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluoroheptanoic acid (PFHpA)	28		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorooctanoic acid (PFOA)	16		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorononanoic acid (PFNA)	4.5		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorohexanesulfonic acid (PFHxS)	3.6		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorooctanesulfonic acid (PFOS)	7.1		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 22:55	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 22:55	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 22:55	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 22:55	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 22:55	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	112		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C4-PFHpA	90		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C4 PFOA	98		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C4 PFOS	104		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C5 PFNA	93		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C4 PFBA	56		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C2 PFHxA	79		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C2 PFDA	102		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C2 PFUnA	84		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C2 PFDoA	67		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C8 FOSA	76		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C5-PFPeA	70		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C2-PFTeDA	75		25 - 150	08/28/18 09:15	08/29/18 22:55	1
d3-NMeFOSAA	77		25 - 150	08/28/18 09:15	08/29/18 22:55	1
d5-NEtFOSAA	79		25 - 150	08/28/18 09:15	08/29/18 22:55	1
M2-6:2FTS	142		25 - 150	08/28/18 09:15	08/29/18 22:55	1
M2-8:2FTS	110		25 - 150	08/28/18 09:15	08/29/18 22:55	1
13C3-PFBS	88		25 - 150	08/28/18 09:15	08/29/18 22:55	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-82J

Lab Sample ID: 200-44915-27

Date Collected: 08/21/18 15:18

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluoropentanoic acid (PFPeA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorohexanoic acid (PFHxA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluoroheptanoic acid (PFHpA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorooctanoic acid (PFOA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorononanoic acid (PFNA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorodecanoic acid (PFDA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluoroundecanoic acid (PFUnA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorododecanoic acid (PFDoA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:22	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:22	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:22	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:22	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:22	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:22	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	83		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C4-PFHxA	76		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C4 PFOA	95		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C4 PFOS	89		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C5 PFNA	85		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C4 PFBA	68		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C2 PFHxA	85		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C2 PFDA	100		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C2 PFUnA	97		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C2 PFDoA	73		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C8 FOSA	48		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C5-PFPeA	82		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C2-PFTeDA	65		25 - 150				09/05/18 08:30	09/07/18 02:22	1
d3-NMeFOSAA	86		25 - 150				09/05/18 08:30	09/07/18 02:22	1
d5-NEtFOSAA	79		25 - 150				09/05/18 08:30	09/07/18 02:22	1
M2-6:2FTS	102		25 - 150				09/05/18 08:30	09/07/18 02:22	1
M2-8:2FTS	107		25 - 150				09/05/18 08:30	09/07/18 02:22	1
13C3-PFBS	78		25 - 150				09/05/18 08:30	09/07/18 02:22	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 895 7B
Date Collected: 08/21/18 16:16
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-28
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorooctanesulfonic acid (PFOS)	2.3		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:11	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 23:11	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 23:11	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 23:11	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 23:11	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C4-PFHpA	82		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C4 PFOA	92		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C4 PFOS	96		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C5 PFNA	84		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C4 PFBA	67		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C2 PFHxA	80		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C2 PFDA	96		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C2 PFUnA	86		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C2 PFDoA	73		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C8 FOSA	70		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C5-PFPeA	68		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C2-PFTeDA	78		25 - 150	08/28/18 09:15	08/29/18 23:11	1
d3-NMeFOSAA	75		25 - 150	08/28/18 09:15	08/29/18 23:11	1
d5-NEtFOSAA	76		25 - 150	08/28/18 09:15	08/29/18 23:11	1
M2-6:2FTS	92		25 - 150	08/28/18 09:15	08/29/18 23:11	1
M2-8:2FTS	99		25 - 150	08/28/18 09:15	08/29/18 23:11	1
13C3-PFBS	104		25 - 150	08/28/18 09:15	08/29/18 23:11	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-895
Date Collected: 08/21/18 16:17
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-29
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluoropentanoic acid (PFPeA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorohexanoic acid (PFHxA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluoroheptanoic acid (PFHpA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorooctanoic acid (PFOA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorononanoic acid (PFNA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorodecanoic acid (PFDA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluoroundecanoic acid (PFUnA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorododecanoic acid (PFDoA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	2.0	2.0	ng/L		09/05/18 08:30	09/07/18 02:38	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:38	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:38	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:38	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:38	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	20	20	ng/L		09/05/18 08:30	09/07/18 02:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	86		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C4-PFHxA	82		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C4 PFOA	91		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C4 PFOS	88		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C5 PFNA	86		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C4 PFBA	66		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C2 PFHxA	90		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C2 PFDA	99		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C2 PFUnA	91		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C2 PFDoA	76		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C8 FOSA	47		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C5-PFPeA	82		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C2-PFTeDA	64		25 - 150				09/05/18 08:30	09/07/18 02:38	1
d3-NMeFOSAA	78		25 - 150				09/05/18 08:30	09/07/18 02:38	1
d5-NEtFOSAA	76		25 - 150				09/05/18 08:30	09/07/18 02:38	1
M2-6:2FTS	93		25 - 150				09/05/18 08:30	09/07/18 02:38	1
M2-8:2FTS	108		25 - 150				09/05/18 08:30	09/07/18 02:38	1
13C3-PFBS	87		25 - 150				09/05/18 08:30	09/07/18 02:38	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 475 GORGE

Lab Sample ID: 200-44915-30

Date Collected: 08/21/18 16:40

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluoropentanoic acid (PFPeA)	2.9		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorohexanoic acid (PFHxA)	1.8		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		08/28/18 09:15	08/29/18 23:27	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 23:27	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 23:27	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 23:27	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/28/18 09:15	08/29/18 23:27	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	103		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C4-PFHpA	88		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C4 PFOA	96		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C4 PFOS	87		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C5 PFNA	90		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C4 PFBA	65		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C2 PFHxA	75		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C2 PFDA	92		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C2 PFUnA	77		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C2 PFDoA	70		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C8 FOSA	79		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C5-PFPeA	79		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C2-PFTeDA	74		25 - 150	08/28/18 09:15	08/29/18 23:27	1
d3-NMeFOSAA	64		25 - 150	08/28/18 09:15	08/29/18 23:27	1
d5-NEtFOSAA	75		25 - 150	08/28/18 09:15	08/29/18 23:27	1
M2-6:2FTS	94		25 - 150	08/28/18 09:15	08/29/18 23:27	1
M2-8:2FTS	103		25 - 150	08/28/18 09:15	08/29/18 23:27	1
13C3-PFBS	100		25 - 150	08/28/18 09:15	08/29/18 23:27	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-475G

Lab Sample ID: 200-44915-31

Date Collected: 08/21/18 16:41

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluoropentanoic acid (PFPeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluoroheptanoic acid (PFHpA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorooctanoic acid (PFOA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorononanoic acid (PFNA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorodecanoic acid (PFDA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 02:54	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 02:54	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 02:54	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 02:54	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 02:54	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 02:54	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	84		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C4-PFHxA	83		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C4 PFOA	93		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C4 PFOS	87		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C5 PFNA	88		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C4 PFBA	66		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C2 PFHxA	80		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C2 PFDA	100		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C2 PFUnA	94		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C2 PFDoA	71		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C8 FOSA	47		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C5-PFPeA	80		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C2-PFTeDA	63		25 - 150	09/05/18 08:30	09/07/18 02:54	1
d3-NMeFOSAA	90		25 - 150	09/05/18 08:30	09/07/18 02:54	1
d5-NEtFOSAA	83		25 - 150	09/05/18 08:30	09/07/18 02:54	1
M2-6:2FTS	114		25 - 150	09/05/18 08:30	09/07/18 02:54	1
M2-8:2FTS	108		25 - 150	09/05/18 08:30	09/07/18 02:54	1
13C3-PFBS	80		25 - 150	09/05/18 08:30	09/07/18 02:54	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 375 GORGE

Lab Sample ID: 200-44915-32

Date Collected: 08/21/18 17:00

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluoropentanoic acid (PFPeA)	6.8		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorohexanoic acid (PFHxA)	3.9		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluoroheptanoic acid (PFHpA)	4.6		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorooctanoic acid (PFOA)	2.2		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorooctanesulfonic acid (PFOS)	2.8		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.7	1.7	ng/L		08/28/18 09:15	08/29/18 23:43	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 23:43	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 23:43	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 23:43	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		08/28/18 09:15	08/29/18 23:43	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	87		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C4-PFHpA	83		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C4 PFOA	90		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C4 PFOS	97		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C5 PFNA	88		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C4 PFBA	76		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C2 PFHxA	73		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C2 PFDA	107		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C2 PFUnA	93		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C2 PFDoA	82		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C8 FOSA	73		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C5-PFPeA	81		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C2-PFTeDA	82		25 - 150				08/28/18 09:15	08/29/18 23:43	1
d3-NMeFOSAA	84		25 - 150				08/28/18 09:15	08/29/18 23:43	1
d5-NEtFOSAA	82		25 - 150				08/28/18 09:15	08/29/18 23:43	1
M2-6:2FTS	98		25 - 150				08/28/18 09:15	08/29/18 23:43	1
M2-8:2FTS	100		25 - 150				08/28/18 09:15	08/29/18 23:43	1
13C3-PFBS	96		25 - 150				08/28/18 09:15	08/29/18 23:43	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: FB-375G

Lab Sample ID: 200-44915-33

Date Collected: 08/21/18 16:58

Matrix: Water

Date Received: 08/22/18 11:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluoropentanoic acid (PFPeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorohexanoic acid (PFHxA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluoroheptanoic acid (PFHpA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorooctanoic acid (PFOA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorononanoic acid (PFNA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorodecanoic acid (PFDA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluoroundecanoic acid (PFUnA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorododecanoic acid (PFDoA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorotridecanoic Acid (PFTriA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorotetradecanoic acid (PFTeA)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorooctanesulfonic acid (PFOS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorodecanesulfonic acid (PFDS)	ND	H	1.9	1.9	ng/L		09/05/18 08:30	09/07/18 03:25	1
Perfluorooctane Sulfonamide (PFOSA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 03:25	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 03:25	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 03:25	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 03:25	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND	H	19	19	ng/L		09/05/18 08:30	09/07/18 03:25	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	95		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C4-PFHxA	82		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C4 PFOA	94		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C4 PFOS	95		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C5 PFNA	92		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C4 PFBA	69		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C2 PFHxA	93		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C2 PFDA	112		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C2 PFUnA	100		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C2 PFDoA	77		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C8 FOSA	49		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C5-PFPeA	81		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C2-PFTeDA	64		25 - 150	09/05/18 08:30	09/07/18 03:25	1
d3-NMeFOSAA	93		25 - 150	09/05/18 08:30	09/07/18 03:25	1
d5-NEtFOSAA	85		25 - 150	09/05/18 08:30	09/07/18 03:25	1
M2-6:2FTS	90		25 - 150	09/05/18 08:30	09/07/18 03:25	1
M2-8:2FTS	118		25 - 150	09/05/18 08:30	09/07/18 03:25	1
13C3-PFBS	89		25 - 150	09/05/18 08:30	09/07/18 03:25	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 581 7B
Date Collected: 08/21/18 11:58
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-34
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluoropentanoic acid (PFPeA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorohexanoic acid (PFHxA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluoroheptanoic acid (PFHpA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorooctanoic acid (PFOA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorononanoic acid (PFNA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorodecanoic acid (PFDA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluoroundecanoic acid (PFUnA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorododecanoic acid (PFDoA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
Perfluorooctane Sulfonamide (PFOSA)	ND		2.2	2.2	ng/L		08/28/18 09:15	08/29/18 23:59	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		22	22	ng/L		08/28/18 09:15	08/29/18 23:59	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		22	22	ng/L		08/28/18 09:15	08/29/18 23:59	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		22	22	ng/L		08/28/18 09:15	08/29/18 23:59	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		22	22	ng/L		08/28/18 09:15	08/29/18 23:59	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C4-PFHxA	82		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C4 PFOA	89		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C4 PFOS	92		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C5 PFNA	92		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C4 PFBA	46		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C2 PFHxA	74		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C2 PFDA	102		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C2 PFUnA	85		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C2 PFDoA	70		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C8 FOSA	65		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C5-PFPeA	60		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C2-PFTeDA	74		25 - 150	08/28/18 09:15	08/29/18 23:59	1
d3-NMeFOSAA	74		25 - 150	08/28/18 09:15	08/29/18 23:59	1
d5-NEtFOSAA	79		25 - 150	08/28/18 09:15	08/29/18 23:59	1
M2-6:2FTS	102		25 - 150	08/28/18 09:15	08/29/18 23:59	1
M2-8:2FTS	96		25 - 150	08/28/18 09:15	08/29/18 23:59	1
13C3-PFBS	80		25 - 150	08/28/18 09:15	08/29/18 23:59	1

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFHxS (25-150)	PFHpA (25-150)	PFOA (25-150)	PFOS (25-150)	PFNA (25-150)	PFBA (25-150)	PFHxA (25-150)	PFDA (25-150)
200-44915-1	656 7B	107	87	91	106	92	47	82	111
200-44915-3	705 7B	108	91	94	97	91	68	95	109
200-44915-4	FB-705	88	79	95	95	85	76	92	104
200-44915-5	205 7B	112	86	96	110	89	38	67	115
200-44915-6	FB-205	97	87	98	95	91	73	88	112
200-44915-7	VTRANS	102	76	91	94	99	28	52	107
200-44915-8	FB-VTRANS	89	79	94	92	93	70	88	112
200-44915-9	859 7B	105	84	89	103	87	59	77	96
200-44915-10	FB-859	98	83	94	105	96	74	92	114
200-44915-11	443 7B	106	86	97	103	89	65	80	105
200-44915-13	940 MIDDLE	119	95	100	102	92	53	77	103
200-44915-14	FB-940	99	91	101	99	94	77	91	113
200-44915-15	866 7B	101	88	93	109	94	76	86	102
200-44915-16	FB-866	91	83	95	91	89	71	88	108
200-44915-17	84 7B	109	86	98	99	96	76	83	108
200-44915-19	339 7B	99	83	100	88	88	54	74	91
200-44915-21	742 7B	111	91	89	105	95	68	83	105
200-44915-22	DUP	105	84	100	95	94	78	87	101
200-44915-24	30 JONES	104	83	88	101	89	62	81	96
200-44915-25	FB-30J	88	83	100	100	93	75	90	114
200-44915-26	82 JONES	112	90	98	104	93	56	79	102
200-44915-27	FB-82J	83	76	95	89	85	68	85	100
200-44915-28	895 7B	96	82	92	96	84	67	80	96
200-44915-29	FB-895	86	82	91	88	86	66	90	99
200-44915-30	475 GORGE	103	88	96	87	90	65	75	92
200-44915-31	FB-475G	84	83	93	87	88	66	80	100
200-44915-32	375 GORGE	87	83	90	97	88	76	73	107
200-44915-33	FB-375G	95	82	94	95	92	69	93	112
200-44915-34	581 7B	96	82	89	92	92	46	74	102
LCS 200-133389/2-A	Lab Control Sample	99	92	96	108	94	78	85	107
LCS 200-133664/2-A	Lab Control Sample	91	88	96	96	87	73	85	101
LCSD 200-133389/3-A	Lab Control Sample Dup	106	92	102	104	96	81	86	115
LCSD 200-133664/3-A	Lab Control Sample Dup	99	86	98	95	95	78	82	112
MB 200-133389/1-A	Method Blank	107	94	103	104	102	87	94	118
MB 200-133664/1-A	Method Blank	85	83	92	85	88	68	80	107

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFOA (25-150)	PFDoA (25-150)	PFOSA (25-150)	PFPeA (25-150)	PFTDA (25-150)	-NMeFOS ₁ (25-150)	-NEtFOS ₁ (25-150)	M262FOS ₁ (25-150)
200-44915-1	656 7B	111	84	79	68	82	102	108	124
200-44915-3	705 7B	85	74	78	89	80	64	78	142
200-44915-4	FB-705	96	72	58	79	64	86	81	107
200-44915-5	205 7B	105	81	79	47	84	81	98	136
200-44915-6	FB-205	103	72	49	87	61	93	92	110
200-44915-7	VTRANS	91	75	74	53	83	85	85	182 *
200-44915-8	FB-VTRANS	103	81	56	82	72	95	90	100
200-44915-9	859 7B	87	77	67	73	77	71	80	142
200-44915-10	FB-859	109	81	51	84	69	97	93	115
200-44915-11	443 7B	88	76	77	88	78	81	84	132
200-44915-13	940 MIDDLE	95	76	83	61	80	74	82	114

TestAmerica Burlington

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFUnA (25-150)	PFDoA (25-150)	PFOSA (25-150)	PFPeA (25-150)	PFTDA (25-150)	-NMeFOS ₁ (25-150)	-NEtFOS ₁ (25-150)	M262FTS (25-150)
200-44915-14	FB-940	108	80	49	83	70	84	95	106
200-44915-15	866 7B	95	76	77	87	77	84	84	86
200-44915-16	FB-866	99	74	48	87	60	90	79	101
200-44915-17	84 7B	88	76	82	87	81	74	81	83
200-44915-19	339 7B	83	70	59	81	77	76	78	129
200-44915-21	742 7B	98	80	73	79	81	91	89	124
200-44915-22	DUP	90	76	77	80	83	80	91	93
200-44915-24	30 JONES	86	79	74	73	82	75	80	82
200-44915-25	FB-30J	103	80	52	88	70	89	95	106
200-44915-26	82 JONES	84	67	76	70	75	77	79	142
200-44915-27	FB-82J	97	73	48	82	65	86	79	102
200-44915-28	895 7B	86	73	70	68	78	75	76	92
200-44915-29	FB-895	91	76	47	82	64	78	76	93
200-44915-30	475 GORGE	77	70	79	79	74	64	75	94
200-44915-31	FB-475G	94	71	47	80	63	90	83	114
200-44915-32	375 GORGE	93	82	73	81	82	84	82	98
200-44915-33	FB-375G	100	77	49	81	64	93	85	90
200-44915-34	581 7B	85	70	65	60	74	74	79	102
LCS 200-133389/2-A	Lab Control Sample	112	96	67	90	69	111	105	123
LCS 200-133664/2-A	Lab Control Sample	101	78	52	84	60	96	87	108
LCSD 200-133389/3-A	Lab Control Sample Dup	112	82	59	85	70	94	94	106
LCSD 200-133664/3-A	Lab Control Sample Dup	110	75	63	91	64	97	89	97
MB 200-133389/1-A	Method Blank	117	76	67	93	68	97	92	80
MB 200-133664/1-A	Method Blank	98	73	45	78	57	89	83	97

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M282FTS (25-150)	3C3-PFB ₁ (25-150)
200-44915-1	656 7B	117	92
200-44915-3	705 7B	94	106
200-44915-4	FB-705	105	89
200-44915-5	205 7B	130	80
200-44915-6	FB-205	115	98
200-44915-7	VTRANS	133	74
200-44915-8	FB-VTRANS	122	82
200-44915-9	859 7B	116	107
200-44915-10	FB-859	118	90
200-44915-11	443 7B	110	95
200-44915-13	940 MIDDLE	111	91
200-44915-14	FB-940	124	96
200-44915-15	866 7B	107	105
200-44915-16	FB-866	120	90
200-44915-17	84 7B	109	101
200-44915-19	339 7B	95	89
200-44915-21	742 7B	123	101
200-44915-22	DUP	102	98
200-44915-24	30 JONES	107	104
200-44915-25	FB-30J	116	89
200-44915-26	82 JONES	110	88
200-44915-27	FB-82J	107	78

TestAmerica Burlington

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M282FTS (25-150)	3C3-PFB: (25-150)
200-44915-28	895 7B	99	104
200-44915-29	FB-895	108	87
200-44915-30	475 GORGE	103	100
200-44915-31	FB-475G	108	80
200-44915-32	375 GORGE	100	96
200-44915-33	FB-375G	118	89
200-44915-34	581 7B	96	80
LCS 200-133389/2-A	Lab Control Sample	130	105
LCS 200-133664/2-A	Lab Control Sample	102	79
LCSD 200-133389/3-A	Lab Control Sample Dup	120	98
LCSD 200-133664/3-A	Lab Control Sample Dup	105	89
MB 200-133389/1-A	Method Blank	129	99
MB 200-133664/1-A	Method Blank	105	91

Surrogate Legend

PFHxS = 18O2 PFHxS
 PFHpA = 13C4-PFHpA
 PFOA = 13C4 PFOA
 PFOS = 13C4 PFOS
 PFNA = 13C5 PFNA
 PFBA = 13C4 PFBA
 PFHxA = 13C2 PFHxA
 PFDA = 13C2 PFDA
 PFUnA = 13C2 PFUnA
 PFDaA = 13C2 PFDaA
 PFOSA = 13C8 FOSA
 PFPeA = 13C5-PFPeA
 PFTDA = 13C2-PFTeDA
 d3-NMeFOSAA = d3-NMeFOSAA
 d5-NEtFOSAA = d5-NEtFOSAA
 M262FTS = M2-6:2FTS
 M282FTS = M2-8:2FTS
 13C3-PFBS = 13C3-PFBS

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-133389/1-A
Matrix: Water
Analysis Batch: 133459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 133389

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
Perfluorooctane Sulfonamide (PFOSA)	ND		2.0	2.0	ng/L		08/28/18 09:15	08/29/18 18:10	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	20	ng/L		08/28/18 09:15	08/29/18 18:10	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	20	ng/L		08/28/18 09:15	08/29/18 18:10	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		20	20	ng/L		08/28/18 09:15	08/29/18 18:10	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		20	20	ng/L		08/28/18 09:15	08/29/18 18:10	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	107		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C4-PFHpA	94		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C4 PFOA	103		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C4 PFOS	104		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C5 PFNA	102		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C4 PFBA	87		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C2 PFHxA	94		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C2 PFDA	118		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C2 PFUnA	117		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C2 PFDoA	76		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C8 FOSA	67		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C5-PFPeA	93		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C2-PFTeDA	68		25 - 150	08/28/18 09:15	08/29/18 18:10	1
d3-NMeFOSAA	97		25 - 150	08/28/18 09:15	08/29/18 18:10	1
d5-NEtFOSAA	92		25 - 150	08/28/18 09:15	08/29/18 18:10	1
M2-6:2FTS	80		25 - 150	08/28/18 09:15	08/29/18 18:10	1
M2-8:2FTS	129		25 - 150	08/28/18 09:15	08/29/18 18:10	1
13C3-PFBS	99		25 - 150	08/28/18 09:15	08/29/18 18:10	1

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-133389/2-A

Matrix: Water

Analysis Batch: 133459

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 133389

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	46.5		ng/L		116	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	43.5		ng/L		109	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	43.8		ng/L		109	50 - 150
Perfluoroheptanoic acid (PFHpA)	40.0	42.7		ng/L		107	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	43.6		ng/L		109	50 - 150
Perfluorononanoic acid (PFNA)	40.0	42.1		ng/L		105	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	39.7		ng/L		99	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	42.7		ng/L		107	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	38.6		ng/L		96	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	25.7		ng/L		64	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	36.9		ng/L		92	50 - 150
Perfluorobutanesulfonic acid (PFBS)	40.0	38.6		ng/L		96	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	40.0	42.8		ng/L		107	50 - 150
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	37.6		ng/L		94	50 - 150
Perfluorooctanesulfonic acid (PFOS)	40.0	40.6		ng/L		101	50 - 150
Perfluorodecanesulfonic acid (PFDS)	40.0	33.8		ng/L		85	50 - 150
Perfluorooctane Sulfonamide (PFOSA)	40.0	36.7		ng/L		92	50 - 150
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	39.5		ng/L		99	50 - 150
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	43.2		ng/L		108	50 - 150
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	33.3		ng/L		83	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	45.4		ng/L		113	50 - 150

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	99		25 - 150
13C4-PFHpA	92		25 - 150
13C4 PFOA	96		25 - 150
13C4 PFOS	108		25 - 150
13C5 PFNA	94		25 - 150
13C4 PFBA	78		25 - 150
13C2 PFHxA	85		25 - 150
13C2 PFDA	107		25 - 150
13C2 PFUnA	112		25 - 150
13C2 PFDoA	96		25 - 150
13C8 FOSA	67		25 - 150
13C5-PFPeA	90		25 - 150
13C2-PFTeDA	69		25 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-133389/2-A
Matrix: Water
Analysis Batch: 133459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133389

<i>Isotope Dilution</i>	<i>LCS %Recovery</i>	<i>LCS Qualifier</i>	<i>Limits</i>
<i>d3-NMeFOSAA</i>	111		25 - 150
<i>d5-NEtFOSAA</i>	105		25 - 150
<i>M2-6:2FTS</i>	123		25 - 150
<i>M2-8:2FTS</i>	130		25 - 150
<i>13C3-PFBS</i>	105		25 - 150

Lab Sample ID: LCSD 200-133389/3-A
Matrix: Water
Analysis Batch: 133459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 133389

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>Limit</i>
Perfluorobutanoic acid (PFBA)	40.0	43.6		ng/L		109	50 - 150	6	30
Perfluoropentanoic acid (PFPeA)	40.0	45.6		ng/L		114	50 - 150	5	30
Perfluorohexanoic acid (PFHxA)	40.0	44.7		ng/L		112	50 - 150	2	30
Perfluoroheptanoic acid (PFHpA)	40.0	42.2		ng/L		106	50 - 150	1	30
Perfluorooctanoic acid (PFOA)	40.0	40.4		ng/L		101	50 - 150	8	30
Perfluorononanoic acid (PFNA)	40.0	43.7		ng/L		109	50 - 150	4	30
Perfluorodecanoic acid (PFDA)	40.0	38.2		ng/L		95	50 - 150	4	30
Perfluoroundecanoic acid (PFUnA)	40.0	42.1		ng/L		105	50 - 150	1	30
Perfluorododecanoic acid (PFDoA)	40.0	38.7		ng/L		97	50 - 150	0	30
Perfluorotridecanoic Acid (PFTriA)	40.0	27.9		ng/L		70	50 - 150	8	30
Perfluorotetradecanoic acid (PFTeA)	40.0	41.7		ng/L		104	50 - 150	12	30
Perfluorobutanesulfonic acid (PFBS)	40.0	44.4		ng/L		111	50 - 150	14	30
Perfluorohexanesulfonic acid (PFHxS)	40.0	38.3		ng/L		96	50 - 150	11	30
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	41.0		ng/L		102	50 - 150	8	30
Perfluorooctanesulfonic acid (PFOS)	40.0	41.4		ng/L		104	50 - 150	2	30
Perfluorodecanesulfonic acid (PFDS)	40.0	31.5		ng/L		79	50 - 150	7	30
Perfluorooctane Sulfonamide (PFOSA)	40.0	34.8		ng/L		87	50 - 150	5	30
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	46.2		ng/L		116	50 - 150	16	30
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	41.2		ng/L		103	50 - 150	5	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	45.2		ng/L		113	50 - 150	30	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	47.5		ng/L		119	50 - 150	5	30

<i>Isotope Dilution</i>	<i>LCSD %Recovery</i>	<i>LCSD Qualifier</i>	<i>Limits</i>
<i>18O2 PFHxS</i>	106		25 - 150
<i>13C4-PFHpa</i>	92		25 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-133389/3-A
Matrix: Water
Analysis Batch: 133459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 133389

<i>Isotope Dilution</i>	<i>LCSD %Recovery</i>	<i>LCSD Qualifier</i>	<i>Limits</i>
13C4 PFOA	102		25 - 150
13C4 PFOS	104		25 - 150
13C5 PFNA	96		25 - 150
13C4 PFBA	81		25 - 150
13C2 PFHxA	86		25 - 150
13C2 PFDA	115		25 - 150
13C2 PFUnA	112		25 - 150
13C2 PFDoA	82		25 - 150
13C8 FOSA	59		25 - 150
13C5-PFPeA	85		25 - 150
13C2-PFTeDA	70		25 - 150
d3-NMeFOSAA	94		25 - 150
d5-NEtFOSAA	94		25 - 150
M2-6:2FTS	106		25 - 150
M2-8:2FTS	120		25 - 150
13C3-PFBS	98		25 - 150

Lab Sample ID: MB 200-133664/1-A
Matrix: Water
Analysis Batch: 133762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 133664

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorooctane Sulfonamide (PFOSA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	20	ng/L		09/05/18 08:30	09/06/18 21:36	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	20	ng/L		09/05/18 08:30	09/06/18 21:36	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		20	20	ng/L		09/05/18 08:30	09/06/18 21:36	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		20	20	ng/L		09/05/18 08:30	09/06/18 21:36	1

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
18O2 PFHxS	85		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C4-PFHpA	83		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C4 PFOA	92		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C4 PFOS	85		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C5 PFNA	88		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C4 PFBA	68		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2 PFHxA	80		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2 PFDA	107		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2 PFUnA	98		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2 PFDoA	73		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C8 FOSA	45		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C5-PFPeA	78		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2-PFTeDA	57		25 - 150	09/05/18 08:30	09/06/18 21:36	1
d3-NMeFOSAA	89		25 - 150	09/05/18 08:30	09/06/18 21:36	1
d5-NEtFOSAA	83		25 - 150	09/05/18 08:30	09/06/18 21:36	1
M2-6:2FTS	97		25 - 150	09/05/18 08:30	09/06/18 21:36	1
M2-8:2FTS	105		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C3-PFBS	91		25 - 150	09/05/18 08:30	09/06/18 21:36	1

Lab Sample ID: LCS 200-133664/2-A
Matrix: Water
Analysis Batch: 133762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133664

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	46.5		ng/L		116	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	47.1		ng/L		118	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	43.8		ng/L		110	50 - 150
Perfluoroheptanoic acid (PFHpA)	40.0	41.7		ng/L		104	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	42.5		ng/L		106	50 - 150
Perfluorononanoic acid (PFNA)	40.0	46.1		ng/L		115	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	44.1		ng/L		110	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	46.8		ng/L		117	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	43.7		ng/L		109	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	30.9		ng/L		77	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	39.0		ng/L		98	50 - 150
Perfluorobutanesulfonic acid (PFBS)	40.0	49.8		ng/L		125	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	40.0	42.1		ng/L		105	50 - 150
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	40.1		ng/L		100	50 - 150
Perfluorooctanesulfonic acid (PFOS)	40.0	41.9		ng/L		105	50 - 150
Perfluorodecanesulfonic acid (PFDS)	40.0	35.2		ng/L		88	50 - 150
Perfluorooctane Sulfonamide (PFOSA)	40.0	38.7		ng/L		97	50 - 150
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	47.5		ng/L		119	50 - 150
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	45.5		ng/L		114	50 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-133664/2-A
Matrix: Water
Analysis Batch: 133762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133664

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	34.4		ng/L		86	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	47.2		ng/L		118	50 - 150
		LCS %Recovery	LCS Qualifier	Limits			
<i>18O2 PFHxS</i>		91		25 - 150			
<i>13C4-PFHpA</i>		88		25 - 150			
<i>13C4 PFOA</i>		96		25 - 150			
<i>13C4 PFOS</i>		96		25 - 150			
<i>13C5 PFNA</i>		87		25 - 150			
<i>13C4 PFBA</i>		73		25 - 150			
<i>13C2 PFHxA</i>		85		25 - 150			
<i>13C2 PFDA</i>		101		25 - 150			
<i>13C2 PFUnA</i>		101		25 - 150			
<i>13C2 PFDoA</i>		78		25 - 150			
<i>13C8 FOSA</i>		52		25 - 150			
<i>13C5-PFPeA</i>		84		25 - 150			
<i>13C2-PFTeDA</i>		60		25 - 150			
<i>d3-NMeFOSAA</i>		96		25 - 150			
<i>d5-NEtFOSAA</i>		87		25 - 150			
<i>M2-6:2FTS</i>		108		25 - 150			
<i>M2-8:2FTS</i>		102		25 - 150			
<i>13C3-PFBS</i>		79		25 - 150			

Lab Sample ID: LCSD 200-133664/3-A
Matrix: Water
Analysis Batch: 133762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 133664

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorobutanoic acid (PFBA)	40.0	44.6		ng/L		111	50 - 150	4	30
Perfluoropentanoic acid (PFPeA)	40.0	46.0		ng/L		115	50 - 150	2	30
Perfluorohexanoic acid (PFHxA)	40.0	49.7		ng/L		124	50 - 150	13	30
Perfluoroheptanoic acid (PFHpA)	40.0	45.2		ng/L		113	50 - 150	8	30
Perfluorooctanoic acid (PFOA)	40.0	44.4		ng/L		111	50 - 150	4	30
Perfluorononanoic acid (PFNA)	40.0	42.8		ng/L		107	50 - 150	7	30
Perfluorodecanoic acid (PFDA)	40.0	42.4		ng/L		106	50 - 150	4	30
Perfluoroundecanoic acid (PFUnA)	40.0	45.0		ng/L		113	50 - 150	4	30
Perfluorododecanoic acid (PFDoA)	40.0	46.7		ng/L		117	50 - 150	7	30
Perfluorotridecanoic Acid (PFTriA)	40.0	36.6		ng/L		91	50 - 150	17	30
Perfluorotetradecanoic acid (PFTeA)	40.0	47.2		ng/L		118	50 - 150	19	30
Perfluorobutanesulfonic acid (PFBS)	40.0	47.5		ng/L		119	50 - 150	5	30
Perfluorohexanesulfonic acid (PFHxS)	40.0	39.8		ng/L		99	50 - 150	6	30
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	44.0		ng/L		110	50 - 150	9	30

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-133664/3-A
Matrix: Water
Analysis Batch: 133762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 133664

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	40.0	48.8		ng/L		122	50 - 150	15	30
Perfluorodecanesulfonic acid (PFDS)	40.0	35.5		ng/L		89	50 - 150	1	30
Perfluorooctane Sulfonamide (PFOSA)	40.0	37.6		ng/L		94	50 - 150	3	30
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	44.4		ng/L		111	50 - 150	7	30
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	41.3		ng/L		103	50 - 150	10	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	44.3		ng/L		111	50 - 150	25	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	47.0		ng/L		117	50 - 150	1	30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
18O2 PFHxS	99		25 - 150
13C4-PFHpA	86		25 - 150
13C4 PFOA	98		25 - 150
13C4 PFOS	95		25 - 150
13C5 PFNA	95		25 - 150
13C4 PFBA	78		25 - 150
13C2 PFHxA	82		25 - 150
13C2 PFDA	112		25 - 150
13C2 PFUnA	110		25 - 150
13C2 PFDoA	75		25 - 150
13C8 FOSA	63		25 - 150
13C5-PFPeA	91		25 - 150
13C2-PFTeDA	64		25 - 150
d3-NMeFOSAA	97		25 - 150
d5-NEtFOSAA	89		25 - 150
M2-6:2FTS	97		25 - 150
M2-8:2FTS	105		25 - 150
13C3-PFBS	89		25 - 150

QC Association Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

LCMS

Prep Batch: 133389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44915-1	656 7B	Total/NA	Water	3535	
200-44915-3	705 7B	Total/NA	Water	3535	
200-44915-5	205 7B	Total/NA	Water	3535	
200-44915-7	VTRANS	Total/NA	Water	3535	
200-44915-9	859 7B	Total/NA	Water	3535	
200-44915-11	443 7B	Total/NA	Water	3535	
200-44915-13	940 MIDDLE	Total/NA	Water	3535	
200-44915-15	866 7B	Total/NA	Water	3535	
200-44915-17	84 7B	Total/NA	Water	3535	
200-44915-19	339 7B	Total/NA	Water	3535	
200-44915-21	742 7B	Total/NA	Water	3535	
200-44915-22	DUP	Total/NA	Water	3535	
200-44915-24	30 JONES	Total/NA	Water	3535	
200-44915-26	82 JONES	Total/NA	Water	3535	
200-44915-28	895 7B	Total/NA	Water	3535	
200-44915-30	475 GORGE	Total/NA	Water	3535	
200-44915-32	375 GORGE	Total/NA	Water	3535	
200-44915-34	581 7B	Total/NA	Water	3535	
MB 200-133389/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-133389/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-133389/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 133459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44915-1	656 7B	Total/NA	Water	537 (modified)	133389
200-44915-3	705 7B	Total/NA	Water	537 (modified)	133389
200-44915-5	205 7B	Total/NA	Water	537 (modified)	133389
200-44915-7	VTRANS	Total/NA	Water	537 (modified)	133389
200-44915-9	859 7B	Total/NA	Water	537 (modified)	133389
200-44915-11	443 7B	Total/NA	Water	537 (modified)	133389
200-44915-13	940 MIDDLE	Total/NA	Water	537 (modified)	133389
200-44915-15	866 7B	Total/NA	Water	537 (modified)	133389
200-44915-17	84 7B	Total/NA	Water	537 (modified)	133389
200-44915-19	339 7B	Total/NA	Water	537 (modified)	133389
200-44915-21	742 7B	Total/NA	Water	537 (modified)	133389
200-44915-22	DUP	Total/NA	Water	537 (modified)	133389
200-44915-24	30 JONES	Total/NA	Water	537 (modified)	133389
200-44915-26	82 JONES	Total/NA	Water	537 (modified)	133389
200-44915-28	895 7B	Total/NA	Water	537 (modified)	133389
200-44915-30	475 GORGE	Total/NA	Water	537 (modified)	133389
200-44915-32	375 GORGE	Total/NA	Water	537 (modified)	133389
200-44915-34	581 7B	Total/NA	Water	537 (modified)	133389
MB 200-133389/1-A	Method Blank	Total/NA	Water	537 (modified)	133389
LCS 200-133389/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	133389
LCSD 200-133389/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	133389

Prep Batch: 133664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44915-4	FB-705	Total/NA	Water	3535	
200-44915-6	FB-205	Total/NA	Water	3535	
200-44915-8	FB-VTRANS	Total/NA	Water	3535	

TestAmerica Burlington

QC Association Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

LCMS (Continued)

Prep Batch: 133664 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44915-10	FB-859	Total/NA	Water	3535	
200-44915-14	FB-940	Total/NA	Water	3535	
200-44915-16	FB-866	Total/NA	Water	3535	
200-44915-25	FB-30J	Total/NA	Water	3535	
200-44915-27	FB-82J	Total/NA	Water	3535	
200-44915-29	FB-895	Total/NA	Water	3535	
200-44915-31	FB-475G	Total/NA	Water	3535	
200-44915-33	FB-375G	Total/NA	Water	3535	
MB 200-133664/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-133664/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-133664/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 133762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44915-4	FB-705	Total/NA	Water	537 (modified)	133664
200-44915-6	FB-205	Total/NA	Water	537 (modified)	133664
200-44915-8	FB-VTRANS	Total/NA	Water	537 (modified)	133664
200-44915-10	FB-859	Total/NA	Water	537 (modified)	133664
200-44915-14	FB-940	Total/NA	Water	537 (modified)	133664
200-44915-16	FB-866	Total/NA	Water	537 (modified)	133664
200-44915-25	FB-30J	Total/NA	Water	537 (modified)	133664
200-44915-27	FB-82J	Total/NA	Water	537 (modified)	133664
200-44915-29	FB-895	Total/NA	Water	537 (modified)	133664
200-44915-31	FB-475G	Total/NA	Water	537 (modified)	133664
200-44915-33	FB-375G	Total/NA	Water	537 (modified)	133664
MB 200-133664/1-A	Method Blank	Total/NA	Water	537 (modified)	133664
LCS 200-133664/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	133664
LCSD 200-133664/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	133664

Lab Chronicle

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
 SDG: 200-44915-1

Client Sample ID: 656 7B

Date Collected: 08/21/18 09:40

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 19:13	BWC	TAL BUR

Client Sample ID: 705 7B

Date Collected: 08/21/18 10:10

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 19:29	BWC	TAL BUR

Client Sample ID: FB-705

Date Collected: 08/21/18 10:08

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 00:31	BWC	TAL BUR

Client Sample ID: 205 7B

Date Collected: 08/21/18 10:35

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 19:45	BWC	TAL BUR

Client Sample ID: FB-205

Date Collected: 08/21/18 10:34

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 00:47	BWC	TAL BUR

Client Sample ID: VTRANS

Date Collected: 08/21/18 10:55

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 20:00	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Client Sample ID: FB-VTRANS

Date Collected: 08/21/18 10:54
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 01:02	BWC	TAL BUR

Client Sample ID: 859 7B

Date Collected: 08/21/18 11:30
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 20:16	BWC	TAL BUR

Client Sample ID: FB-859

Date Collected: 08/21/18 11:31
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 01:18	BWC	TAL BUR

Client Sample ID: 443 7B

Date Collected: 08/21/18 12:15
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 20:32	BWC	TAL BUR

Client Sample ID: 940 MIDDLE

Date Collected: 08/21/18 12:54
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 20:48	BWC	TAL BUR

Client Sample ID: FB-940

Date Collected: 08/21/18 12:53
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 01:34	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Client Sample ID: 866 7B

Date Collected: 08/21/18 13:10

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 21:04	BWC	TAL BUR

Client Sample ID: FB-866

Date Collected: 08/21/18 13:08

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 01:50	BWC	TAL BUR

Client Sample ID: 84 7B

Date Collected: 08/21/18 13:55

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 21:36	BWC	TAL BUR

Client Sample ID: 339 7B

Date Collected: 08/21/18 14:10

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 21:52	BWC	TAL BUR

Client Sample ID: 742 7B

Date Collected: 08/21/18 14:40

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 22:08	BWC	TAL BUR

Client Sample ID: DUP

Date Collected: 08/21/18 12:00

Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 22:23	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Client Sample ID: 30 JONES

Date Collected: 08/21/18 15:00
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 22:39	BWC	TAL BUR

Client Sample ID: FB-30J

Date Collected: 08/21/18 14:58
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 02:06	BWC	TAL BUR

Client Sample ID: 82 JONES

Date Collected: 08/21/18 15:20
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 22:55	BWC	TAL BUR

Client Sample ID: FB-82J

Date Collected: 08/21/18 15:18
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 02:22	BWC	TAL BUR

Client Sample ID: 895 7B

Date Collected: 08/21/18 16:16
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-28

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 23:11	BWC	TAL BUR

Client Sample ID: FB-895

Date Collected: 08/21/18 16:17
Date Received: 08/22/18 11:25

Lab Sample ID: 200-44915-29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 02:38	BWC	TAL BUR

TestAmerica Burlington

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Client Sample ID: 475 GORGE

Lab Sample ID: 200-44915-30

Date Collected: 08/21/18 16:40

Matrix: Water

Date Received: 08/22/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 23:27	BWC	TAL BUR

Client Sample ID: FB-475G

Lab Sample ID: 200-44915-31

Date Collected: 08/21/18 16:41

Matrix: Water

Date Received: 08/22/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 02:54	BWC	TAL BUR

Client Sample ID: 375 GORGE

Lab Sample ID: 200-44915-32

Date Collected: 08/21/18 17:00

Matrix: Water

Date Received: 08/22/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 23:43	BWC	TAL BUR

Client Sample ID: FB-375G

Lab Sample ID: 200-44915-33

Date Collected: 08/21/18 16:58

Matrix: Water

Date Received: 08/22/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 03:25	BWC	TAL BUR

Client Sample ID: 581 7B

Lab Sample ID: 200-44915-34

Date Collected: 08/21/18 11:58

Matrix: Water

Date Received: 08/22/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133389	08/28/18 09:15	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133459	08/29/18 23:59	BWC	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD ELAP		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-19
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-18
New Hampshire	NELAP	1	2006	12-18-18
New Jersey	NELAP	2	VT972	06-30-19
New York	NELAP	2	10391	04-01-19
Pennsylvania	NELAP	3	68-00489	04-30-19
Rhode Island	State Program	1	LAO00298	12-30-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-19
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-18
Virginia	NELAP	3	460209	12-14-18

Method Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990



Sample Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44915-1
SDG: 200-44915-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-44915-1	656 7B	Water	08/21/18 09:40	08/22/18 11:25
200-44915-3	705 7B	Water	08/21/18 10:10	08/22/18 11:25
200-44915-4	FB-705	Water	08/21/18 10:08	08/22/18 11:25
200-44915-5	205 7B	Water	08/21/18 10:35	08/22/18 11:25
200-44915-6	FB-205	Water	08/21/18 10:34	08/22/18 11:25
200-44915-7	VTRANS	Water	08/21/18 10:55	08/22/18 11:25
200-44915-8	FB-VTRANS	Water	08/21/18 10:54	08/22/18 11:25
200-44915-9	859 7B	Water	08/21/18 11:30	08/22/18 11:25
200-44915-10	FB-859	Water	08/21/18 11:31	08/22/18 11:25
200-44915-11	443 7B	Water	08/21/18 12:15	08/22/18 11:25
200-44915-13	940 MIDDLE	Water	08/21/18 12:54	08/22/18 11:25
200-44915-14	FB-940	Water	08/21/18 12:53	08/22/18 11:25
200-44915-15	866 7B	Water	08/21/18 13:10	08/22/18 11:25
200-44915-16	FB-866	Water	08/21/18 13:08	08/22/18 11:25
200-44915-17	84 7B	Water	08/21/18 13:55	08/22/18 11:25
200-44915-19	339 7B	Water	08/21/18 14:10	08/22/18 11:25
200-44915-21	742 7B	Water	08/21/18 14:40	08/22/18 11:25
200-44915-22	DUP	Water	08/21/18 12:00	08/22/18 11:25
200-44915-24	30 JONES	Water	08/21/18 15:00	08/22/18 11:25
200-44915-25	FB-30J	Water	08/21/18 14:58	08/22/18 11:25
200-44915-26	82 JONES	Water	08/21/18 15:20	08/22/18 11:25
200-44915-27	FB-82J	Water	08/21/18 15:18	08/22/18 11:25
200-44915-28	895 7B	Water	08/21/18 16:16	08/22/18 11:25
200-44915-29	FB-895	Water	08/21/18 16:17	08/22/18 11:25
200-44915-30	475 GORGE	Water	08/21/18 16:40	08/22/18 11:25
200-44915-31	FB-475G	Water	08/21/18 16:41	08/22/18 11:25
200-44915-32	375 GORGE	Water	08/21/18 17:00	08/22/18 11:25
200-44915-33	FB-375G	Water	08/21/18 16:58	08/22/18 11:25
200-44915-34	581 7B	Water	08/21/18 11:58	08/22/18 11:25

TestAmerica Burlington
 30 Community Drive Suite 11
 South Burlington, VT 05403
 Phone (802) 660-1990 Fax (802) 660-1919

Chain of Custody Record



TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

OC No: 00-21640-9489.1
 Page: 1 of 4
 Job #: 4

200-44915 Chain of Custody

Lab PM: Dusatlon, Kristine A
 E-Mail: kris.dusatlon@testamericainc.com

Sampler: Jo Palmer
 Phone: 241-4131

Due Date Requested:
 TAT Requested (days): 10

PO #: Purchase Order not required
 WO #:

Project #: 20008078
 SSO#:

Address: 1 Elm Street, Suite 3
 City: Waterbury
 State, Zip: VT, 05676
 Phone: 802-241-4131 (Tel)
 Email: James.gascoyne@atcgs.com

Client Information
 Client Contact: Mr. James Gascoyne
 Company: ATC Group Services LLC

Project Name: James.gascoyne@atcgs.com
 PFAS, SVRA (21/24 analytes)
 Site: Rutland 280EM00247

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, AT=Tissue, AA=Air)	Field Filtered Sample (Yes or No)	Performance/MSD (Yes or No)	PF, JDA - PFAS, Standard List (21 analytes)	Total Number of Containers	Special Instructions/Note:
656 7B	8/21/18	0940	G	Water	X	X	2	2	
FB-656		0941		Water			1	1	*
705 7B		1010		Water			2	2	*
FB-705		1008		Water			1	1	*
205 7B		1035		Water			2	2	*
FB-205		1034		Water			1	1	*
Vtrans		1055		Water			2	2	*
FB-Vtrans		1054		Water			1	1	*
859 7B		1130		Water			2	2	*
FB-859		1131		Water			1	1	*
443 7B		1215		Water			2	2	*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/Requirements:
 * hold field blanks unless hits in comp. sample

Relinquished by: Jo Palmer
 Date/Time: 8/22/18 1125
 Company: ATC Group Services LLC

Received by: [Signature]
 Date/Time: 8/22/18 1125
 Company: ATC Group Services LLC

Relinquished by: [Signature]
 Date/Time: [Blank]
 Company: [Blank]

Received by: [Signature]
 Date/Time: [Blank]
 Company: [Blank]

Custody Seals Intact: Custody Seal No.: 1453
 Δ Yes Δ No

Chain of Custody Record

Client Information		Lab PM: Dusatblon, Kristine A		Carrier Tracking No(s):		COC No: 200-21640-9439.2																																																																																																																									
Client Contact: Mr. James Gascoyne		E-Mail: kris.dusatblon@testamericainc.com		Page: 2 of 7		Job #: 4																																																																																																																									
Company: ATC Group Services LLC		Due Date Requested:		Analysis Requested																																																																																																																											
Address: 1 Elm Street, Suite 3		TAT Requested (days): 10																																																																																																																													
City: Waterbury		PO #: Purchase Order not required		<table border="1"> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, AS=Air)</th> <th>Field Filtered Sample (Yes or No)</th> <th>PFCLDA - PFAS, Standard List (21 analytes)</th> <th>Perform MS/MS (Yes or No)</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> <tr> <td>FB-443</td> <td>8/21/18</td> <td>1214</td> <td>G</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>*</td> </tr> <tr> <td>940 Middle</td> <td></td> <td>1254</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>FB-940</td> <td></td> <td>1253</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>*</td> </tr> <tr> <td>846 FB</td> <td></td> <td>1310</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>FB-846</td> <td></td> <td>1308</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>*</td> </tr> <tr> <td>84 FB</td> <td></td> <td>1355</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>FB-84</td> <td></td> <td>1354</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>⊕</td> </tr> <tr> <td>339 FB</td> <td></td> <td>1410</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>FB-339</td> <td></td> <td>1411</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>⊕</td> </tr> <tr> <td>742 FB</td> <td></td> <td>1440</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>DWP</td> <td></td> <td>1200</td> <td></td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> </table>				Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, AS=Air)	Field Filtered Sample (Yes or No)	PFCLDA - PFAS, Standard List (21 analytes)	Perform MS/MS (Yes or No)	Total Number of Containers	Special Instructions/Note:	FB-443	8/21/18	1214	G	Water	X	X	X	1	*	940 Middle		1254		Water	X	X	X	2		FB-940		1253		Water	X	X	X	1	*	846 FB		1310		Water	X	X	X	2		FB-846		1308		Water	X	X	X	1	*	84 FB		1355		Water	X	X	X	2		FB-84		1354		Water	X	X	X	1	⊕	339 FB		1410		Water	X	X	X	2		FB-339		1411		Water	X	X	X	1	⊕	742 FB		1440		Water	X	X	X	2		DWP		1200		Water	X	X	X	2	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)					Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, AS=Air)	Field Filtered Sample (Yes or No)	PFCLDA - PFAS, Standard List (21 analytes)	Perform MS/MS (Yes or No)	Total Number of Containers	Special Instructions/Note:																																																																																																																		
FB-443	8/21/18	1214	G	Water	X	X	X	1	*																																																																																																																						
940 Middle		1254		Water	X	X	X	2																																																																																																																							
FB-940		1253		Water	X	X	X	1	*																																																																																																																						
846 FB		1310		Water	X	X	X	2																																																																																																																							
FB-846		1308		Water	X	X	X	1	*																																																																																																																						
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FB-84		1354		Water	X	X	X	1	⊕																																																																																																																						
339 FB		1410		Water	X	X	X	2																																																																																																																							
FB-339		1411		Water	X	X	X	1	⊕																																																																																																																						
742 FB		1440		Water	X	X	X	2																																																																																																																							
DWP		1200		Water	X	X	X	2																																																																																																																							
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																																																																																																											
Empty Kit Relinquished by:		Date:		Special Instructions/OC Requirements: W/ case narrative w/ cold field pans unless hits in corresp. sample																																																																																																																											
Relinquished by: <i>John R</i>		Date/Time: 8/22/18 11:25		Received by: <i>ATC</i>		Date/Time: 8/22/18 11:25																																																																																																																									
Relinquished by:		Date/Time:		Received by:		Date/Time:																																																																																																																									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.4, S.3																																																																																																																											



TestAmerica Burlington
 30 Community Drive Suite 11
 South Burlington, VT 05403
 Phone (802) 660-1990 Fax (802) 660-1919

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Lab P/N: Dusatlon, Kristine A		Carrier Tracking No(s):		COC No: 200-21640-9499.3	
Client Contact: Mr. James Gascoyne		E-Mail: kris.dusatlon@testamericainc.com		Phone: 802-241-4131		Page 3 of 4	
Company: ATC Group Services LLC		Due Date Requested:		Analysis Requested		Job #: 4	
Address: 1 Elm Street, Suite 3		TAT Requested (days): 10		Field Filtered Sample (Yes or No)		Preservation Codes:	
City: Waterbury		Purchase Order not required		PFAS, SVRA (21 analytes)		M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - H2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
State, Zip: VT, 05676		PO #: 802-241-4131 (Tel)		Form MSD (Yes or No)		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Phone: 802-241-4131 (Tel)		Project #: 20008078		PFC, IDA - PFAS, Standard List (21 analytes)		Special Instructions/Note:	
Email: james.gascoyne@atcgs.com		SSOW#: 280EM00247		Total Number of containers			
Project Name: PFAS, SVRA (21/24 analytes)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Site: Rutland 280EM00247		8/22/18		1441		Water	
Sample Identification		8/22/18		1500		Water	
FB-742		8/22/18		1458		Water	
30 Jones		8/22/18		1520		Water	
FB-305		8/22/18		1518		Water	
82 Jones		8/22/18		1616		Water	
FB-825		8/22/18		1617		Water	
895 FB		8/22/18		1640		Water	
FB-895		8/22/18		1641		Water	
475 Gorg		8/22/18		1700		Water	
FB-475 G		8/22/18		1658		Water	
375 Gorg		8/22/18					
FB-375 G		8/22/18					
Possible Hazard Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		8/22/18		1125		ATC	
Deliverable Requested: I, II, III, IV, Other (specify)		Date		Date		Company	
None		8/22/18		1125		ATC	
Empty Kit Relinquished by:		Date		Date		Company	
John P. Jones		8/22/18		1125		ATC	
Relinquished by:		Date		Date		Company	
John P. Jones		8/22/18		1125		ATC	
Relinquished by:		Date		Date		Company	
John P. Jones		8/22/18		1125		ATC	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No:		Cooler Temperature(s) °C and Other Remarks: 1.4, 5.3		Company	
Yes						Company	



Login Sample Receipt Checklist

Client: ATC Group Services LLC

Job Number: 200-44915-1
SDG Number: 200-44915-1

Login Number: 44915

List Number: 1

Creator: Johnson, Eleanor E

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4°C, 5.3°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	JP
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Burlington

30 Community Drive

Suite 11

South Burlington, VT 05403

Tel: (802)660-1990

TestAmerica Job ID: 200-44961-1

TestAmerica Sample Delivery Group: 200-44961-1

Client Project/Site: PFAS, SVRA (21/24 analytes)

For:

ATC Group Services LLC

1 Elm Street, Suite 3

Waterbury, Vermont 05676

Attn: Mr. James Gascoyne



Authorized for release by:

9/11/2018 2:09:03 PM

Kristine Dusablon, Project Manager II

(802)660-1990

kris.dusablon@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

Glossary

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

Case Narrative

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Job ID: 200-44961-1

Laboratory: TestAmerica Burlington

Narrative

CASE NARRATIVE

Client: ATC Group Services LLC

Project: PFAS, SVRA (21/24 analytes)

Report Number: 200-44961-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

RECEIPT

The samples were received on 08/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.2 C.

PERFLUORINATED HYDROCARBONS

Samples BP-INFLUENT (200-44961-1), BP-EFFLUENT A (200-44961-2), BP-EFFLUENT B (200-44961-3), FB-BP (200-44961-4), 129 7B (200-44961-5) and FB-129 (200-44961-6) were analyzed for Perfluorinated Hydrocarbons in accordance with TAL SOP WS-LC-0025. The samples were prepared on 08/27/2018 and 09/05/2018 and analyzed on 08/28/2018, 08/29/2018 and 09/07/2018.

Sample BP-INFLUENT (200-44961-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The Isotope Dilution Analyte (IDA) recovery associated with sample BP-INFLUENT (200-44961-1). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample. All detection limits are below the lower calibration. NOTE: The ISTD responses for these samples are below criteria because the samples were diluted; the ISTD is NOT fortified for dilutions within the IDA methodology.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Client Sample ID: BP-INFLUENT

Lab Sample ID: 200-44961-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	31		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	160		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	100		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	40		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	21		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.6		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.4		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.1		1.8	1.8	ng/L	1		537 (modified)	Total/NA
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	300		92	92	ng/L	5		537 (modified)	Total/NA

Client Sample ID: BP-EFFLUENT A

Lab Sample ID: 200-44961-2

No Detections.

Client Sample ID: BP-EFFLUENT B

Lab Sample ID: 200-44961-3

No Detections.

Client Sample ID: FB-BP

Lab Sample ID: 200-44961-4

No Detections.

Client Sample ID: 129 7B

Lab Sample ID: 200-44961-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	4.4		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.7		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.4		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	6.3		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.4		1.8	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	12		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-129

Lab Sample ID: 200-44961-6

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Client Sample ID: BP-INFLUENT

Lab Sample ID: 200-44961-1

Date Collected: 08/23/18 09:15

Matrix: Water

Date Received: 08/23/18 16:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	31		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluoropentanoic acid (PFPeA)	160		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorohexanoic acid (PFHxA)	100		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluoroheptanoic acid (PFHpA)	40		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorooctanoic acid (PFOA)	21		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorononanoic acid (PFNA)	2.6		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorohexanesulfonic acid (PFHxS)	6.4		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorooctanesulfonic acid (PFOS)	7.1		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 16:50	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/27/18 08:30	08/28/18 16:50	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/27/18 08:30	08/28/18 16:50	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	300		92	92	ng/L		08/27/18 08:30	08/29/18 17:22	5
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/27/18 08:30	08/28/18 16:50	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	84		25 - 150	08/27/18 08:30	08/28/18 16:50	1
18O2 PFHxS	83		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C4-PFHpA	86		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C4-PFHpA	103		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C4 PFOA	104		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C4 PFOA	90		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C4 PFOS	85		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C4 PFOS	93		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C5 PFNA	102		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C5 PFNA	98		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C4 PFBA	48		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C4 PFBA	83		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C2 PFHxA	68		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C2 PFHxA	78		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C2 PFDA	94		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C2 PFDA	97		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C2 PFUnA	80		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C2 PFUnA	70		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C2 PFDoA	63		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C2 PFDoA	54		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C8 FOSA	59		25 - 150	08/27/18 08:30	08/28/18 16:50	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Client Sample ID: BP-INFLUENT

Date Collected: 08/23/18 09:15

Date Received: 08/23/18 16:10

Lab Sample ID: 200-44961-1

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	64		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C5-PFPeA	69		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C5-PFPeA	94		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C2-PFTeDA	62		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C2-PFTeDA	55		25 - 150	08/27/18 08:30	08/29/18 17:22	5
d3-NMeFOSAA	76		25 - 150	08/27/18 08:30	08/28/18 16:50	1
d3-NMeFOSAA	59		25 - 150	08/27/18 08:30	08/29/18 17:22	5
d5-NEtFOSAA	75		25 - 150	08/27/18 08:30	08/28/18 16:50	1
d5-NEtFOSAA	72		25 - 150	08/27/18 08:30	08/29/18 17:22	5
M2-6:2FTS	73		25 - 150	08/27/18 08:30	08/29/18 17:22	5
M2-8:2FTS	106		25 - 150	08/27/18 08:30	08/28/18 16:50	1
M2-8:2FTS	112		25 - 150	08/27/18 08:30	08/29/18 17:22	5
13C3-PFBS	78		25 - 150	08/27/18 08:30	08/28/18 16:50	1
13C3-PFBS	66		25 - 150	08/27/18 08:30	08/29/18 17:22	5

Client Sample ID: BP-EFFLUENT A

Date Collected: 08/23/18 09:10

Date Received: 08/23/18 16:10

Lab Sample ID: 200-44961-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.9	1.9	ng/L		08/27/18 08:30	08/28/18 17:06	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		19	19	ng/L		08/27/18 08:30	08/28/18 17:06	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		19	19	ng/L		08/27/18 08:30	08/28/18 17:06	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND *		19	19	ng/L		08/27/18 08:30	08/28/18 17:06	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		19	19	ng/L		08/27/18 08:30	08/28/18 17:06	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
18O2 PFHxS	96		25 - 150	08/27/18 08:30	08/28/18 17:06	1			
13C4-PFHpA	82		25 - 150	08/27/18 08:30	08/28/18 17:06	1			

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Client Sample ID: BP-EFFLUENT A

Date Collected: 08/23/18 09:10

Date Received: 08/23/18 16:10

Lab Sample ID: 200-44961-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	86		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C4 PFOS	82		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C5 PFNA	86		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C4 PFBA	104		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C2 PFHxA	84		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C2 PFDA	96		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C2 PFUnA	82		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C2 PFDoA	59		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C8 FOSA	60		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C5-PFPeA	83		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C2-PFTeDA	65		25 - 150	08/27/18 08:30	08/28/18 17:06	1
d3-NMeFOSAA	67		25 - 150	08/27/18 08:30	08/28/18 17:06	1
d5-NEtFOSAA	69		25 - 150	08/27/18 08:30	08/28/18 17:06	1
M2-6:2FTS	102		25 - 150	08/27/18 08:30	08/28/18 17:06	1
M2-8:2FTS	103		25 - 150	08/27/18 08:30	08/28/18 17:06	1
13C3-PFBS	95		25 - 150	08/27/18 08:30	08/28/18 17:06	1

Client Sample ID: BP-EFFLUENT B

Date Collected: 08/23/18 09:11

Date Received: 08/23/18 16:10

Lab Sample ID: 200-44961-3

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:22	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/27/18 08:30	08/28/18 17:22	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/27/18 08:30	08/28/18 17:22	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND *		18	18	ng/L		08/27/18 08:30	08/28/18 17:22	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/27/18 08:30	08/28/18 17:22	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Client Sample ID: BP-EFFLUENT B

Lab Sample ID: 200-44961-3

Date Collected: 08/23/18 09:11

Matrix: Water

Date Received: 08/23/18 16:10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	98		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C4-PFHpA	82		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C4 PFOA	91		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C4 PFOS	94		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C5 PFNA	93		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C4 PFBA	104		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C2 PFHxA	87		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C2 PFDA	97		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C2 PFUnA	89		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C2 PFDoA	63		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C8 FOSA	56		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C5-PFPeA	86		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C2-PFTeDA	70		25 - 150	08/27/18 08:30	08/28/18 17:22	1
d3-NMeFOSAA	70		25 - 150	08/27/18 08:30	08/28/18 17:22	1
d5-NEtFOSAA	74		25 - 150	08/27/18 08:30	08/28/18 17:22	1
M2-6:2FTS	102		25 - 150	08/27/18 08:30	08/28/18 17:22	1
M2-8:2FTS	105		25 - 150	08/27/18 08:30	08/28/18 17:22	1
13C3-PFBS	99		25 - 150	08/27/18 08:30	08/28/18 17:22	1

Client Sample ID: FB-BP

Lab Sample ID: 200-44961-4

Date Collected: 08/23/18 09:12

Matrix: Water

Date Received: 08/23/18 16:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:41	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		09/05/18 08:30	09/07/18 03:41	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		09/05/18 08:30	09/07/18 03:41	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		09/05/18 08:30	09/07/18 03:41	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		09/05/18 08:30	09/07/18 03:41	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Client Sample ID: FB-BP
Date Collected: 08/23/18 09:12
Date Received: 08/23/18 16:10

Lab Sample ID: 200-44961-4
Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	94		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C4-PFHpA	84		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C4 PFOA	99		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C4 PFOS	94		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C5 PFNA	91		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C4 PFBA	74		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C2 PFHxA	88		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C2 PFDA	110		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C2 PFUnA	108		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C2 PFDoA	85		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C8 FOSA	62		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C5-PFPeA	88		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C2-PFTeDA	71		25 - 150	09/05/18 08:30	09/07/18 03:41	1
d3-NMeFOSAA	99		25 - 150	09/05/18 08:30	09/07/18 03:41	1
d5-NEtFOSAA	94		25 - 150	09/05/18 08:30	09/07/18 03:41	1
M2-6:2FTS	127		25 - 150	09/05/18 08:30	09/07/18 03:41	1
M2-8:2FTS	110		25 - 150	09/05/18 08:30	09/07/18 03:41	1
13C3-PFBS	87		25 - 150	09/05/18 08:30	09/07/18 03:41	1

Client Sample ID: 129 7B
Date Collected: 08/23/18 12:20
Date Received: 08/23/18 16:10

Lab Sample ID: 200-44961-5
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluoropentanoic acid (PFPeA)	4.4		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorohexanoic acid (PFHxA)	3.7		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluoroheptanoic acid (PFHpA)	2.4		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorooctanoic acid (PFOA)	6.3		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorohexanesulfonic acid (PFHxS)	2.4		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorooctanesulfonic acid (PFOS)	12		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		08/27/18 08:30	08/28/18 17:38	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		08/27/18 08:30	08/28/18 17:38	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		08/27/18 08:30	08/28/18 17:38	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND *		18	18	ng/L		08/27/18 08:30	08/28/18 17:38	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Client Sample ID: 129 7B
Date Collected: 08/23/18 12:20
Date Received: 08/23/18 16:10

Lab Sample ID: 200-44961-5
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		08/27/18 08:30	08/28/18 17:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	104		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C4-PFHpA	89		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C4 PFOA	98		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C4 PFOS	93		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C5 PFNA	95		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C4 PFBA	41		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C2 PFHxA	72		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C2 PFDA	111		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C2 PFUnA	95		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C2 PFDoA	72		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C8 FOSA	80		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C5-PFPeA	52		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C2-PFTeDA	74		25 - 150				08/27/18 08:30	08/28/18 17:38	1
d3-NMeFOSAA	75		25 - 150				08/27/18 08:30	08/28/18 17:38	1
d5-NEtFOSAA	85		25 - 150				08/27/18 08:30	08/28/18 17:38	1
M2-6:2FTS	134		25 - 150				08/27/18 08:30	08/28/18 17:38	1
M2-8:2FTS	114		25 - 150				08/27/18 08:30	08/28/18 17:38	1
13C3-PFBS	87		25 - 150				08/27/18 08:30	08/28/18 17:38	1

Client Sample ID: FB-129
Date Collected: 08/23/18 12:18
Date Received: 08/23/18 16:10

Lab Sample ID: 200-44961-6
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
Perfluorooctane Sulfonamide (PFOSA)	ND		1.8	1.8	ng/L		09/05/18 08:30	09/07/18 03:57	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		09/05/18 08:30	09/07/18 03:57	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		09/05/18 08:30	09/07/18 03:57	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Client Sample ID: FB-129

Lab Sample ID: 200-44961-6

Date Collected: 08/23/18 12:18

Matrix: Water

Date Received: 08/23/18 16:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		09/05/18 08:30	09/07/18 03:57	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		09/05/18 08:30	09/07/18 03:57	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	86		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C4-PFHpA	78		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C4 PFOA	93		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C4 PFOS	96		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C5 PFNA	87		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C4 PFBA	69		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C2 PFHxA	82		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C2 PFDA	104		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C2 PFUnA	101		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C2 PFDoA	75		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C8 FOSA	50		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C5-PFPeA	76		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C2-PFTeDA	59		25 - 150				09/05/18 08:30	09/07/18 03:57	1
d3-NMeFOSAA	91		25 - 150				09/05/18 08:30	09/07/18 03:57	1
d5-NEtFOSAA	88		25 - 150				09/05/18 08:30	09/07/18 03:57	1
M2-6:2FTS	106		25 - 150				09/05/18 08:30	09/07/18 03:57	1
M2-8:2FTS	113		25 - 150				09/05/18 08:30	09/07/18 03:57	1
13C3-PFBS	86		25 - 150				09/05/18 08:30	09/07/18 03:57	1

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (25-150)	PFHpA (25-150)	PFOA (25-150)	PFOS (25-150)	PFNA (25-150)	PFBA (25-150)	PFHxA (25-150)	PFDA (25-150)
200-44961-1	BP-INFLUENT	84	86	104	85	102	48	68	94
200-44961-1	BP-INFLUENT	83	103	90	93	98	83	78	97
200-44961-2	BP-EFFLUENT A	96	82	86	82	86	104	84	96
200-44961-3	BP-EFFLUENT B	98	82	91	94	93	104	87	97
200-44961-4	FB-BP	94	84	99	94	91	74	88	110
200-44961-5	129 7B	104	89	98	93	95	41	72	111
200-44961-6	FB-129	86	78	93	96	87	69	82	104
LCS 200-133330/2-A	Lab Control Sample	99	81	91	99	93	86	90	108
LCS 200-133330/2-A	Lab Control Sample								
LCS 200-133664/2-A	Lab Control Sample	91	88	96	96	87	73	85	101
LCSD 200-133330/3-A	Lab Control Sample Dup	98	80	88	99	88	76	90	100
LCSD 200-133330/3-A	Lab Control Sample Dup								
LCSD 200-133664/3-A	Lab Control Sample Dup	99	86	98	95	95	78	82	112
MB 200-133330/1-A	Method Blank	105	84	91	101	86	84	93	109
MB 200-133664/1-A	Method Blank	85	83	92	85	88	68	80	107

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (25-150)	PFDaA (25-150)	PFOSA (25-150)	PFPeA (25-150)	PFTDA (25-150)	-NMeFOS, (25-150)	-NEtFOS/ (25-150)	M262FTS (25-150)
200-44961-1	BP-INFLUENT	80	63	59	69	62	76	75	
200-44961-1	BP-INFLUENT	70	54	64	94	55	59	72	73
200-44961-2	BP-EFFLUENT A	82	59	60	83	65	67	69	102
200-44961-3	BP-EFFLUENT B	89	63	56	86	70	70	74	102
200-44961-4	FB-BP	108	85	62	88	71	99	94	127
200-44961-5	129 7B	95	72	80	52	74	75	85	134
200-44961-6	FB-129	101	75	50	76	59	91	88	106
LCS 200-133330/2-A	Lab Control Sample	96	51	38	96	47	112	85	
LCS 200-133330/2-A	Lab Control Sample								101
LCS 200-133664/2-A	Lab Control Sample	101	78	52	84	60	96	87	108
LCSD 200-133330/3-A	Lab Control Sample Dup	90	76	59	91	52	98	87	
LCSD 200-133330/3-A	Lab Control Sample Dup								105
LCSD 200-133664/3-A	Lab Control Sample Dup	110	75	63	91	64	97	89	97
MB 200-133330/1-A	Method Blank	108	80	67	97	54	94	97	120
MB 200-133664/1-A	Method Blank	98	73	45	78	57	89	83	97

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	M282FTS (25-150)	3C3-PFB: (25-150)
200-44961-1	BP-INFLUENT	106	78
200-44961-1	BP-INFLUENT	112	66
200-44961-2	BP-EFFLUENT A	103	95
200-44961-3	BP-EFFLUENT B	105	99
200-44961-4	FB-BP	110	87
200-44961-5	129 7B	114	87
200-44961-6	FB-129	113	86
LCS 200-133330/2-A	Lab Control Sample	114	99
LCS 200-133330/2-A	Lab Control Sample		
LCS 200-133664/2-A	Lab Control Sample	102	79
LCSD 200-133330/3-A	Lab Control Sample Dup	109	90
LCSD 200-133330/3-A	Lab Control Sample Dup		

Isotope Dilution Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M282FTS	3C3-PFB:
		(25-150)	(25-150)
LCSD 200-133664/3-A	Lab Control Sample Dup	105	89
MB 200-133330/1-A	Method Blank	121	95
MB 200-133664/1-A	Method Blank	105	91

Surrogate Legend

PFHxS = 18O2 PFHxS
PFHpA = 13C4-PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDaA = 13C2 PFDaA
PFOSA = 13C8 FOSA
PFPeA = 13C5-PFPeA
PFTDA = 13C2-PFTeDA
d3-NMeFOSAA = d3-NMeFOSAA
d5-NEtFOSAA = d5-NEtFOSAA
M262FTS = M2-6:2FTS
M282FTS = M2-8:2FTS
13C3-PFBS = 13C3-PFBS

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-133330/1-A

Matrix: Water

Analysis Batch: 133366

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 133330

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
Perfluorooctane Sulfonamide (PFOSA)	ND		2.0	2.0	ng/L		08/27/18 08:30	08/28/18 15:15	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	20	ng/L		08/27/18 08:30	08/28/18 15:15	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	20	ng/L		08/27/18 08:30	08/28/18 15:15	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		20	20	ng/L		08/27/18 08:30	08/28/18 15:15	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		20	20	ng/L		08/27/18 08:30	08/28/18 15:15	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	105		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C4-PFHpA	84		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C4 PFOA	91		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C4 PFOS	101		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C5 PFNA	86		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C4 PFBA	84		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C2 PFHxA	93		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C2 PFDA	109		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C2 PFUnA	108		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C2 PFDoA	80		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C8 FOSA	67		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C5-PFPeA	97		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C2-PFTeDA	54		25 - 150	08/27/18 08:30	08/28/18 15:15	1
d3-NMeFOSAA	94		25 - 150	08/27/18 08:30	08/28/18 15:15	1
d5-NEtFOSAA	97		25 - 150	08/27/18 08:30	08/28/18 15:15	1
M2-6:2FTS	120		25 - 150	08/27/18 08:30	08/28/18 15:15	1
M2-8:2FTS	121		25 - 150	08/27/18 08:30	08/28/18 15:15	1
13C3-PFBS	95		25 - 150	08/27/18 08:30	08/28/18 15:15	1

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-133330/2-A

Matrix: Water

Analysis Batch: 133366

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 133330

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	42.4		ng/L		106	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	45.1		ng/L		113	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	44.0		ng/L		110	50 - 150
Perfluoroheptanoic acid (PFHpA)	40.0	42.8		ng/L		107	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	41.4		ng/L		103	50 - 150
Perfluorononanoic acid (PFNA)	40.0	41.8		ng/L		104	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	40.4		ng/L		101	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	43.2		ng/L		108	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	40.4		ng/L		101	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	31.8		ng/L		79	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	40.0		ng/L		100	50 - 150
Perfluorobutanesulfonic acid (PFBS)	40.0	43.3		ng/L		108	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	40.0	40.3		ng/L		101	50 - 150
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	41.0		ng/L		102	50 - 150
Perfluorooctanesulfonic acid (PFOS)	40.0	43.5		ng/L		109	50 - 150
Perfluorodecanesulfonic acid (PFDS)	40.0	30.9		ng/L		77	50 - 150
Perfluorooctane Sulfonamide (PFOSA)	40.0	39.5		ng/L		99	50 - 150
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	38.5		ng/L		96	50 - 150
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	42.2		ng/L		106	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	43.0		ng/L		107	50 - 150

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	99		25 - 150
13C4-PFHpA	81		25 - 150
13C4 PFOA	91		25 - 150
13C4 PFOS	99		25 - 150
13C5 PFNA	93		25 - 150
13C4 PFBA	86		25 - 150
13C2 PFHxA	90		25 - 150
13C2 PFDA	108		25 - 150
13C2 PFUnA	96		25 - 150
13C2 PFDoA	51		25 - 150
13C8 FOSA	38		25 - 150
13C5-PFPeA	96		25 - 150
13C2-PFTeDA	47		25 - 150
d3-NMeFOSAA	112		25 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-133330/2-A
Matrix: Water
Analysis Batch: 133366

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133330

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>LCS Qualifier</i>	<i>Limits</i>
<i>d5-NEtFOSAA</i>	85		25 - 150
<i>M2-8:2FTS</i>	114		25 - 150
<i>13C3-PFBS</i>	99		25 - 150

Lab Sample ID: LCS 200-133330/2-A
Matrix: Water
Analysis Batch: 133459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133330

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	46.7		ng/L		117	50 - 150

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>LCS Qualifier</i>	<i>Limits</i>
<i>M2-6:2FTS</i>	101		25 - 150

Lab Sample ID: LCSD 200-133330/3-A
Matrix: Water
Analysis Batch: 133366

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 133330

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
Perfluorobutanoic acid (PFBA)	40.0	46.8		ng/L		117	50 - 150	10	30
Perfluoropentanoic acid (PFPeA)	40.0	41.4		ng/L		103	50 - 150	9	30
Perfluorohexanoic acid (PFHxA)	40.0	42.4		ng/L		106	50 - 150	4	30
Perfluoroheptanoic acid (PFHpA)	40.0	43.8		ng/L		109	50 - 150	2	30
Perfluorooctanoic acid (PFOA)	40.0	43.6		ng/L		109	50 - 150	5	30
Perfluorononanoic acid (PFNA)	40.0	42.9		ng/L		107	50 - 150	3	30
Perfluorodecanoic acid (PFDA)	40.0	42.6		ng/L		106	50 - 150	5	30
Perfluoroundecanoic acid (PFUnA)	40.0	45.0		ng/L		112	50 - 150	4	30
Perfluorododecanoic acid (PFDoA)	40.0	41.3		ng/L		103	50 - 150	2	30
Perfluorotridecanoic Acid (PFTriA)	40.0	29.2		ng/L		73	50 - 150	8	30
Perfluorotetradecanoic acid (PFTeA)	40.0	42.8		ng/L		107	50 - 150	7	30
Perfluorobutanesulfonic acid (PFBS)	40.0	44.0		ng/L		110	50 - 150	2	30
Perfluorohexanesulfonic acid (PFHxS)	40.0	37.6		ng/L		94	50 - 150	7	30
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	41.9		ng/L		105	50 - 150	2	30
Perfluorooctanesulfonic acid (PFOS)	40.0	40.4		ng/L		101	50 - 150	7	30
Perfluorodecanesulfonic acid (PFDS)	40.0	31.2		ng/L		78	50 - 150	1	30
Perfluorooctane Sulfonamide (PFOSA)	40.0	42.6		ng/L		106	50 - 150	7	30
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	43.9		ng/L		110	50 - 150	13	30

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-133330/3-A
Matrix: Water
Analysis Batch: 133366

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 133330

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	40.7		ng/L		102	50 - 150	4	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	42.0		ng/L		105	50 - 150	2	30
LCSD LCSD									
Isotope Dilution	%Recovery	Qualifier	Limits						
18O2 PFHxS	98		25 - 150						
13C4-PFHpA	80		25 - 150						
13C4 PFOA	88		25 - 150						
13C4 PFOS	99		25 - 150						
13C5 PFNA	88		25 - 150						
13C4 PFBA	76		25 - 150						
13C2 PFHxA	90		25 - 150						
13C2 PFDA	100		25 - 150						
13C2 PFUnA	90		25 - 150						
13C2 PFDoA	76		25 - 150						
13C8 FOSA	59		25 - 150						
13C5-PFPeA	91		25 - 150						
13C2-PFTeDA	52		25 - 150						
d3-NMeFOSAA	98		25 - 150						
d5-NEtFOSAA	87		25 - 150						
M2-8:2FTS	109		25 - 150						
13C3-PFBS	90		25 - 150						

Lab Sample ID: LCSD 200-133330/3-A
Matrix: Water
Analysis Batch: 133459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 133330

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	48.4		ng/L		121	50 - 150	3	30
LCSD LCSD									
Isotope Dilution	%Recovery	Qualifier	Limits						
M2-6:2FTS	105		25 - 150						

Lab Sample ID: MB 200-133664/1-A
Matrix: Water
Analysis Batch: 133762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 133664

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-133664/1-A
Matrix: Water
Analysis Batch: 133762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 133664

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
Perfluorooctane Sulfonamide (PFOSA)	ND		2.0	2.0	ng/L		09/05/18 08:30	09/06/18 21:36	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	20	ng/L		09/05/18 08:30	09/06/18 21:36	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	20	ng/L		09/05/18 08:30	09/06/18 21:36	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		20	20	ng/L		09/05/18 08:30	09/06/18 21:36	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		20	20	ng/L		09/05/18 08:30	09/06/18 21:36	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	85		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C4-PFHpA	83		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C4 PFOA	92		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C4 PFOS	85		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C5 PFNA	88		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C4 PFBA	68		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2 PFHxA	80		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2 PFDA	107		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2 PFUnA	98		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2 PFDoA	73		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C8 FOSA	45		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C5-PFPeA	78		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C2-PFTeDA	57		25 - 150	09/05/18 08:30	09/06/18 21:36	1
d3-NMeFOSAA	89		25 - 150	09/05/18 08:30	09/06/18 21:36	1
d5-NEtFOSAA	83		25 - 150	09/05/18 08:30	09/06/18 21:36	1
M2-6:2FTS	97		25 - 150	09/05/18 08:30	09/06/18 21:36	1
M2-8:2FTS	105		25 - 150	09/05/18 08:30	09/06/18 21:36	1
13C3-PFBS	91		25 - 150	09/05/18 08:30	09/06/18 21:36	1

Lab Sample ID: LCS 200-133664/2-A
Matrix: Water
Analysis Batch: 133762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133664

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	46.5		ng/L		116	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	47.1		ng/L		118	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	43.8		ng/L		110	50 - 150
Perfluoroheptanoic acid (PFHpA)	40.0	41.7		ng/L		104	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	42.5		ng/L		106	50 - 150
Perfluorononanoic acid (PFNA)	40.0	46.1		ng/L		115	50 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-133664/2-A
Matrix: Water
Analysis Batch: 133762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133664

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorodecanoic acid (PFDA)	40.0	44.1		ng/L		110	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	46.8		ng/L		117	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	43.7		ng/L		109	50 - 150
Perfluorotridecanoic Acid (PFTriA)	40.0	30.9		ng/L		77	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	39.0		ng/L		98	50 - 150
Perfluorobutanesulfonic acid (PFBS)	40.0	49.8		ng/L		125	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	40.0	42.1		ng/L		105	50 - 150
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	40.1		ng/L		100	50 - 150
Perfluorooctanesulfonic acid (PFOS)	40.0	41.9		ng/L		105	50 - 150
Perfluorodecanesulfonic acid (PFDS)	40.0	35.2		ng/L		88	50 - 150
Perfluorooctane Sulfonamide (PFOSA)	40.0	38.7		ng/L		97	50 - 150
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	47.5		ng/L		119	50 - 150
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	45.5		ng/L		114	50 - 150
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	34.4		ng/L		86	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	47.2		ng/L		118	50 - 150

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	91		25 - 150
13C4-PFHpA	88		25 - 150
13C4 PFOA	96		25 - 150
13C4 PFOS	96		25 - 150
13C5 PFNA	87		25 - 150
13C4 PFBA	73		25 - 150
13C2 PFHxA	85		25 - 150
13C2 PFDA	101		25 - 150
13C2 PFUnA	101		25 - 150
13C2 PFDoA	78		25 - 150
13C8 FOSA	52		25 - 150
13C5-PFPeA	84		25 - 150
13C2-PFTeDA	60		25 - 150
d3-NMeFOSAA	96		25 - 150
d5-NEtFOSAA	87		25 - 150
M2-6:2FTS	108		25 - 150
M2-8:2FTS	102		25 - 150
13C3-PFBS	79		25 - 150

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-133664/3-A

Matrix: Water

Analysis Batch: 133762

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 133664

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorobutanoic acid (PFBA)	40.0	44.6		ng/L		111	50 - 150	4	30
Perfluoropentanoic acid (PFPeA)	40.0	46.0		ng/L		115	50 - 150	2	30
Perfluorohexanoic acid (PFHxA)	40.0	49.7		ng/L		124	50 - 150	13	30
Perfluoroheptanoic acid (PFHpA)	40.0	45.2		ng/L		113	50 - 150	8	30
Perfluorooctanoic acid (PFOA)	40.0	44.4		ng/L		111	50 - 150	4	30
Perfluorononanoic acid (PFNA)	40.0	42.8		ng/L		107	50 - 150	7	30
Perfluorodecanoic acid (PFDA)	40.0	42.4		ng/L		106	50 - 150	4	30
Perfluoroundecanoic acid (PFUnA)	40.0	45.0		ng/L		113	50 - 150	4	30
Perfluorododecanoic acid (PFDoA)	40.0	46.7		ng/L		117	50 - 150	7	30
Perfluorotridecanoic Acid (PFTriA)	40.0	36.6		ng/L		91	50 - 150	17	30
Perfluorotetradecanoic acid (PFTeA)	40.0	47.2		ng/L		118	50 - 150	19	30
Perfluorobutanesulfonic acid (PFBS)	40.0	47.5		ng/L		119	50 - 150	5	30
Perfluorohexanesulfonic acid (PFHxS)	40.0	39.8		ng/L		99	50 - 150	6	30
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	44.0		ng/L		110	50 - 150	9	30
Perfluorooctanesulfonic acid (PFOS)	40.0	48.8		ng/L		122	50 - 150	15	30
Perfluorodecanesulfonic acid (PFDS)	40.0	35.5		ng/L		89	50 - 150	1	30
Perfluorooctane Sulfonamide (PFOSA)	40.0	37.6		ng/L		94	50 - 150	3	30
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	44.4		ng/L		111	50 - 150	7	30
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	41.3		ng/L		103	50 - 150	10	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	44.3		ng/L		111	50 - 150	25	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	47.0		ng/L		117	50 - 150	1	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
18O2 PFHxS	99		25 - 150
13C4-PFHpA	86		25 - 150
13C4 PFOA	98		25 - 150
13C4 PFOS	95		25 - 150
13C5 PFNA	95		25 - 150
13C4 PFBA	78		25 - 150
13C2 PFHxA	82		25 - 150
13C2 PFDA	112		25 - 150
13C2 PFUnA	110		25 - 150
13C2 PFDoA	75		25 - 150
13C8 FOSA	63		25 - 150
13C5-PFPeA	91		25 - 150
13C2-PFTeDA	64		25 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-133664/3-A

Matrix: Water

Analysis Batch: 133762

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 133664

<i>Isotope Dilution</i>	<i>LCSD LCSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>d3-NMeFOSAA</i>	97		25 - 150
<i>d5-NEtFOSAA</i>	89		25 - 150
<i>M2-6:2FTS</i>	97		25 - 150
<i>M2-8:2FTS</i>	105		25 - 150
<i>13C3-PFBS</i>	89		25 - 150

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QC Association Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

LCMS

Prep Batch: 133330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44961-1	BP-INFLUENT	Total/NA	Water	3535	
200-44961-2	BP-EFFLUENT A	Total/NA	Water	3535	
200-44961-3	BP-EFFLUENT B	Total/NA	Water	3535	
200-44961-5	129 7B	Total/NA	Water	3535	
MB 200-133330/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-133330/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-133330/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 133366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44961-1	BP-INFLUENT	Total/NA	Water	537 (modified)	133330
200-44961-2	BP-EFFLUENT A	Total/NA	Water	537 (modified)	133330
200-44961-3	BP-EFFLUENT B	Total/NA	Water	537 (modified)	133330
200-44961-5	129 7B	Total/NA	Water	537 (modified)	133330
MB 200-133330/1-A	Method Blank	Total/NA	Water	537 (modified)	133330
LCS 200-133330/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	133330
LCSD 200-133330/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	133330

Analysis Batch: 133459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44961-1	BP-INFLUENT	Total/NA	Water	537 (modified)	133330
LCS 200-133330/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	133330
LCSD 200-133330/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	133330

Prep Batch: 133664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44961-4	FB-BP	Total/NA	Water	3535	
200-44961-6	FB-129	Total/NA	Water	3535	
MB 200-133664/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-133664/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-133664/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 133762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-44961-4	FB-BP	Total/NA	Water	537 (modified)	133664
200-44961-6	FB-129	Total/NA	Water	537 (modified)	133664
MB 200-133664/1-A	Method Blank	Total/NA	Water	537 (modified)	133664
LCS 200-133664/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	133664
LCSD 200-133664/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	133664

Lab Chronicle

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
 SDG: 200-44961-1

Client Sample ID: BP-INFLUENT

Lab Sample ID: 200-44961-1

Date Collected: 08/23/18 09:15

Matrix: Water

Date Received: 08/23/18 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133330	08/27/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133366	08/28/18 16:50	BWC	TAL BUR
Total/NA	Prep	3535			133330	08/27/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		5	133459	08/29/18 17:22	BWC	TAL BUR

Client Sample ID: BP-EFFLUENT A

Lab Sample ID: 200-44961-2

Date Collected: 08/23/18 09:10

Matrix: Water

Date Received: 08/23/18 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133330	08/27/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133366	08/28/18 17:06	BWC	TAL BUR

Client Sample ID: BP-EFFLUENT B

Lab Sample ID: 200-44961-3

Date Collected: 08/23/18 09:11

Matrix: Water

Date Received: 08/23/18 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133330	08/27/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133366	08/28/18 17:22	BWC	TAL BUR

Client Sample ID: FB-BP

Lab Sample ID: 200-44961-4

Date Collected: 08/23/18 09:12

Matrix: Water

Date Received: 08/23/18 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 03:41	BWC	TAL BUR

Client Sample ID: 129 7B

Lab Sample ID: 200-44961-5

Date Collected: 08/23/18 12:20

Matrix: Water

Date Received: 08/23/18 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133330	08/27/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133366	08/28/18 17:38	BWC	TAL BUR

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Client Sample ID: FB-129

Date Collected: 08/23/18 12:18

Date Received: 08/23/18 16:10

Lab Sample ID: 200-44961-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			133664	09/05/18 08:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	133762	09/07/18 03:57	BWC	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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Accreditation/Certification Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD ELAP		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-19
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-18
New Hampshire	NELAP	1	2006	12-18-18
New Jersey	NELAP	2	VT972	06-30-19
New York	NELAP	2	10391	04-01-19
Pennsylvania	NELAP	3	68-00489	04-30-19
Rhode Island	State Program	1	LAO00298	12-30-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-19
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-18
Virginia	NELAP	3	460209	12-14-18

Method Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990



Sample Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-44961-1
SDG: 200-44961-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-44961-1	BP-INFLUENT	Water	08/23/18 09:15	08/23/18 16:10
200-44961-2	BP-EFFLUENT A	Water	08/23/18 09:10	08/23/18 16:10
200-44961-3	BP-EFFLUENT B	Water	08/23/18 09:11	08/23/18 16:10
200-44961-4	FB-BP	Water	08/23/18 09:12	08/23/18 16:10
200-44961-5	129 7B	Water	08/23/18 12:20	08/23/18 16:10
200-44961-6	FB-129	Water	08/23/18 12:18	08/23/18 16:10

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Login Sample Receipt Checklist

Client: ATC Group Services LLC

Job Number: 200-44961-1
SDG Number: 200-44961-1

Login Number: 44961
List Number: 1
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Burlington

30 Community Drive

Suite 11

South Burlington, VT 05403

Tel: (802)660-1990

TestAmerica Job ID: 200-45582-1

TestAmerica Sample Delivery Group: 200-45582-1

Client Project/Site: PFAS, SVRA (21/24 analytes)

For:

ATC Group Services LLC

1 Elm Street, Suite 3

Waterbury, Vermont 05676

Attn: Mr. James Gascoyne



Authorized for release by:

10/17/2018 5:42:53 PM

Kristine Dusablon, Project Manager II

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
SDG: 200-45582-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	Isotope Dilution analyte is outside acceptance limits.

Glossary

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

Case Narrative

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
SDG: 200-45582-1

Job ID: 200-45582-1

Laboratory: TestAmerica Burlington

Narrative

CASE NARRATIVE

Client: ATC Group Services LLC

Project: PFAS, SVRA (21/24 analytes)

Report Number: 200-45582-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

RECEIPT

The samples were received on 10/04/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.1° C.

PERFLUORINATED HYDROCARBONS

Samples 1770-7B (200-45582-1), FB-1770 (200-45582-2), 65 MIDDLE (200-45582-3) and FB-65 MID (200-45582-4) were analyzed for Perfluorinated Hydrocarbons in accordance with TAL SOP WS-LC-0025. The samples were prepared on 10/10/2018 and 10/12/2018 and analyzed on 10/16/2018.

The continuing calibration verification (CCV) associated with batch 200-135244 recovered above the upper control limit for Perfluoropentanoic acid (PFPeA). The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 200-135244 recovered above the upper control limit for M2-6:2 FTS. The target analyte (6:2FTS) recovery in these CCV are all within 10%, therefore the IDA is accurately reflecting the system response for both, even though the responses were both enhanced. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Analyte (IDA) recovery is above the method recommended limit for the analytical batch. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

The laboratory control sample (LCS) for preparation batch 200-135049 and analytical batch 200-135244 recovered outside control limits for Perfluoropentanoic acid (PFPeA). This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
SDG: 200-45582-1

Client Sample ID: 1770-7B

Lab Sample ID: 200-45582-1

No Detections.

Client Sample ID: FB-1770

Lab Sample ID: 200-45582-2

No Detections.

Client Sample ID: 65 MIDDLE

Lab Sample ID: 200-45582-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-65 MID

Lab Sample ID: 200-45582-4

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Client Sample ID: 1770-7B

Date Collected: 10/03/18 13:10

Date Received: 10/04/18 10:03

Lab Sample ID: 200-45582-1

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluoropentanoic acid (PFPeA)	ND	*	1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorooctanoic acid (PFOA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorononanoic acid (PFNA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorodecanoic acid (PFDA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.7	1.7	ng/L		10/10/18 09:50	10/16/18 02:16	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	17	ng/L		10/10/18 09:50	10/16/18 02:16	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	17	ng/L		10/10/18 09:50	10/16/18 02:16	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	17	ng/L		10/10/18 09:50	10/16/18 02:16	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	17	ng/L		10/10/18 09:50	10/16/18 02:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	74		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C4 PFHpA	90		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C4 PFOA	102		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C4 PFOS	84		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C5 PFNA	102		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C4 PFBA	94		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C2 PFHxA	85		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C2 PFDA	90		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C2 PFUnA	100		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C2 PFDoA	95		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C8 FOSA	71		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C5 PFPeA	71		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C2 PFTeDA	96		25 - 150				10/10/18 09:50	10/16/18 02:16	1
d3-NMeFOSAA	79		25 - 150				10/10/18 09:50	10/16/18 02:16	1
d5-NEtFOSAA	89		25 - 150				10/10/18 09:50	10/16/18 02:16	1
M2-6:2 FTS	148		25 - 150				10/10/18 09:50	10/16/18 02:16	1
M2-8:2 FTS	109		25 - 150				10/10/18 09:50	10/16/18 02:16	1
13C3 PFBS	86		25 - 150				10/10/18 09:50	10/16/18 02:16	1

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Client Sample ID: FB-1770

Lab Sample ID: 200-45582-2

Date Collected: 10/03/18 13:12

Matrix: Water

Date Received: 10/04/18 10:03

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorooctanoic acid (PFOA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorononanoic acid (PFNA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorodecanoic acid (PFDA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.9	1.9	ng/L		10/12/18 09:28	10/16/18 10:11	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		19	19	ng/L		10/12/18 09:28	10/16/18 10:11	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		19	19	ng/L		10/12/18 09:28	10/16/18 10:11	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		19	19	ng/L		10/12/18 09:28	10/16/18 10:11	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		19	19	ng/L		10/12/18 09:28	10/16/18 10:11	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C4 PFHpA	90		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C4 PFOA	106		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C4 PFOS	114		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C5 PFNA	115		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C4 PFBA	81		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C2 PFHxA	108		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C2 PFDA	114		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C2 PFUnA	108		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C2 PFDoA	116		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C8 FOSA	76		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C5 PFPeA	137		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C2 PFTeDA	115		25 - 150	10/12/18 09:28	10/16/18 10:11	1
d3-NMeFOSAA	85		25 - 150	10/12/18 09:28	10/16/18 10:11	1
d5-NEtFOSAA	98		25 - 150	10/12/18 09:28	10/16/18 10:11	1
M2-6:2 FTS	268 *		25 - 150	10/12/18 09:28	10/16/18 10:11	1
M2-8:2 FTS	114		25 - 150	10/12/18 09:28	10/16/18 10:11	1
13C3 PFBS	99		25 - 150	10/12/18 09:28	10/16/18 10:11	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Client Sample ID: 65 MIDDLE

Lab Sample ID: 200-45582-3

Date Collected: 10/03/18 15:35

Matrix: Water

Date Received: 10/04/18 10:03

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluoropentanoic acid (PFPeA)	ND	*	1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.8	1.8	ng/L		10/10/18 09:50	10/16/18 02:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		10/10/18 09:50	10/16/18 02:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		10/10/18 09:50	10/16/18 02:32	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		10/10/18 09:50	10/16/18 02:32	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		10/10/18 09:50	10/16/18 02:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	76		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C4 PFHpA	85		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C4 PFOA	96		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C4 PFOS	82		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C5 PFNA	108		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C4 PFBA	42		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C2 PFHxA	68		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C2 PFDA	101		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C2 PFUnA	108		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C2 PFDoA	103		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C8 FOSA	74		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C5 PFPeA	49		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C2 PFTeDA	106		25 - 150	10/10/18 09:50	10/16/18 02:32	1
d3-NMeFOSAA	90		25 - 150	10/10/18 09:50	10/16/18 02:32	1
d5-NEtFOSAA	93		25 - 150	10/10/18 09:50	10/16/18 02:32	1
M2-6:2 FTS	159	*	25 - 150	10/10/18 09:50	10/16/18 02:32	1
M2-8:2 FTS	115		25 - 150	10/10/18 09:50	10/16/18 02:32	1
13C3 PFBS	55		25 - 150	10/10/18 09:50	10/16/18 02:32	1

TestAmerica Burlington

Client Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Client Sample ID: FB-65 MID

Lab Sample ID: 200-45582-4

Date Collected: 10/03/18 15:36

Matrix: Water

Date Received: 10/04/18 10:03

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorooctanoic acid (PFOA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorononanoic acid (PFNA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorodecanoic acid (PFDA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.8	1.8	ng/L		10/12/18 09:28	10/16/18 10:27	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	18	ng/L		10/12/18 09:28	10/16/18 10:27	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	18	ng/L		10/12/18 09:28	10/16/18 10:27	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	18	ng/L		10/12/18 09:28	10/16/18 10:27	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	18	ng/L		10/12/18 09:28	10/16/18 10:27	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	86		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C4 PFHpA	81		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C4 PFOA	92		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C4 PFOS	109		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C5 PFNA	100		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C4 PFBA	71		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C2 PFHxA	110		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C2 PFDA	96		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C2 PFUnA	106		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C2 PFDoA	104		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C8 FOSA	71		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C5 PFPeA	120		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C2 PFTeDA	104		25 - 150	10/12/18 09:28	10/16/18 10:27	1
d3-NMeFOSAA	82		25 - 150	10/12/18 09:28	10/16/18 10:27	1
d5-NEtFOSAA	85		25 - 150	10/12/18 09:28	10/16/18 10:27	1
M2-6:2 FTS	216 *		25 - 150	10/12/18 09:28	10/16/18 10:27	1
M2-8:2 FTS	100		25 - 150	10/12/18 09:28	10/16/18 10:27	1
13C3 PFBS	87		25 - 150	10/12/18 09:28	10/16/18 10:27	1

TestAmerica Burlington

Isotope Dilution Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFHxS (25-150)	PFHpA (25-150)	PFOA (25-150)	PFOS (25-150)	PFNA (25-150)	PFBA (25-150)	PFHxA (25-150)	PFDA (25-150)
200-45582-1	1770-7B	74	90	102	84	102	94	85	90
200-45582-2	FB-1770	91	90	106	114	115	81	108	114
200-45582-3	65 MIDDLE	76	85	96	82	108	42	68	101
200-45582-4	FB-65 MID	86	81	92	109	100	71	110	96
LCS 200-135049/2-A	Lab Control Sample	59	94	112	64	111	90	75	103
LCS 200-135150/2-A	Lab Control Sample	94	82	100	101	101	81	118	98
LCSD 200-135049/3-A	Lab Control Sample Dup	71	94	110	77	110	96	89	105
MB 200-135049/1-A	Method Blank	58	88	101	58	100	82	79	100
MB 200-135150/1-A	Method Blank	96	93	105	114	114	84	126	109

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFUnA (25-150)	PFDoA (25-150)	PFOSA (25-150)	PFPeA (25-150)	PFTDA (25-150)	-NMeFOS ₁ (25-150)	-NEtFOS ₁ (25-150)	M262FTS (25-150)
200-45582-1	1770-7B	100	95	71	71	96	79	89	148
200-45582-2	FB-1770	108	116	76	137	115	85	98	268 *
200-45582-3	65 MIDDLE	108	103	74	49	106	90	93	159 *
200-45582-4	FB-65 MID	106	104	71	120	104	82	85	216 *
LCS 200-135049/2-A	Lab Control Sample	115	105	41	48	110	105	105	99
LCS 200-135150/2-A	Lab Control Sample	103	116	84	128	112	87	93	223 *
LCSD 200-135049/3-A	Lab Control Sample Dup	110	102	53	60	107	94	96	119
MB 200-135049/1-A	Method Blank	105	99	38	50	93	90	93	88
MB 200-135150/1-A	Method Blank	113	115	79	140	106	87	96	248 *

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M282FTS (25-150)	3C3-PFB ₁ (25-150)
200-45582-1	1770-7B	109	86
200-45582-2	FB-1770	114	99
200-45582-3	65 MIDDLE	115	55
200-45582-4	FB-65 MID	100	87
LCS 200-135049/2-A	Lab Control Sample	115	64
LCS 200-135150/2-A	Lab Control Sample	110	108
LCSD 200-135049/3-A	Lab Control Sample Dup	129	75
MB 200-135049/1-A	Method Blank	106	62
MB 200-135150/1-A	Method Blank	114	111

Surrogate Legend

- PFHxS = 18O2 PFHxS
- PFHpA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFOS = 13C4 PFOS
- PFNA = 13C5 PFNA
- PFBA = 13C4 PFBA
- PFHxA = 13C2 PFHxA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA
- PFDoA = 13C2 PFDoA
- PFOSA = 13C8 FOSA
- PFPeA = 13C5 PFPeA
- PFTDA = 13C2 PFTeDA
- d3-NMeFOSAA = d3-NMeFOSAA

Isotope Dilution Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
SDG: 200-45582-1

d5-NEtFOSAA = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
13C3-PFBS = 13C3 PFBS

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QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-135049/1-A
Matrix: Water
Analysis Batch: 135244

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 135049

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	2.0	ng/L		10/10/18 09:50	10/16/18 01:29	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	20	ng/L		10/10/18 09:50	10/16/18 01:29	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	20	ng/L		10/10/18 09:50	10/16/18 01:29	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		20	20	ng/L		10/10/18 09:50	10/16/18 01:29	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		20	20	ng/L		10/10/18 09:50	10/16/18 01:29	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	58		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C4 PFHpA	88		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C4 PFOA	101		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C4 PFOS	58		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C5 PFNA	100		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C4 PFBA	82		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C2 PFHxA	79		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C2 PFDA	100		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C2 PFUnA	105		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C2 PFDoA	99		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C8 FOSA	38		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C5 PFPeA	50		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C2 PFTeDA	93		25 - 150	10/10/18 09:50	10/16/18 01:29	1
d3-NMeFOSAA	90		25 - 150	10/10/18 09:50	10/16/18 01:29	1
d5-NEtFOSAA	93		25 - 150	10/10/18 09:50	10/16/18 01:29	1
M2-6:2 FTS	88		25 - 150	10/10/18 09:50	10/16/18 01:29	1
M2-8:2 FTS	106		25 - 150	10/10/18 09:50	10/16/18 01:29	1
13C3 PFBS	62		25 - 150	10/10/18 09:50	10/16/18 01:29	1

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-135049/2-A
Matrix: Water
Analysis Batch: 135244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135049

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	45.2		ng/L		113	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	70.7	*	ng/L		177	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	43.3		ng/L		108	50 - 150
Perfluoroheptanoic acid (PFHpA)	40.0	40.4		ng/L		101	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	37.9		ng/L		95	50 - 150
Perfluorononanoic acid (PFNA)	40.0	35.4		ng/L		88	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	39.9		ng/L		100	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	38.3		ng/L		96	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	38.7		ng/L		97	50 - 150
Perfluorotridecanoic acid (PFTriA)	40.0	37.7		ng/L		94	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	39.7		ng/L		99	50 - 150
Perfluorobutanesulfonic acid (PFBS)	40.0	45.3		ng/L		113	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	40.0	45.1		ng/L		113	50 - 150
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	37.9		ng/L		95	50 - 150
Perfluorooctanesulfonic acid (PFOS)	40.0	38.6		ng/L		97	50 - 150
Perfluorodecanesulfonic acid (PFDS)	40.0	38.3		ng/L		96	50 - 150
Perfluorooctanesulfonamide (PFOSA)	40.0	38.2		ng/L		95	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	36.4		ng/L		91	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	38.2		ng/L		95	50 - 150
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	42.0		ng/L		105	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	35.4		ng/L		89	50 - 150

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
18O2 PFHxS	59		25 - 150
13C4 PFHpA	94		25 - 150
13C4 PFOA	112		25 - 150
13C4 PFOS	64		25 - 150
13C5 PFNA	111		25 - 150
13C4 PFBA	90		25 - 150
13C2 PFHxA	75		25 - 150
13C2 PFDA	103		25 - 150
13C2 PFUnA	115		25 - 150
13C2 PFDoA	105		25 - 150
13C8 FOSA	41		25 - 150
13C5 PFPeA	48		25 - 150
13C2 PFTeDA	110		25 - 150
d3-NMeFOSAA	105		25 - 150

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-135049/2-A
Matrix: Water
Analysis Batch: 135244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135049

<i>Isotope Dilution</i>	<i>LCS %Recovery</i>	<i>LCS Qualifier</i>	<i>Limits</i>
d5-NEtFOSAA	105		25 - 150
M2-6:2 FTS	99		25 - 150
M2-8:2 FTS	115		25 - 150
13C3 PFBS	64		25 - 150

Lab Sample ID: LCSD 200-135049/3-A
Matrix: Water
Analysis Batch: 135244

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 135049

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
Perfluorobutanoic acid (PFBA)	40.0	41.8		ng/L		105	50 - 150	8	30
Perfluoropentanoic acid (PFPeA)	40.0	58.1		ng/L		145	50 - 150	20	30
Perfluorohexanoic acid (PFHxA)	40.0	39.5		ng/L		99	50 - 150	9	30
Perfluoroheptanoic acid (PFHpA)	40.0	40.1		ng/L		100	50 - 150	1	30
Perfluorooctanoic acid (PFOA)	40.0	39.4		ng/L		99	50 - 150	4	30
Perfluorononanoic acid (PFNA)	40.0	36.6		ng/L		92	50 - 150	4	30
Perfluorodecanoic acid (PFDA)	40.0	39.9		ng/L		100	50 - 150	0	30
Perfluoroundecanoic acid (PFUnA)	40.0	37.0		ng/L		92	50 - 150	4	30
Perfluorododecanoic acid (PFDoA)	40.0	40.9		ng/L		102	50 - 150	6	30
Perfluorotridecanoic acid (PFTriA)	40.0	37.7		ng/L		94	50 - 150	0	30
Perfluorotetradecanoic acid (PFTeA)	40.0	41.4		ng/L		103	50 - 150	4	30
Perfluorobutanesulfonic acid (PFBS)	40.0	46.1		ng/L		115	50 - 150	2	30
Perfluorohexanesulfonic acid (PFHxS)	40.0	43.7		ng/L		109	50 - 150	3	30
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	42.2		ng/L		105	50 - 150	11	30
Perfluorooctanesulfonic acid (PFOS)	40.0	37.6		ng/L		94	50 - 150	3	30
Perfluorodecanesulfonic acid (PFDS)	40.0	37.0		ng/L		92	50 - 150	4	30
Perfluorooctanesulfonamide (PFOSA)	40.0	38.5		ng/L		96	50 - 150	1	30
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	40.0	37.2		ng/L		93	50 - 150	2	30
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	40.0	39.0		ng/L		97	50 - 150	2	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	42.5		ng/L		106	50 - 150	1	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	30.8		ng/L		77	50 - 150	14	30

<i>Isotope Dilution</i>	<i>LCSD %Recovery</i>	<i>LCSD Qualifier</i>	<i>Limits</i>
18O2 PFHxS	71		25 - 150
13C4 PFHpA	94		25 - 150
13C4 PFOA	110		25 - 150
13C4 PFOS	77		25 - 150
13C5 PFNA	110		25 - 150

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-135049/3-A
Matrix: Water
Analysis Batch: 135244

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 135049

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>LCSD Qualifier</i>	<i>Limits</i>
13C4 PFBA	96		25 - 150
13C2 PFHxA	89		25 - 150
13C2 PFDA	105		25 - 150
13C2 PFUnA	110		25 - 150
13C2 PFDoA	102		25 - 150
13C8 FOSA	53		25 - 150
13C5 PFPeA	60		25 - 150
13C2 PFTeDA	107		25 - 150
d3-NMeFOSAA	94		25 - 150
d5-NEtFOSAA	96		25 - 150
M2-6:2 FTS	119		25 - 150
M2-8:2 FTS	129		25 - 150
13C3 PFBS	75		25 - 150

Lab Sample ID: MB 200-135150/1-A
Matrix: Water
Analysis Batch: 135244

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 135150

<i>Analyte</i>	<i>MB Result</i>	<i>MB Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Perfluorobutanoic acid (PFBA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorooctanoic acid (PFOA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorononanoic acid (PFNA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorodecanoic acid (PFDA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	2.0	ng/L		10/12/18 09:28	10/16/18 09:40	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	20	ng/L		10/12/18 09:28	10/16/18 09:40	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	20	ng/L		10/12/18 09:28	10/16/18 09:40	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		20	20	ng/L		10/12/18 09:28	10/16/18 09:40	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		20	20	ng/L		10/12/18 09:28	10/16/18 09:40	1

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MB Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	96		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C4 PFHpA	93		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C4 PFOA	105		25 - 150	10/12/18 09:28	10/16/18 09:40	1

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-135150/1-A
Matrix: Water
Analysis Batch: 135244

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 135150

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFOS	114		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C5 PFNA	114		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C4 PFBA	84		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C2 PFHxA	126		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C2 PFDA	109		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C2 PFUnA	113		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C2 PFDoA	115		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C8 FOSA	79		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C5 PFPeA	140		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C2 PFTeDA	106		25 - 150	10/12/18 09:28	10/16/18 09:40	1
d3-NMeFOSAA	87		25 - 150	10/12/18 09:28	10/16/18 09:40	1
d5-NEtFOSAA	96		25 - 150	10/12/18 09:28	10/16/18 09:40	1
M2-6:2 FTS	248	*	25 - 150	10/12/18 09:28	10/16/18 09:40	1
M2-8:2 FTS	114		25 - 150	10/12/18 09:28	10/16/18 09:40	1
13C3 PFBS	111		25 - 150	10/12/18 09:28	10/16/18 09:40	1

Lab Sample ID: LCS 200-135150/2-A
Matrix: Water
Analysis Batch: 135244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	43.7		ng/L		109	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	29.0		ng/L		72	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	40.5		ng/L		101	50 - 150
Perfluoroheptanoic acid (PFHpA)	40.0	47.5		ng/L		119	50 - 150
Perfluorooctanoic acid (PFOA)	40.0	41.4		ng/L		103	50 - 150
Perfluorononanoic acid (PFNA)	40.0	39.6		ng/L		99	50 - 150
Perfluorodecanoic acid (PFDA)	40.0	44.8		ng/L		112	50 - 150
Perfluoroundecanoic acid (PFUnA)	40.0	48.9		ng/L		122	50 - 150
Perfluorododecanoic acid (PFDoA)	40.0	41.2		ng/L		103	50 - 150
Perfluorotridecanoic acid (PFTriA)	40.0	41.8		ng/L		105	50 - 150
Perfluorotetradecanoic acid (PFTeA)	40.0	45.8		ng/L		114	50 - 150
Perfluorobutanesulfonic acid (PFBS)	40.0	39.2		ng/L		98	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	40.0	38.4		ng/L		96	50 - 150
Perfluoroheptanesulfonic Acid (PFHpS)	40.0	43.9		ng/L		110	50 - 150
Perfluorooctanesulfonic acid (PFOS)	40.0	43.5		ng/L		109	50 - 150
Perfluorodecanesulfonic acid (PFDS)	40.0	45.7		ng/L		114	50 - 150
Perfluorooctanesulfonamide (PFOSA)	40.0	41.2		ng/L		103	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	38.8		ng/L		97	50 - 150

TestAmerica Burlington

QC Sample Results

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-135150/2-A
 Matrix: Water
 Analysis Batch: 135244

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 135150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	40.0	42.5		ng/L		106	50 - 150
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	40.0	45.4		ng/L		114	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	40.0	38.4		ng/L		96	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
18O2 PFHxS	94		25 - 150
13C4 PFHpA	82		25 - 150
13C4 PFOA	100		25 - 150
13C4 PFOS	101		25 - 150
13C5 PFNA	101		25 - 150
13C4 PFBA	81		25 - 150
13C2 PFHxA	118		25 - 150
13C2 PFDA	98		25 - 150
13C2 PFUnA	103		25 - 150
13C2 PFDaA	116		25 - 150
13C8 FOSA	84		25 - 150
13C5 PFPeA	128		25 - 150
13C2 PFTeDA	112		25 - 150
d3-NMeFOSAA	87		25 - 150
d5-NEtFOSAA	93		25 - 150
M2-6:2 FTS	223 *		25 - 150
M2-8:2 FTS	110		25 - 150
13C3 PFBS	108		25 - 150

QC Association Summary

Client: ATC Group Services LLC
 Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
 SDG: 200-45582-1

LCMS

Prep Batch: 135049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-45582-1	1770-7B	Total/NA	Water	3535	
200-45582-3	65 MIDDLE	Total/NA	Water	3535	
MB 200-135049/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-135049/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-135049/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 135150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-45582-2	FB-1770	Total/NA	Water	3535	
200-45582-4	FB-65 MID	Total/NA	Water	3535	
MB 200-135150/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-135150/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 135244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-45582-1	1770-7B	Total/NA	Water	537 (modified)	135049
200-45582-2	FB-1770	Total/NA	Water	537 (modified)	135150
200-45582-3	65 MIDDLE	Total/NA	Water	537 (modified)	135049
200-45582-4	FB-65 MID	Total/NA	Water	537 (modified)	135150
MB 200-135049/1-A	Method Blank	Total/NA	Water	537 (modified)	135049
MB 200-135150/1-A	Method Blank	Total/NA	Water	537 (modified)	135150
LCS 200-135049/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	135049
LCS 200-135150/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	135150
LCSD 200-135049/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	135049

Lab Chronicle

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
SDG: 200-45582-1

Client Sample ID: 1770-7B

Date Collected: 10/03/18 13:10

Date Received: 10/04/18 10:03

Lab Sample ID: 200-45582-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			135049	10/10/18 09:50	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	135244	10/16/18 02:16	BWC	TAL BUR

Client Sample ID: FB-1770

Date Collected: 10/03/18 13:12

Date Received: 10/04/18 10:03

Lab Sample ID: 200-45582-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			135150	10/12/18 09:28	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	135244	10/16/18 10:11	BWC	TAL BUR

Client Sample ID: 65 MIDDLE

Date Collected: 10/03/18 15:35

Date Received: 10/04/18 10:03

Lab Sample ID: 200-45582-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			135049	10/10/18 09:50	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	135244	10/16/18 02:32	BWC	TAL BUR

Client Sample ID: FB-65 MID

Date Collected: 10/03/18 15:36

Date Received: 10/04/18 10:03

Lab Sample ID: 200-45582-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			135150	10/12/18 09:28	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	135244	10/16/18 10:27	BWC	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
SDG: 200-45582-1

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD ELAP		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-19
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-18
New Hampshire	NELAP	1	2006	12-18-18
New Jersey	NELAP	2	VT972	06-30-19
New York	NELAP	2	10391	04-01-19
Pennsylvania	NELAP	3	68-00489	04-30-19
Rhode Island	State Program	1	LAO00298	12-30-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-19
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-18
Virginia	NELAP	3	460209	12-14-18

Method Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
SDG: 200-45582-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990



Sample Summary

Client: ATC Group Services LLC
Project/Site: PFAS, SVRA (21/24 analytes)

TestAmerica Job ID: 200-45582-1
SDG: 200-45582-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-45582-1	1770-7B	Water	10/03/18 13:10	10/04/18 10:03
200-45582-2	FB-1770	Water	10/03/18 13:12	10/04/18 10:03
200-45582-3	65 MIDDLE	Water	10/03/18 15:35	10/04/18 10:03
200-45582-4	FB-65 MID	Water	10/03/18 15:36	10/04/18 10:03

1

2

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TestAmerica Burlington
 30 Community Drive Suite 11
 South Burlington, VT 05403
 Phone (802) 660-1990 Fax (802) 660-1919

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Mr. James Gascoyne Company: ATC Group Services LLC Address: 1 Elm Street, Suite 3 City: Waterbury State, Zip: VT, 05676 Phone: 802 241 4131 Email: James.Gascoyne@atcassociates.com Project Name: PFAS, SVRA (12 analytes) Site: Rutland (Ref)		Lab PM: Dusablon, Kristine A E-Mail: kris.dusablon@testamericainc.com Phone: 802 241 4131 Carrier Tracking No(s): Job #:		COC No: 200-20855-9098.4 Page: Page 4 of 4 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: / 2008078 Project #: 20007895 SSOW#:		Analysis Requested  200-45582 COC			
Sample Identification Sample ID: 767-ERP Sample ID: FB-767-7B Sample ID: 1770-7B Sample ID: FB-1770 Sample ID: 65 Middle Sample ID: FB-65 Mid		Sample Date 10/3/18 1245 1244 1310 1312 1535 1536	Sample Time 1245 1244 1310 1312 1535 1536	Sample Type (C=Comp, G=grab) G G G G G G	Matrix (W=water, S=solid, O=oil, A=air) Preservation Code: Water Water Water Water Water Water
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> X Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> X PFC, IDA - (MOD) PFAS, 12 Analytes <input checked="" type="checkbox"/> X PFC, IDA - (MOD) PFAS, 12 Analytes <input checked="" type="checkbox"/> X Total Number of Containers <input checked="" type="checkbox"/> X		Special Instructions/Note: Return To Client <input checked="" type="checkbox"/> X Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) COMM. B w/ case narrative		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Empty Kit Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]		Method of Shipment: Date/Time: 10/13/18 1930 Date/Time: 10/18/18 10:03 Date/Time:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

Login Sample Receipt Checklist

Client: ATC Group Services LLC

Job Number: 200-45582-1
SDG Number: 200-45582-1

Login Number: 45582
List Number: 1
Creator: Nye, Elizabeth A

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1° C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



APPENDIX B
SAMPLING FIELD NOTES

3/28/18

Project: Rutland SVRA- PFC sampling

Project #: 280EM Rutland SVRA

Weather: Cloudy, 38°F

0915

Chelsea Fellows-Stanley (CFS) of ATE arrives onsite at Rutland Airport Industrial Park. Meet with Mark Drazen who says well #1 is ready for sampling.

0920

CFS goes into building and completes PFAS sampling checklist.

0922

CFS tests well #1 water for Chlorine. NO Chlorine observed.

0925

Collect Field Blank (SVRA-Field Blank) at water sample port location using PFAS-free water supplied by lab. (Test America).

0930

Collect sample from well #1 (SVRA-Well-01)

0932

Begin flushing well #2. Should take 30 min.

1000

CFS tests well #2 water for Chlorine. NO Chlorine observed.

1005

Collect sample from well #2 (SVRA-Well-02), then.

~~1007~~

Begin flushing for combined well sample.

1033

CFS tests combined well water for Chlorine. NO Chlorine observed.

1035

Collect sample from combined well (SVRA-Well-combined)

1037

Take photos of interior and exterior of building. Note yellow tape on sample port connection to piping. Call PM - James Gascoyne to confirm all samples have been collected.

1045

Complete sample management and complete COC.

1100

CFS offsite and head back to office.

4/12/18 Project - Rutland SVRA - PFAS sampling
Private Drinking Water Wells

P# 280EM00165

Weather: Partly Cloudy 40°F

0930 ATC's Chelsea Fellows-Stanley (CFS) arrives at
1480 Gorge Rd. and checks in with tenant (Jen).

0935 VT DEC's Michael Nahmias arrives onsite and
finds property owner (Ron Evans).

0940 Start running water at Kitchen Sink. Then CFS, MN +
property owner go to the basement to view 800
gallon storage tanks. Owner says best place to
collect a sample is from the kitchen sink which
is water prior to storage tanks. VT DEC agrees.

0954 Collect FB-1480 Gorge at kitchen sink

0955 Collect DW-1480 Gorge from kitchen sink.

1015 Arrive at 375 Gorge Rd. and check in with owner
Geri Hamle. Notes they do not have treatment
system.

1016 CFS starts running water at kitchen sink.

1025 Collect FB-375 Gorge at kitchen sink.

1026 collect DW-375 Gorge from kitchen sink.

(and duplicate sample → DW-Duplicate @ 0000)

1035 Arrive at Jones Ln. / Wayne's Body Shop and check in
with Gary Jones. Notes he has already run water at
both properties for more than 10 min.

1039 collect FB-30 Jones at kitchen sink.

4/12/18

Project: Rutland SVRA - PPTAS Sampling
P# 280EM00165

(2)

1040

Collect DW-30 Jones from kitchen sink.

1048

collect FB-82 Jones at kitchen sink

1050

collect DW-82 Jones from kitchen sink.

1103

Arrive at 742 Rt. 7B and check in with owner
(Kipp Mullin).

1104

Start running water at kitchen sink, ^{water} system has
softener so go to basement to collect sample
from pressure tank spiget.

1114

Collect FB-742 Rt 7B at pressure tank location

1115

collect DW-742 Rt 7B from pressure tank spiget.

Work: small amount of teflon tape on spiget to tank

1130

Arrive at 832 Rt. 7B and check in with ^{connection}
Joseph Guggenberger (owner), VT DEC, ATC, and owner
discuss property water system. Decide to collect
sample from spiget prior to softener but after
filter b/c owner can route water to by pass
filter and spiget at base of pressure tank is not
located so a sample bottle could fit in space.

1140

Turn water on at kitchen ^{FB} and let run for 10 min.

1149

Collect FB-832 Rt. 7B

1150

Collect DW-832 Rt 7B

1205

Arrive at 916 Rt. 7B and check in with owner
Dorlene Goad. Water system has softener but
currently not working. Owner states she has already
run the water for more than 10 min.

4/12/18

Project: Rutland SVRA - PFAS Sampling
P#: 280EM00165

1208

Collect FB-916 Pt. 7B at kitchen sink.

1210

Collect DW-916 Pt. 7B from kitchen sink.

1215

VT DEC and ATC confirm all 7 sample locations / properties on the list (dated 4/12/18) have been sampled. VT DEC offsite. ATC offsite to complete sample management and deliver samples to Test America in Burlington.

1430

CFS completes sample management + COC, picks up additional ice + heads to Test America.

1600

Drop off samples at Test America.
CFS heads back to ATC office.

~~CFS 4/12/18~~

Residential PFAS Drinking Water Sampling
Sampling Schedule
April 12, 2018

Name	Sample Time on 4/12/18	Address	Phone/Email	Notes
X X Ron and Linda Evans	9:30	2964 East Street is actual address	773-8277	they have 800-gallons of storage in the basement. May need to sample before this if possible.
		1480 Gorge Road (Kingsley Grist Mill)		
X X Geraldyn & David Hañce	10:00	375 Gorge Road	775-4417 gerih42@myfairpoint.net	No treatment before distribution Dcp
X X Gary Jones	10:30 & 11:00	30 - P th Jones Lane 82 - Main Hwy (Wayne's Body Shop)	Cell: 747-8894	<u>Two wells</u> ; one at Gary's residence and one at his parents' residence; works from home <u>no softener</u>
X X Kipp & Mary Mullin	11:15	742 Route 7B Central	Cell: 779-1723 Home: 747-0517	Softner in basement, try to sample before if possible.
X X Blaine & Darlene Goad	11:45	916 Route 7B Central	Cell: 345-6845	Have softener, but its not working? Sample before if possible <u>softener not working</u>
X X Josef & Mary Guggenberger	12:15	832 Route 7B Central	Cell: 236-1460 Home: 747-3246	has softener, try to sample before if possible.
Robert P. Boylan (Frito Lay Contact)	1:00	Route 7B Central	Work: 376-8822 rboylan@yahoo.com	Frito Lay Warehouse on 7B north of pellet mill - Mr. Boylan will not be available until 10:00 AM on 4/19
Valerie Badger		770 Airport Blvd		
Blaine Russell		767 Route 7B Central		

↓ RMULLIN 35 @ GMAIL.COM
MARY.MULLIN @ ME.COM

280EM00185 - VTRANS Rutland Airport - DW sampling PFAS

5.9.18 P onsite w/ M. Mahmas from VTDEC

1030 onsite Alt 111 Middle Rd.

111 Middle Rd @ 1035 kitchen sink

FB-111 Middle @ 1030

1045 Town Hall 279 Middle Rd

279 Middle Rd @ 1055 bathroom sink

FB-279 Middle @ 1050

1105 Carol Guyette 339 Rt 7B Central

339 Rt 7B @ 1115 pressure tank

FB-339 Rt 7B @ 1110

1130 Frito Lay Rt 7B Central

Frito Lay @ 1140 bathroom sink

FB-Frito Lay @ 1135

1150 Helen Hadley 1420 Gorge Rd.


1420 Gorge @ 1204 spigot

FB-1420 Gorge @ 1205

DUP @ 1200

1210 Katie Dayton 84 Rt 7B

84 Rt 7B @ 1220 kitchen sink

!  FB-84 Rt 7B @ 1215

1300 Sarah Gregory 443 Rt 7B

443 Rt 7B @ 1310 spigot

FB-443 Rt 7B @ 1305

5-9-18
cont.

1320 Joe Thompson 452 Rt 7B
452 Rt 7B @ 1330 spigot
FB-452 Rt 7B @ 1325

1340 Tom Weeks 581 Rt 7B
581 Rt 7B @ 1350 pressure tank
FB-581 Rt 7B @ 1345

1400 Shirley Whittmore 859 Rt 7B
859 Rt 7B @ 1415 kitchen sink
FB-859 Rt 7B @ 1410

1420 Phyllis Carlson 656 Rt 7B
656 Rt 7B @ 1430 spigot
FB-656 Rt 7B @ 1425

1435 Gary Renner 205 Rt 7B
205 Rt 7B @ 1445 kitchen sink
FB-205 Rt 7B @ 1440

1450 Tammy Potter 866 Rt 7B
866 Rt 7B @ 1500 kitchen sink
FB-866 Rt 7B @ 1455

1505 Jim Eddy 705 Rt 7B
705 Rt 7B @ 1515 spigot
FB-705 Rt 7B @ 1510

JP

5.9.18
cont.

1540 Russells 767 Rt 7B
767 Rt 7B @ 1530 kitchen sink
FB-767Rt7B @ 1545 (softener bypassed)

1555 Sharon/Jerry Flood 895 Rt 7B
895 Rt 7B @ ~~1305~~ 1505 pressure tank
FB-895Rt7B @ ~~1300~~ 1600

1610 Mark Hance 92 Gorge Rd
92 Gorge ~~Rd~~ @ 1620 pressure tank
FB-92 Gorge @ 1615

1630 Eric Jenson 129 Rt 7B
129 Rt 7B @ 1640 kitchen sink
FB-129Rt7B @ 1635

1645 Edward Baker 940 Middle Rd
940 Middle Rd @ 1655 spigot
FB-940 Middle @ 1650

finished paperwork

at site

JP

Residential PFAS Drinking Water Sampling
Sampling Schedule
May 9, 2018

Name	Sample Time on 5/9/18	Address	Phone/Email	Notes
✓ Tammy Potter		@1500 866 Route 7B Central	802-770-0843	left two messages, no return call
✓ Phyllis Carlson		@1430 656 Route 7B Central	802-773-0405	left two messages, no return call
✓ Eric Jensen	4:30	@1640 129 Route 7B Central	802-558-0233 Mary Marriot, Case Worker	doesn't think they have a softener, probably check.
✓ Mark Hance	4:00	@1620 92 Gorge Road	802-282-8769	no softener, has "water filter". He should be home at 4:00 but if not collect from Spigot
✓ Sharon & Jerry Flood	3:30	@1305 895 Route 7B Central	802-236-6206	They work til 3:00. have softener, sample before.
✓ Jim Eddy	3:00	@1515 705 Route 7B Central	802-775-2140	Has softener, but can collect from hose bib or pressure tank.
✓ Gary Renner	2:30	@1445 205 Route 7B Central	802-747-4949	no softener, collect from faucet.
✓ Shirley Whittemore	2:00	@1415 859 Route 7B Central	802-558-8872	no softener, collect from faucet.
✓ Tom Weeks	1:30	@1350 581 Route 7B Central	802-773-5614	Has softener, run water at sink and collect from pressure tank.
✓ Sarah Gregory	1:00	@1310 443 Route 7B Central	802-683-7115	have softener, sample after
12:30-1:00 Lunch break				
✓ Katie Dayton	12:00	@1220 84 Route 7B Central	802-353-3989	No filtration or softener, take from faucet.
✓ Robert P. Boylan (Frito Lay Contact)	11:30	825 @1140 Route 7B Central	Work: 376-8822 rpboylan@yahoo.com	Frito Lay Warehouse on 7B north of pellet mill
✓ Carol Guyette	11:00	@1115 339 Route 7B Central	802-773-9666	Home until 12:00, have softener, sample from pressure tank
✓ Town Hall	10:30	@1055 279 Middle Road	802-775-4274	No filtration or softener, take from faucet.
✓ Alf Strom-Olsen	10:00	@1035 111 Middle Road	802-775-5122	No filtration or softener, take from faucet. He will run water and remove screen ahead of you arrival.
✓ Joe Thompson	Anytime	@1330 452 Route 7B Central	215-514-2587	resident is home all day, but is okay with sampling from his spigot.
✓ Helen Hadley	Anytime	@1204 1420 Gorge Road *DUP	No contact info, see notes	Sample outside spigot, which was turned on for us to sample. Located at back of house on the deck
✓ Edward Baker	Anytime	@1655 940 Middle Road	802-747-5537	collect sample from spigot in front of house close to garage. If alarm sounds call 802-353-1879

* run water for at least 10 minutes before sample collection. If sampling from pressure tank (pre-softener), keep water running at faucet during sampling.

✓ Russell 767 Rt 7B @1550

JP onsite 0830

weather - sunny 70-88°, breezy

Residential PFAS Drinking Water Sampling
Sampling Schedule
July 24, 2018

FB'S

Samples

0900
0925
0950
*
1125
1145
1200
1225

1310
1330
1410
1440
1515
1600
1625
1645
1720
1530

0902
0924
0948
*
1124
1144
1158
1224

1308
shared well 1328
1408
1438
1514
1601
1624
1644
1721
1528

Name	Sample Time on 7/24/18	Address	Phone/Email	Notes
Barbara Minard ✓	8:30	864 Airport Drive	802-775-0747 babsons2@gmail.com	has softener sample from pressure tank.
Joe Thompson ✓	9:00	452 Rt 7B	215-514-2587	he will not be there, hose bib sampling outside. Had to switch out his 2:30 for 9:00 to accommodate OMYA sampling
Tony Flanders ✓	9:30	873 Airport Drive	802-558-4436 tf1man@comcast.net	has softener but on bypass, also has filter for kitchen faucet, collect from bathroom or pressure tank.
Mary & Dave Dransfield ✓	10:00	429 Airport Drive	802-775-4980 dmdrans@sover.net	4 sample locations. have filters/softeners, dairy barn, house, and rental. They also have spring. Collect main house, rental, dairy barn and spring water supplies.
Bernard Corey ✓	11:00	915 Airport Drive	802-775-4449 bbcorey@comcast.net	no softener or filtration
Harry Delong ✓	11:30	729 Airport Drive	802-775-0616	has softener, sample from pressure tank.
Lucretia Badger ✓	12:00	770 Airport Drive	802-345-2933	no softener No treatment/softener
Bob Bixby ✓	12:30	773 Airport Drive	802-773-6470	no softener/treatment. Rental property
no lunch break scheduled				
Michael & Angela Goodwin ✓	1:00	168 Brenda Road	802-377-7695 asheldrick228@gmail.com	No treatment/softener
Janine Nilsen ✓	1:30	2759 East Street	802-855-1618 Nilsen.jd@gmail.com	has softener, sample from pressure tank.
Pete Harrington ✓	2:00	383 Rt 7B	802-342-1042 harringtonbnr@yahoo.com	collect from outdoor hose bib, see attached email instruction. He has softener, and he will bypass it just to be safe.
Dan Pennington ✓	2:30	hanger at airport, 1002 Airport Drive.	802-236-8277	Dan will meet you at site at 2:30, which is the earliest he can do.
Zerrita Colvin ✓	3:00	71 Cobb Lane	802-558-4248 zc05732@gmail.com	has softener, meet Ms. Colvin here first
Zerrita Colvin ✓	3:30	29 Cobb Lane	802-558-4248 zc05732@gmail.com	Collect sample from 56 Parsonage/Cobb Lane residence (shared well). Residence has softener. If owner (Judith Palfrey) is not there then collect from one of three hose bibs.
James Colburn ✓	3:45	43 Middle Road	802-770-9135	no softener/treatment.
Karl & Teresa Trujillo ✓	4:15	42 Middle Road	505-259-3468 gonnfishnn@gmail.com	have softener, sample before.
Deb & Peter Esslinger ✓	4:45	118 Middle Road	802-775-6001	Sampling okay, not sure if they have softener/filtration. Played phone tag.
David Mason ✓	5:15	84 Cobb Lane	802-775-2204	have softener, sample before.

* run water for at least 10 minutes before sample collection. If sampling from pressure tank (pre-softener), keep water running at faucet during sampling.

ATC

JP onsite 15 1730

280EM00TBD

* 429 - Main @ 1025

FB-429, main @ 1024

471 @ 1030

FB @ 1028

429 - Dairy @ 1045

FB @ 1044

429 - Spring @ 1050

FB @ 1048



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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	864 Airport Drive		
SAMPLER(S)	JF	DATE/TIME	7/24/18 8:30
OWNER NAME	Barbara Mmard	E-MAIL	babsons2@gmail.com
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-775-0747
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) Backyard	
DATE OF INSTALLATION	13:529815	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES 152	LAT: 44° 20.248'	WELL TAG NUMBER	
	LONG: 72° 45.381' - 72° 45.376'	DRILLER ID #	
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES <input type="radio"/> NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	right of house
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT <input type="radio"/> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 0850 SAMPLE TIME: 0900	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE: NA
SAMPLE ID:	864 Airport	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

FB-864 Airport @ 0902

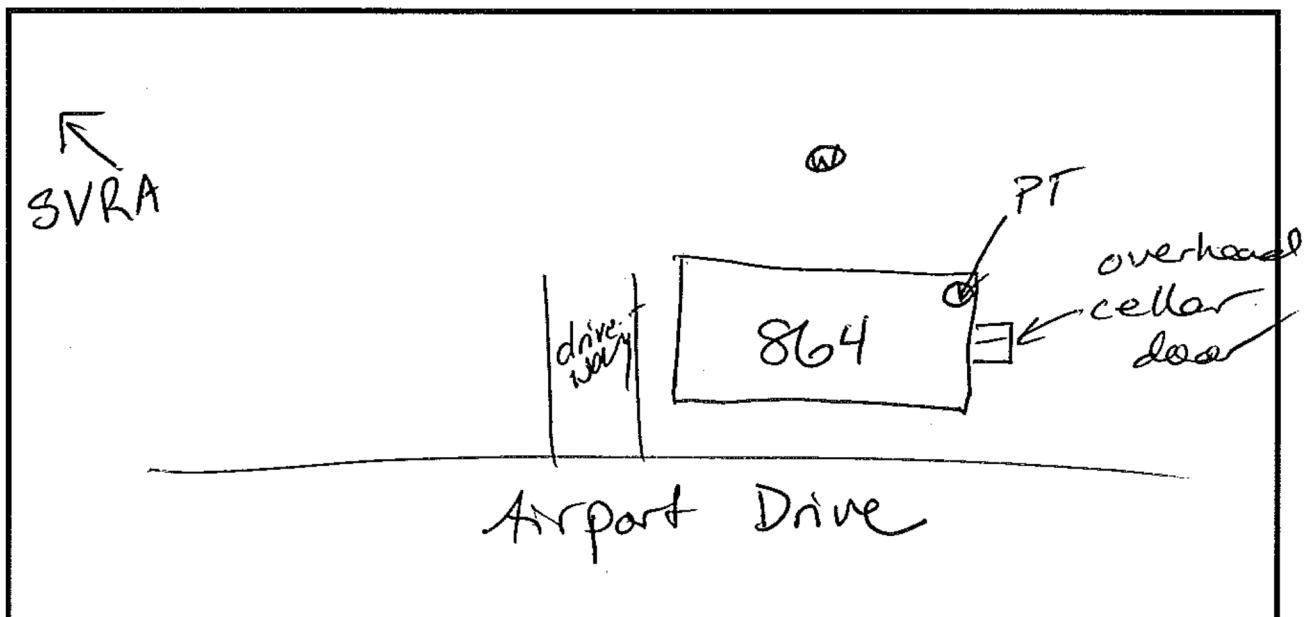
SAMPLE AREA INVENTORY/USE:

NOTES:

Basement - unfinished
concrete floor

water softener
sewer line
sump pump

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	452 Rt. 7B		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Joe Thompson	E-MAIL	-
ADDRESS (IF DIFFERENT)	-	TELEPHONE	215-514-2587
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME		TELEPHONE	-
WATER SUPPLY TYPE	<input checked="" type="radio"/> SPRING <input type="radio"/> OVERBURDEN <input checked="" type="radio"/> BEDROCK <input type="radio"/> UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) Backyard	
DATE OF INSTALLATION	11/2016	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE) <input checked="" type="checkbox"/>	
GPS COORDINATES 153	LAT: 44° 20' 248" 43° 51' 8" 768" JP	WELL TAG NUMBER	56495 (sampled previously)
	LONG: 72° 45' 381" -72.961214	DRILLER ID#	212
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input checked="" type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES <input type="radio"/> NO <input type="radio"/> NONE PRESENT NA
PURGING TIMES	START: 0915 SAMPLE TIME: 0925	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID: 452 Rt 7B		COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

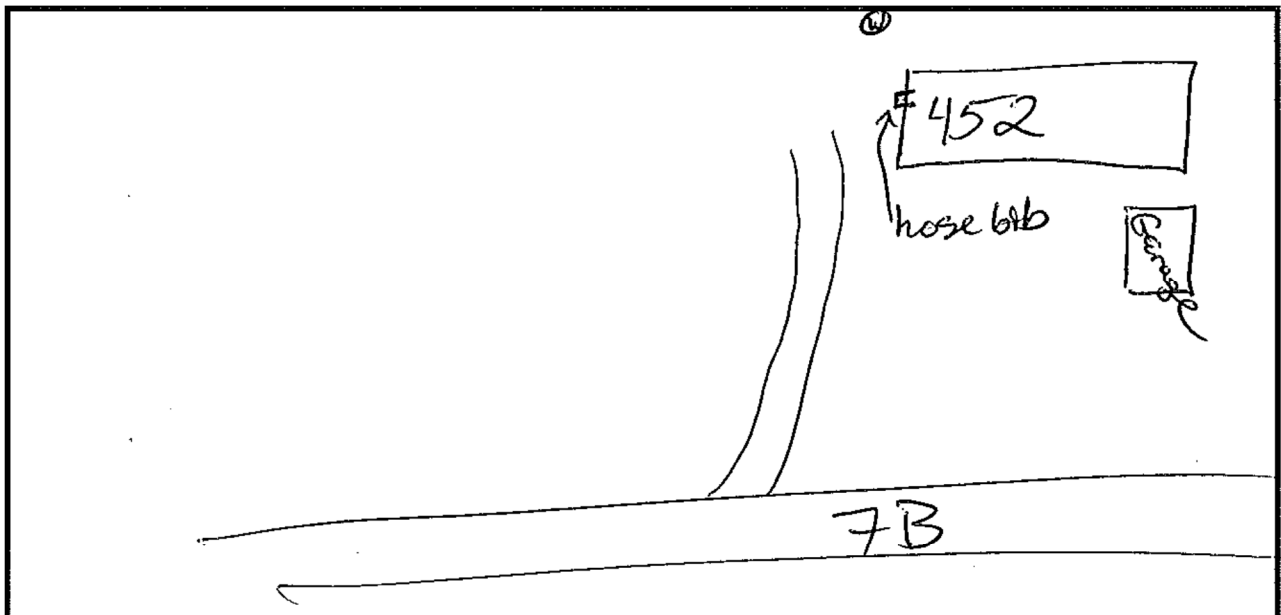
FB-452 Rt 7B @ 0924
* switched over to spring

SAMPLE AREA INVENTORY/USE:

NOTES:

hose bib - left side of
house

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	873 Airport Drive		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Tomy Flanders	E-MAIL	tf1man@comcast.net
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-558-4436
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) right front yard	
DATE OF INSTALLATION	11/16	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES 154	LAT: 44° 20.248' <input checked="" type="radio"/> 43.529452 <input checked="" type="radio"/>	WELL TAG NUMBER	42509
	LONG: 72° 45.381' <input checked="" type="radio"/> 72.944613 <input checked="" type="radio"/>	DRILLER ID #	212
WATER SOFTENER	<input checked="" type="radio"/> YES No TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES No UNKNOWN
WATER FILTER	<input checked="" type="radio"/> YES No TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT KITCHEN FAUCET OTHER: Bathroom	AERATOR REMOVED?	<input checked="" type="radio"/> YES No NONE PRESENT
PURGING TIMES	START: 0940 SAMPLE TIME: 0950	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE: NA
SAMPLE ID:	873 Airport	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

PB-873 Airport @ 0948

SAMPLE AREA INVENTORY/USE:

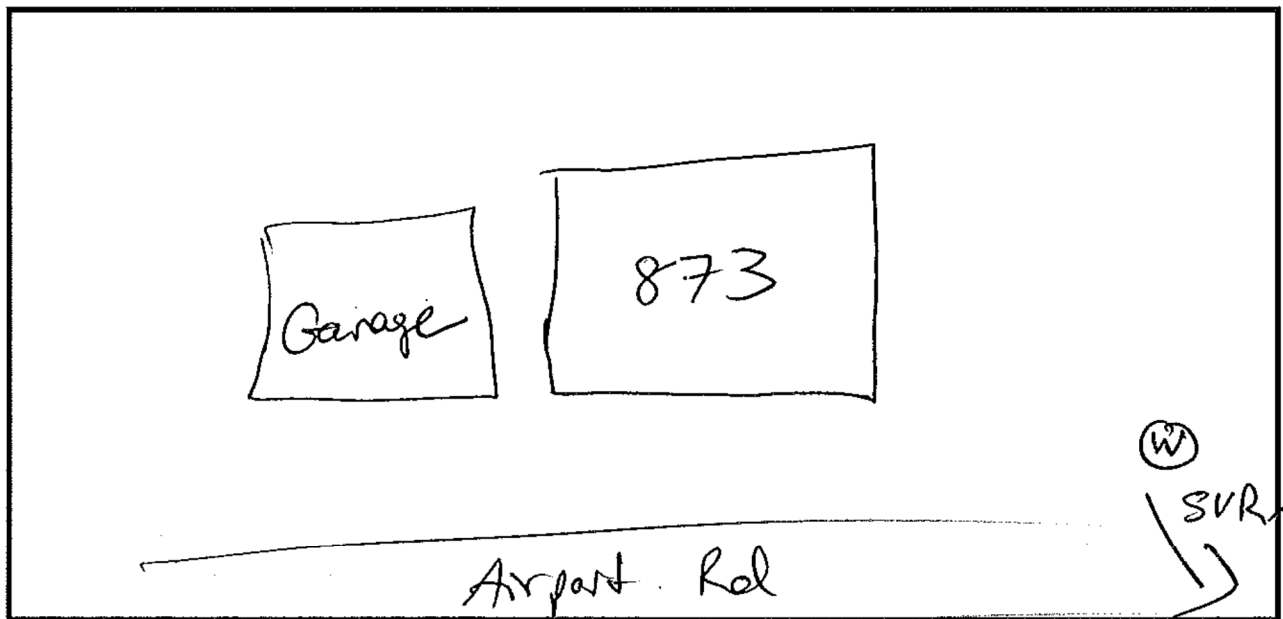
NOTES:

bypassed softener

filter on kitchen sink

sample from bathroom

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:



← Mineral



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SUPPLY WELL FIELD COLLECTION FORM

main house

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	429 Airport Drive		
SAMPLER(S)	JF	DATE/TIME	7/24/18
OWNER NAME	Dave Dransfield	E-MAIL	dmdrans@sover.net
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-775-4980
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) flush mount in grass	
DATE OF INSTALLATION		TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 155 COORDINATES	LAT: 43° 32.148'	WELL TAG NUMBER	no
	LONG: 72° 56.783'	DRILLER ID #	
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE: bypassed	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO UNKNOWN
WATER FILTER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE: bypassed	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input checked="" type="radio"/> OUTSIDE SPIGOT	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 1015 SAMPLE TIME: 1025	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE: NA
SAMPLE ID: 429-main		COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

PB-429 main @ 1024

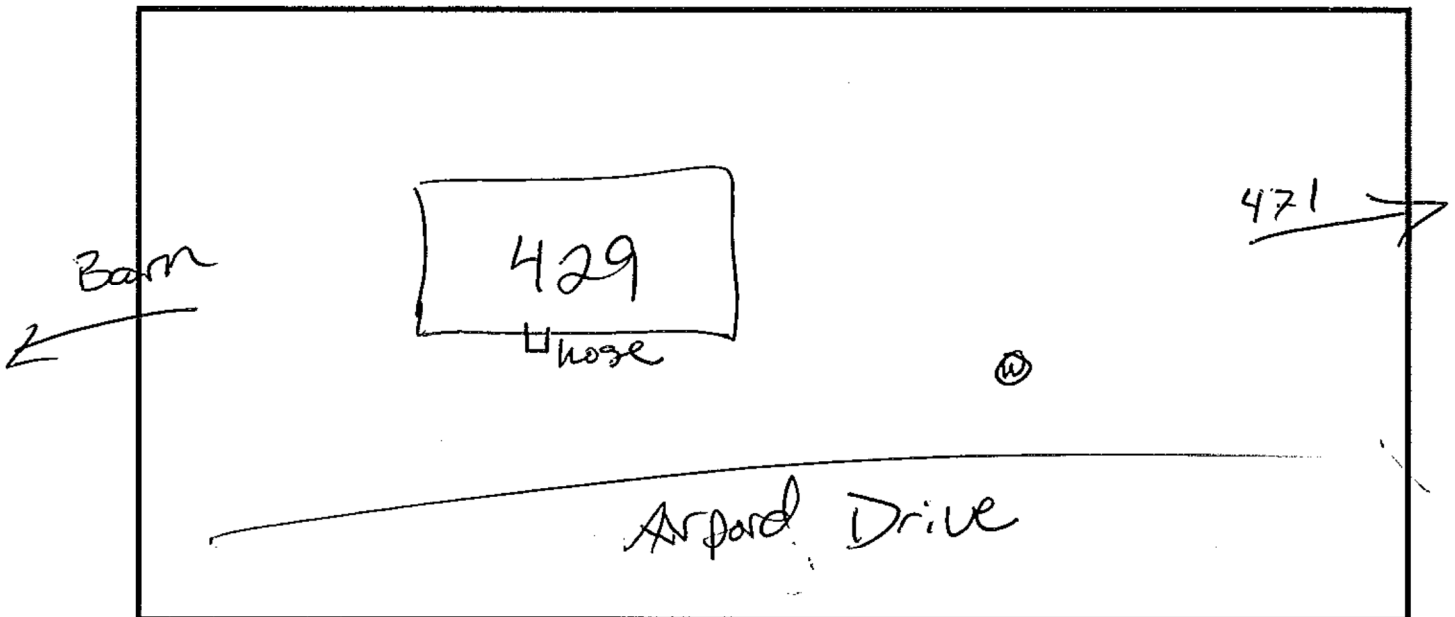
SAMPLE AREA INVENTORY/USE:

NOTES:

hose bnd

front of house

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

rental

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	471 429 Airport Drive		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Dave Dransfield	E-MAIL	dndrans@sover.net
ADDRESS (IF DIFFERENT)	429 Airport Dr.	TELEPHONE	802-775-4980
RENTAL?	<input checked="" type="radio"/> YES <input type="radio"/> NO	E-MAIL	-
TENANT NAME	Chris + Pam Lancour	TELEPHONE	802-236-0499
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) left yard	
DATE OF INSTALLATION		TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: 43° 32.138'	WELL TAG NUMBER	no
	LONG: -72° 56.776'	DRILLER ID #	-
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO UNKNOWN
WATER FILTER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES <input checked="" type="radio"/> NO NONE PRESENT
PURGING TIMES	START: 1017 SAMPLE TIME: 1030	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	471 Airport	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

FB-471 Airport @ 1028

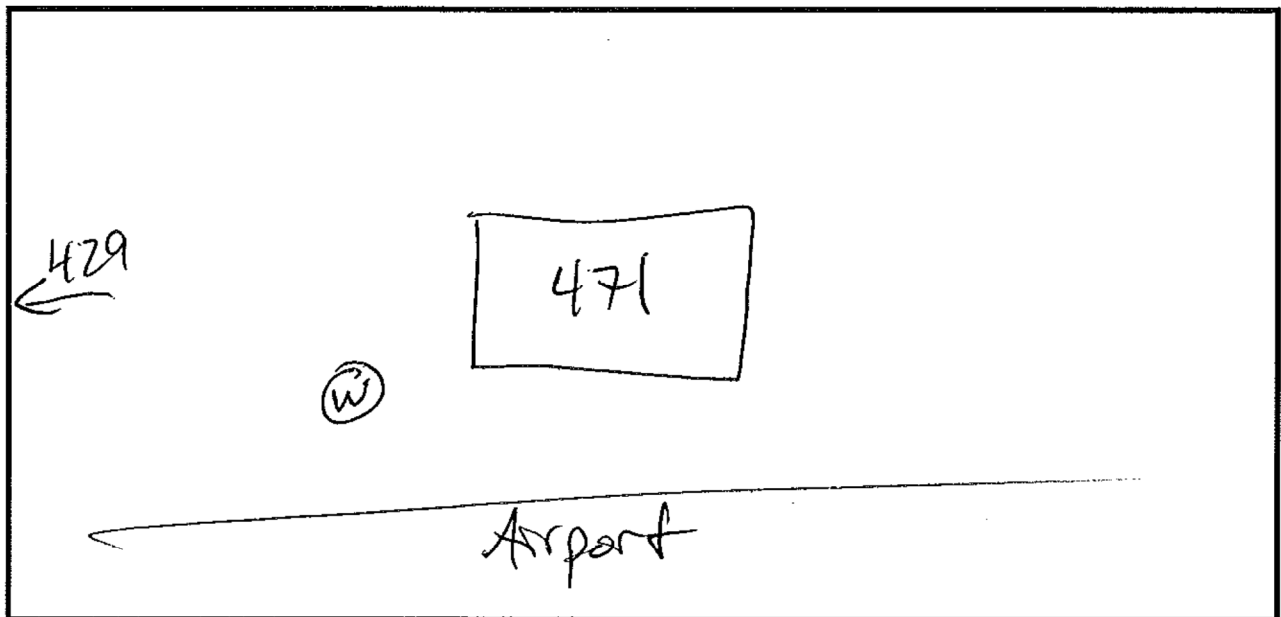
SAMPLE AREA INVENTORY/USE:

NOTES:

pressure tank

- household chemicals, joint compound, paints etc.

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

Dairy Barn

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	429 Airport Drive		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Dave Dransfield	E-MAIL	dndrans@sover.net
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-775-4980
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) right of barn	
DATE OF INSTALLATION	5/1994	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 157 COORDINATES	LAT: 43° 32.236'	WELL TAG NUMBER	17631
	LONG: -72° 56.827'	DRILLER ID #	
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES <input type="radio"/> NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 1035 SAMPLE TIME: 1045	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	429-dairy	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

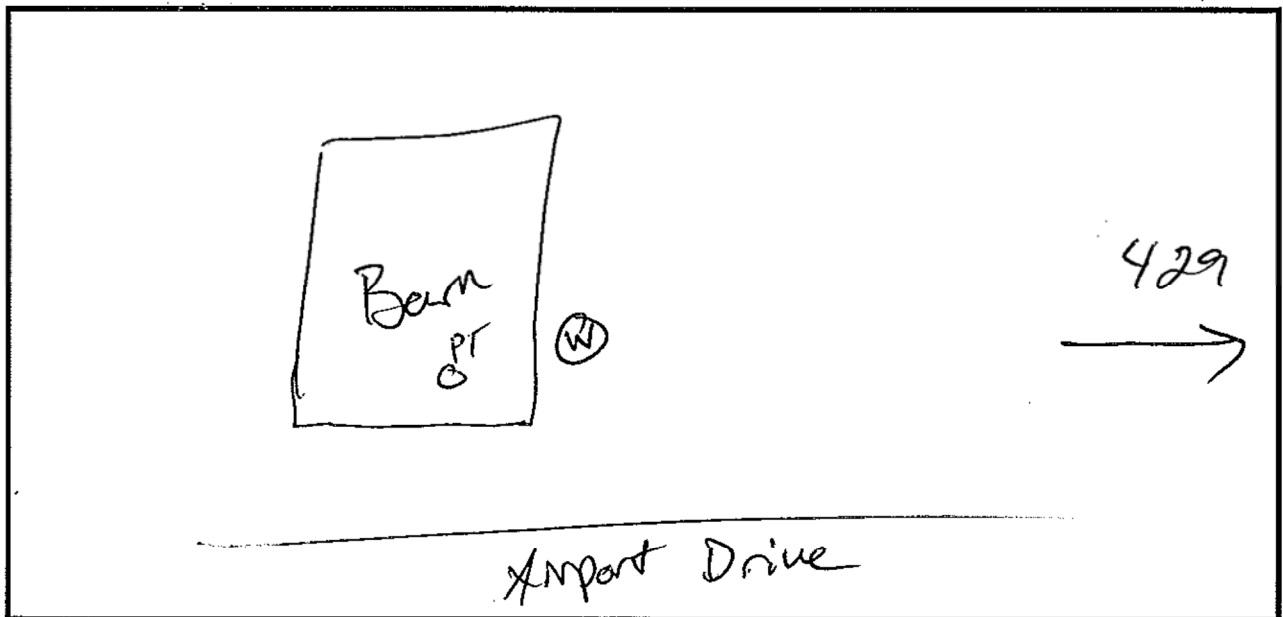
FB-429 Dairy @1044

SAMPLE AREA INVENTORY/USE:

NOTES:

pressure tank room

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

spring

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	429 Airport Drive		
SAMPLER(S)	J8	DATE/TIME	7/24/18
OWNER NAME	Dave Dransfield	E-MAIL	dmdrans@sover.net
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-775-4980
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	<input checked="" type="radio"/> SPRING OVERBURDEN BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...)	
DATE OF INSTALLATION	—	—	
GPS 158 COORDINATES	LAT: 43°32.215'	WELL TAG NUMBER	—
	LONG: -72°56.818'	DRILLER ID #	—
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES <input type="radio"/> NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT KITCHEN FAUCET OTHER: Spring	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 1035 constantly running SAMPLE TIME: 1050	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	429-spring	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

FB - 429 spring @ 1048



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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	915 Airport Drive		
SAMPLER(S)	JR	DATE/TIME	7/24/18
OWNER NAME	Bernard Corey	E-MAIL	bbcorey@comcast.net
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-775-4449
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...)	
DATE OF INSTALLATION		next to deck	
GPS 160 COORDINATES	LAT: 43° 31.748'	WELL TAG NUMBER	yes
	LONG: -72° 56.660'	DRILLER ID #	
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT <input checked="" type="radio"/> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	<input checked="" type="radio"/> YES <input type="radio"/> NO NONE PRESENT
PURGING TIMES	START: 1115 SAMPLE TIME: 1125	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	915 Airport	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

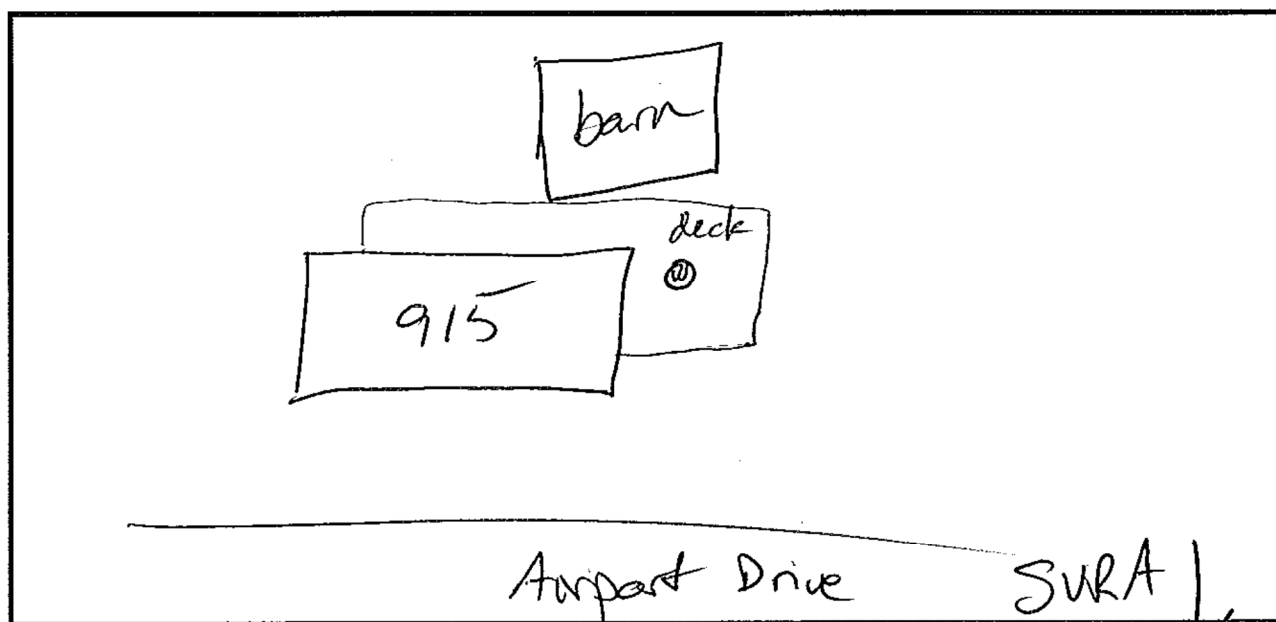
FB-915 Airport @ 1124

SAMPLE AREA INVENTORY/USE:

NOTES:

none noted

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	729 Airport Drive		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Harry DeLong	E-MAIL	-
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-775-0616
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...)	
DATE OF INSTALLATION		Back left of house	
GPS COORDINATES	LAT: 43° 31.920'	WELL TAG NUMBER	-
	LONG: -72° 56.697'	DRILLER ID #	
WATER SOFTENER	YES <input checked="" type="radio"/> NO TYPE:	ONSITE SEPTIC?	YES <input checked="" type="radio"/> NO UNKNOWN
WATER FILTER	YES <input checked="" type="radio"/> NO TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 1135 SAMPLE TIME: 1145	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	729 Airport	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

AB-729 Airport @ 1144

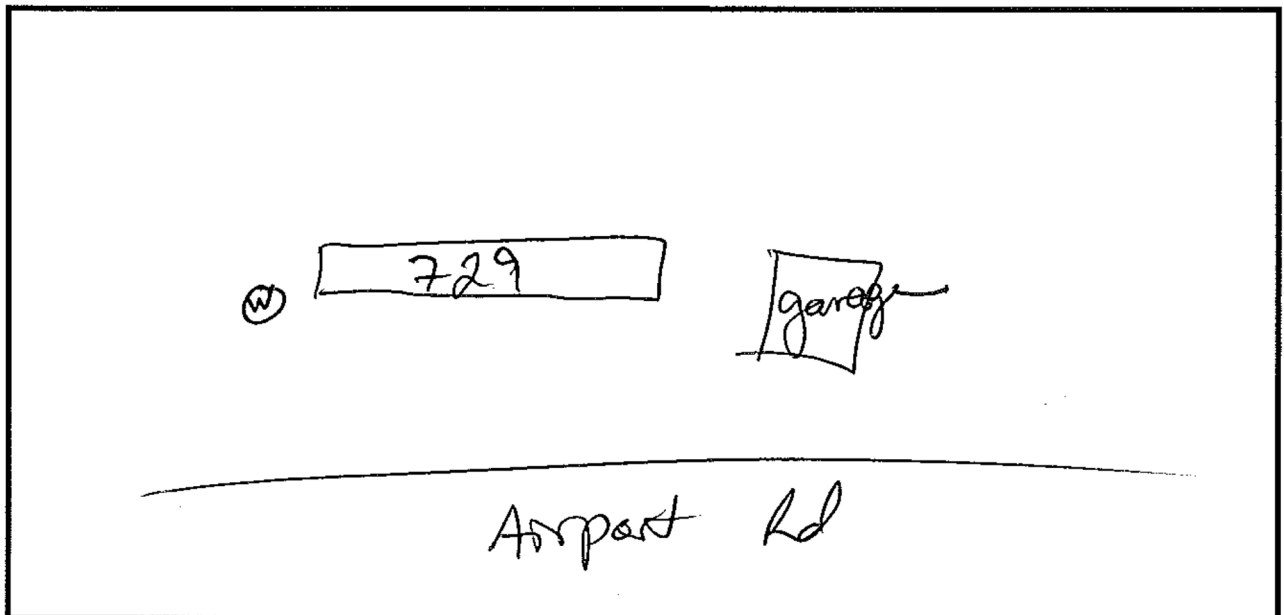
SAMPLE AREA INVENTORY/USE:

NOTES:

basement ~ pressure tank

oil tanks
household chems

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	770 Airport Drive		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Lucretia Badger	E-MAIL	-
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-345-2933
RENTAL?	YES <input checked="" type="radio"/> NO	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) right backyard	
DATE OF INSTALLATION		TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES 162-165	LAT: 43° 31.920	WELL TAG NUMBER	no
	LONG: -72° 56.698	DRILLER ID #	
WATER SOFTENER	YES <input checked="" type="radio"/> NO TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES NO UNKNOWN
WATER FILTER	YES <input checked="" type="radio"/> NO TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT <input checked="" type="radio"/> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	<input checked="" type="radio"/> YES NO NONE PRESENT
PURGING TIMES	START: 1150 SAMPLE TIME: 1200	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	770 Airport	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

FB - 770 Airport @ 1158
* DWP @ 0800 (Action)

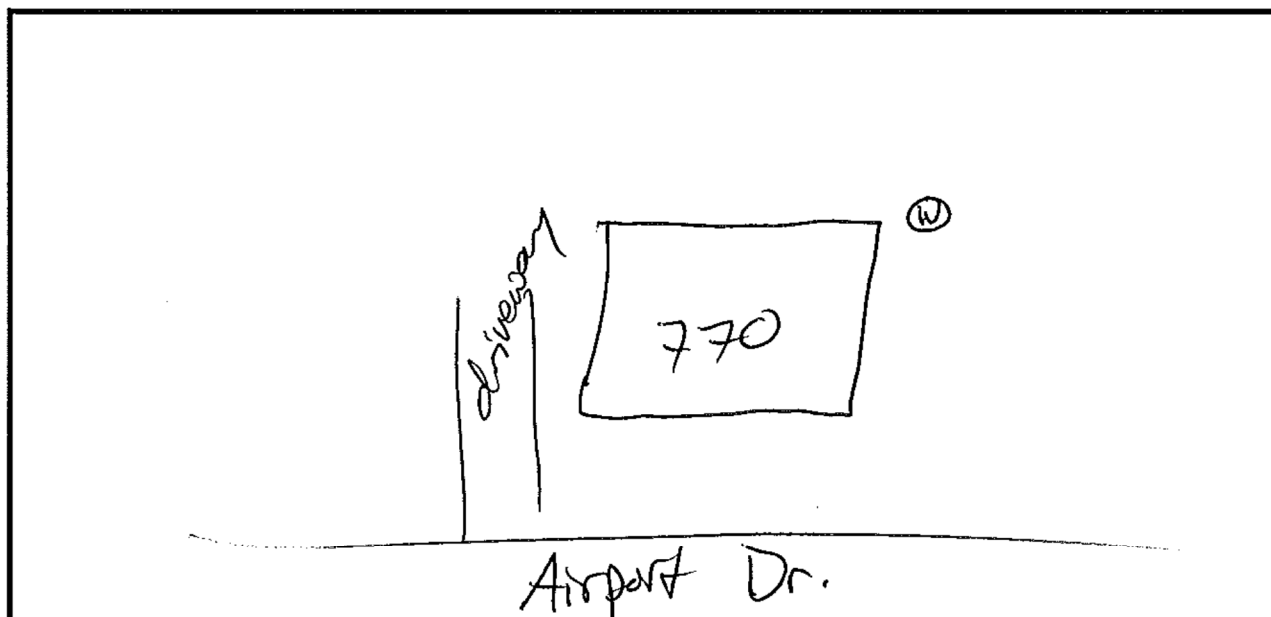
SAMPLE AREA INVENTORY/USE:

NOTES:

normal kitchen substances

serves house + 3 trailers

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	773 Airport Drive		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Robert Bixby	E-MAIL	-
ADDRESS (IF DIFFERENT)	251 Moulton Ave.	TELEPHONE	802-773-6470
RENTAL?	<input checked="" type="radio"/> YES <input type="radio"/> NO	E-MAIL	-
TENANT NAME	Jeremy (Grandson in-law)	TELEPHONE	-
WATER SUPPLY TYPE	SPRING <input type="radio"/> OVERBURDEN <input type="radio"/> <input checked="" type="radio"/> BEDROCK <input type="radio"/> UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) right front yard	
DATE OF INSTALLATION	11/1996	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE) <input checked="" type="checkbox"/>	
GPS COORDINATES 166	LAT: 43° 31.857'	WELL TAG NUMBER	176116
	LONG: -72° 56.690'	DRILLER ID #	?
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT <input type="radio"/> <input checked="" type="radio"/> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	<input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> NONE PRESENT
PURGING TIMES	START: 1215 SAMPLE TIME: 1225	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	773 Airport	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

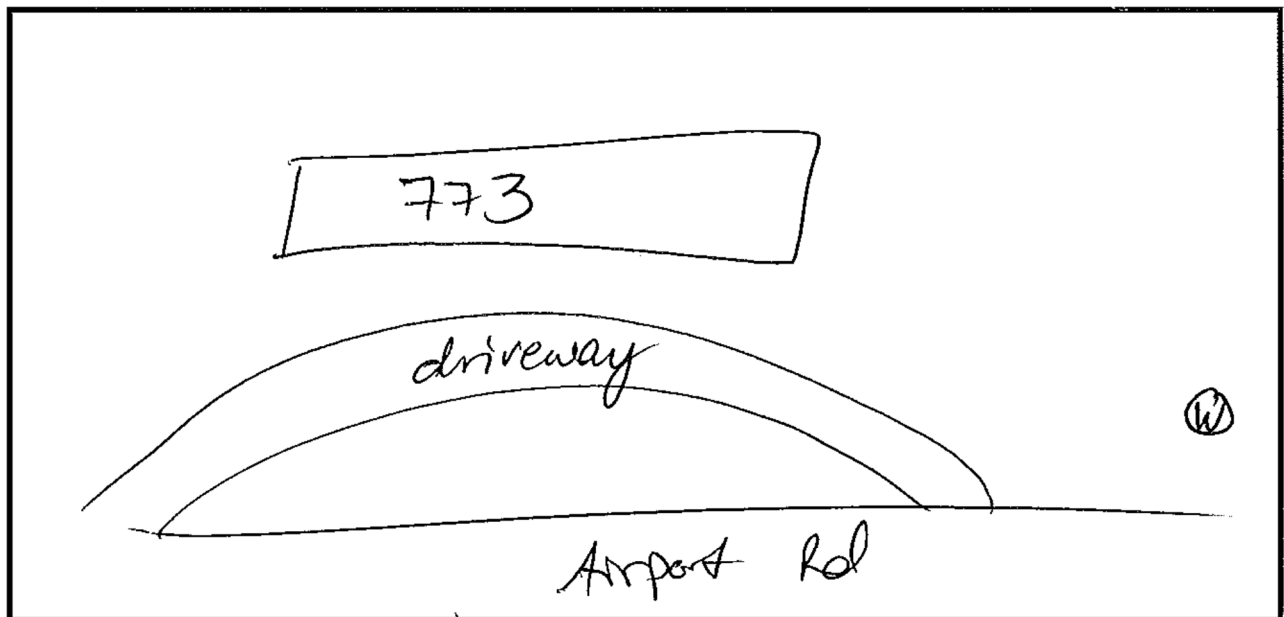
PB - 773 Airport @ 1224

SAMPLE AREA INVENTORY/USE:

NOTES:

kitchen supplies

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	168 Brenda Road		
SAMPLER(S)	RP	DATE/TIME	7/29/18
OWNER NAME	Michael + Angela Goodwin	E-MAIL	asheldrick228@gmail.com
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-377-7695
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) front yard	
DATE OF INSTALLATION	10/91	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES 167	LAT: # 43° 31.197'	WELL TAG NUMBER	143476
	LONG: -72° 56.678'	DRILLER ID #	?
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	unknown
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT <input type="radio"/> <input checked="" type="radio"/> KITCHEN FAUCET OTHER: _____	AERATOR REMOVED?	<input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> NONE PRESENT
PURGING TIMES	START: 1300 SAMPLE TIME: 1310	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	168 Brenda	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

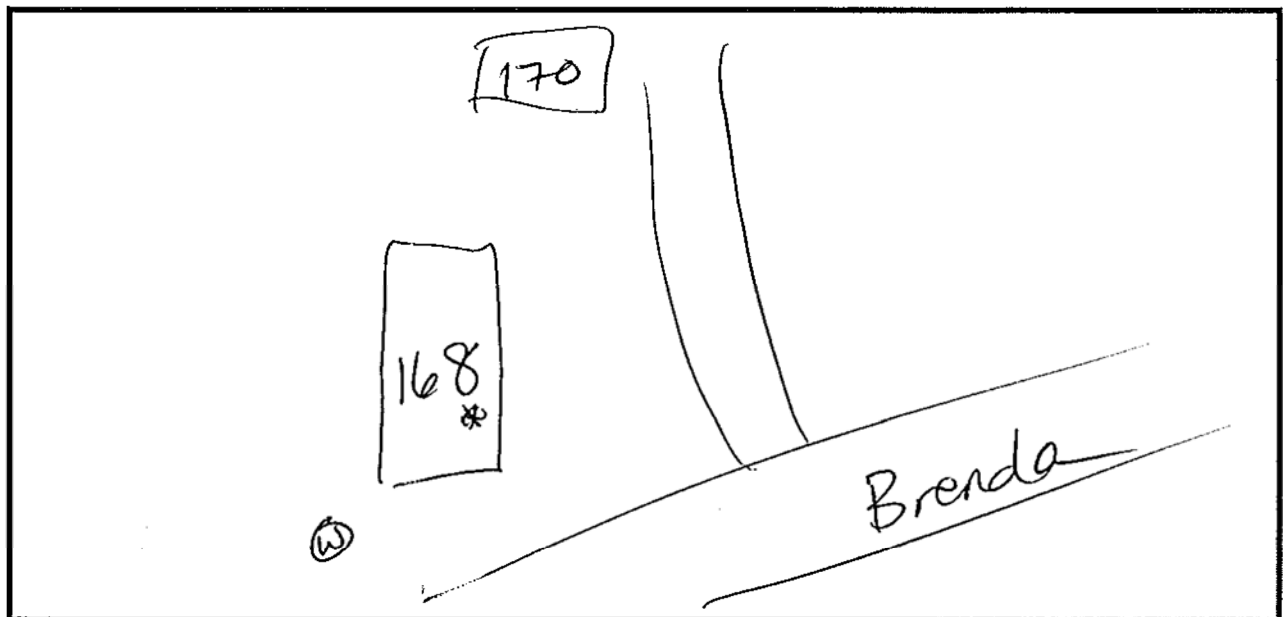
RB- 168 Brenda @ 1308

SAMPLE AREA INVENTORY/USE:

NOTES:

Kitchen supplies

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	2759 East Street		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Janne Nilson	E-MAIL	nilsen.jd@gmail.com
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-855-1618
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) front yard - right	
DATE OF INSTALLATION		TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE) No	
GPS 168 COORDINATES	LAT: 43° 31.311'	WELL TAG NUMBER	—
	LONG: -72° 56.567'	DRILLER ID #	—
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES <input type="radio"/> NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 1320 SAMPLE TIME: 1330	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	2759 East	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

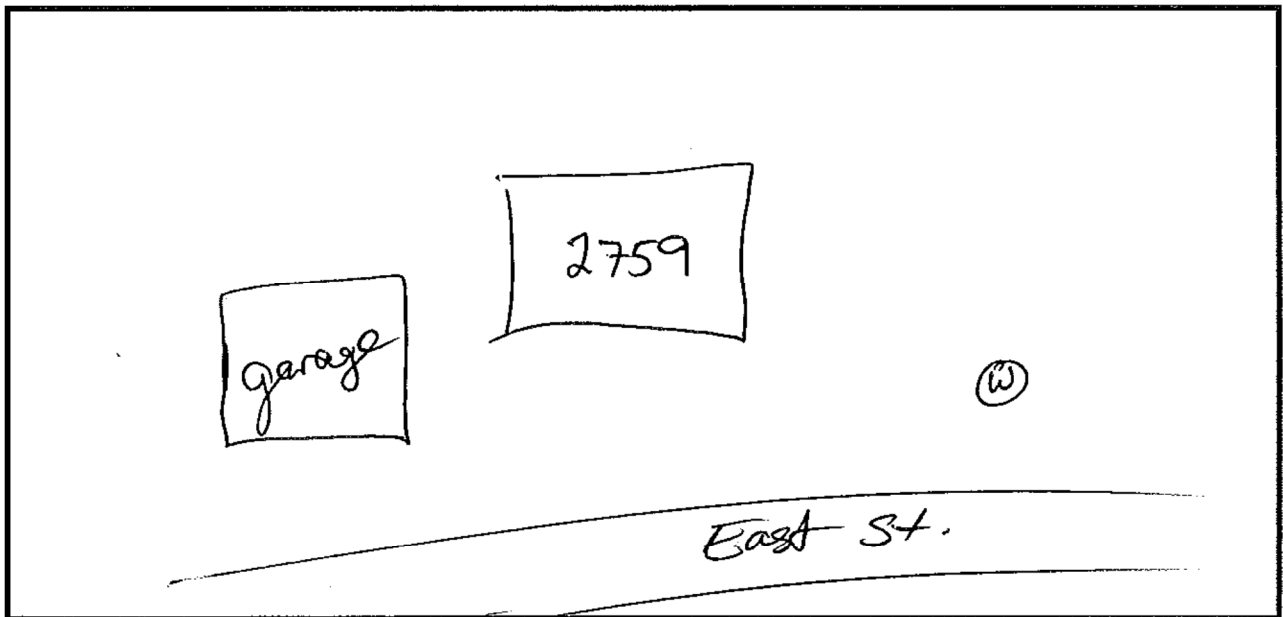
AB-2759 East @ 1328

SAMPLE AREA INVENTORY/USE:

NOTES:

basement - pressure tank

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	383 Rt. 7B		
SAMPLER(S)	JF	DATE/TIME	7/24/18
OWNER NAME	Pete Harrington	E-MAIL	harringtonbr@yahoo.com
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-342-1042
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) right at house in decorative well house	
DATE OF INSTALLATION	10/1991	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE) <input checked="" type="checkbox"/>	
GPS 169 COORDINATES	LAT: 43° 31.246'	WELL TAG NUMBER	140176
	LONG: -72° 57.798'	DRILLER ID #	?
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE: bypassed	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO UNKNOWN
WATER FILTER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE: culligan white	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input checked="" type="radio"/> OUTSIDE SPIGOT	AERATOR REMOVED?	YES NO NONE PRESENT <i>NA</i>
PURGING TIMES	START: 1400 SAMPLE TIME: 1410	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	383 Rt. 7B	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

FB-383 Rt 7B @ 1408

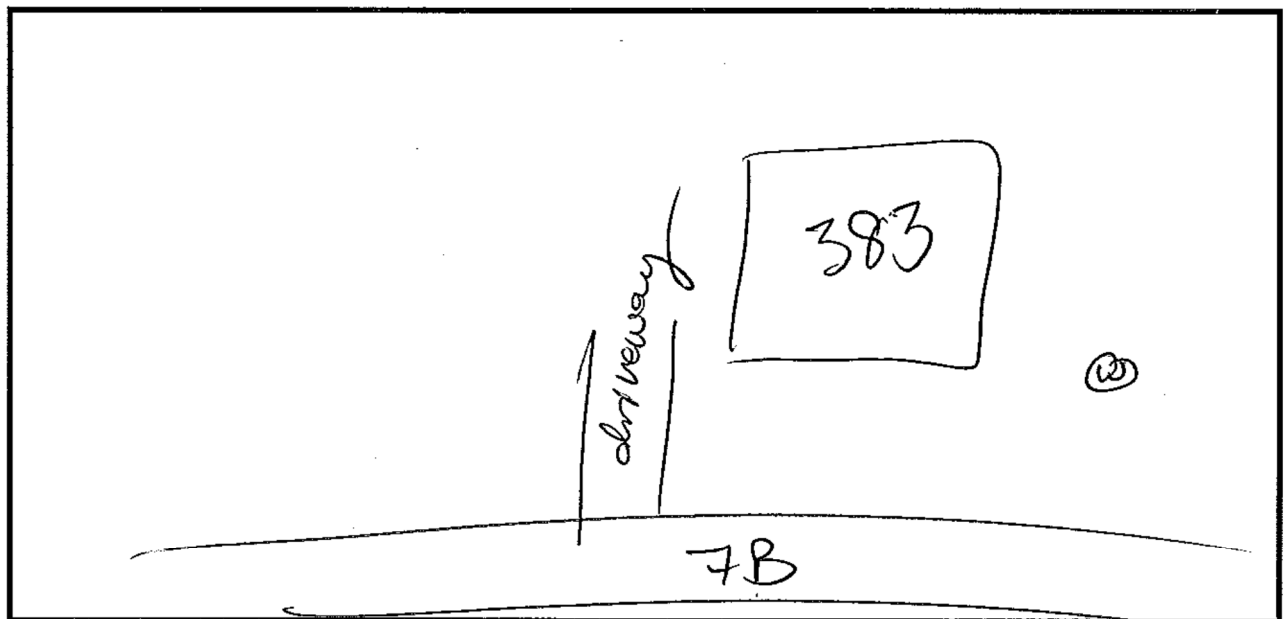
SAMPLE AREA INVENTORY/USE:

NOTES:

none - outside

left side deck

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	1002 Airport Drive		
SAMPLER(S)	RP	DATE/TIME	7/24/18
OWNER NAME	Dan Pennington/OMYA	E-MAIL	-
ADDRESS (IF DIFFERENT)	Airport	TELEPHONE	802-236-8277
RENTAL?	YES NO lease	E-MAIL	-
TENANT NAME	OMYA	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <u>BEDROCK</u> UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) north side	
DATE OF INSTALLATION		TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE) <input checked="" type="checkbox"/>	
GPS COORDINATES	LAT: 43° 31.745'	WELL TAG NUMBER	
	LONG: 72° 56.783'	DRILLER ID #	
WATER SOFTENER	YES <u>NO</u> TYPE:	ONSITE SEPTIC?	YES NO <u>UNKNOWN</u>
WATER FILTER	<u>YES</u> NO TYPE: bypassed	SEPTIC LOCATION	
SAMPLE LOCATION	PRESSURE TANK SPIGOT <u>OUTSIDE SPIGOT</u> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO NONE PRESENT <u>NA</u>
PURGING TIMES	START: 1430 SAMPLE TIME: 1440	ODOR?	YES <u>NO</u> DESCRIBE:
SAMPLE ID:	1002 OMYA	COLOR?	YES <u>NO</u> DESCRIBE:

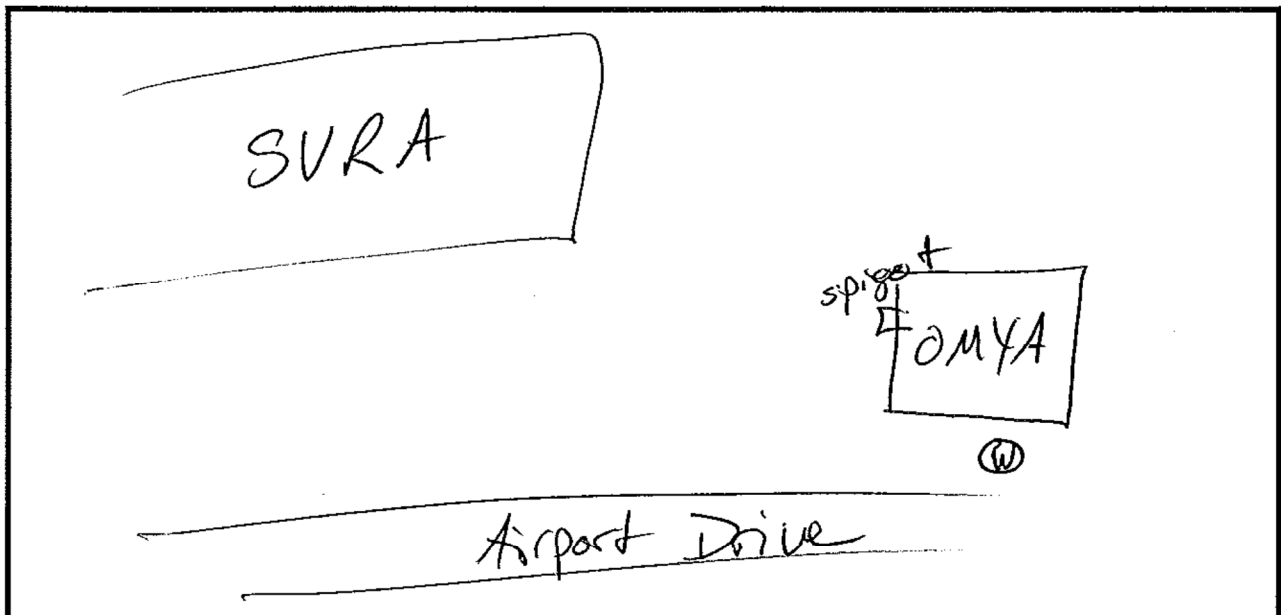
AB - 1002 OMYA @ 1438

SAMPLE AREA INVENTORY/USE:

NOTES:

outdoor spigot

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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	71 Cobb Lane		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Zerrita Colvin	E-MAIL	zc05732@gmail.com
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-558-4248
RENTAL?	YES <input checked="" type="radio"/> NO <input type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) front yard - right	
DATE OF INSTALLATION	1/2016	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 171 COORDINATES	LAT: 43° 31.054'	WELL TAG NUMBER	56796
	LONG: -72° 58.156'	DRILLER ID #	212
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE: bypassed	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO UNKNOWN
WATER FILTER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input checked="" type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 1505 SAMPLE TIME: 1515	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	71 Cobb	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

RB-71 Cobb @ 1514

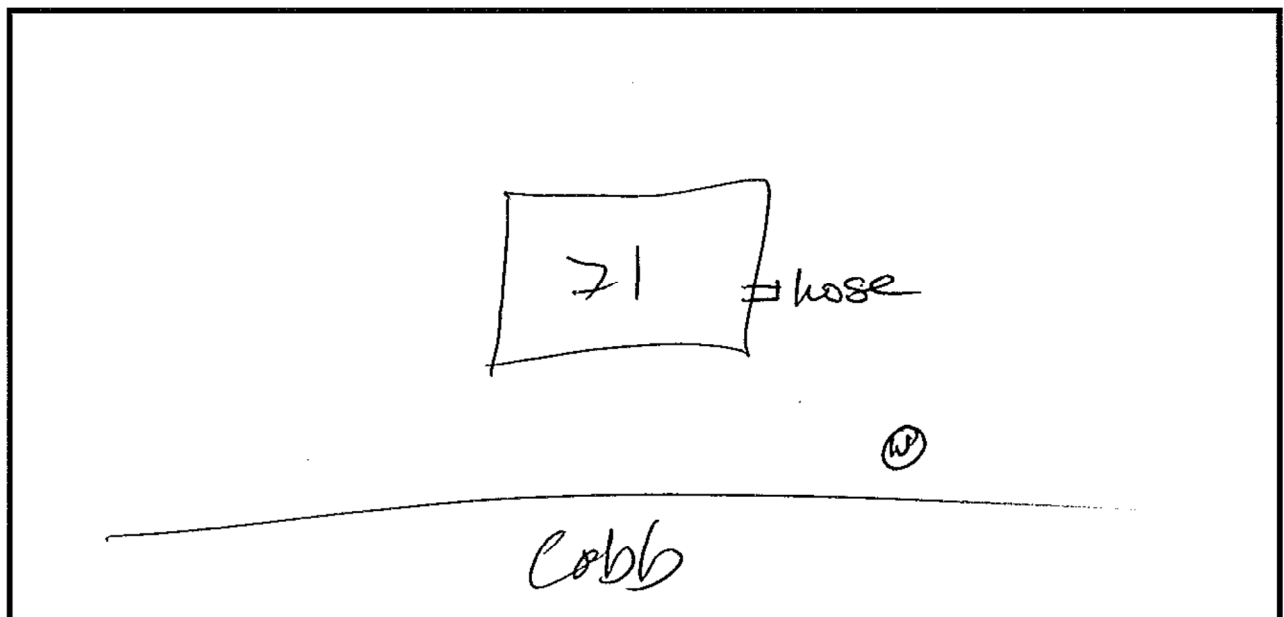
SAMPLE AREA INVENTORY/USE:

NOTES:

outside spigot - right side
of house near chimney

- bypasses saturday other
hose bibs do not

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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	84 Cobb Lane		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	David Mason	E-MAIL	-
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-775-2204
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) back yard - left	
DATE OF INSTALLATION	?	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: 43° 31.030'	WELL TAG NUMBER	16
	LONG: -72° 58.108'	DRILLER ID #	?
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO UNKNOWN
WATER FILTER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER: <u>hose</u>	AERATOR REMOVED?	YES <input type="radio"/> NO <input checked="" type="radio"/> NONE PRESENT NA
PURGING TIMES	START: 1520 SAMPLE TIME: 1530	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	84 Cobb	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

FB-84Cobb @ 1528

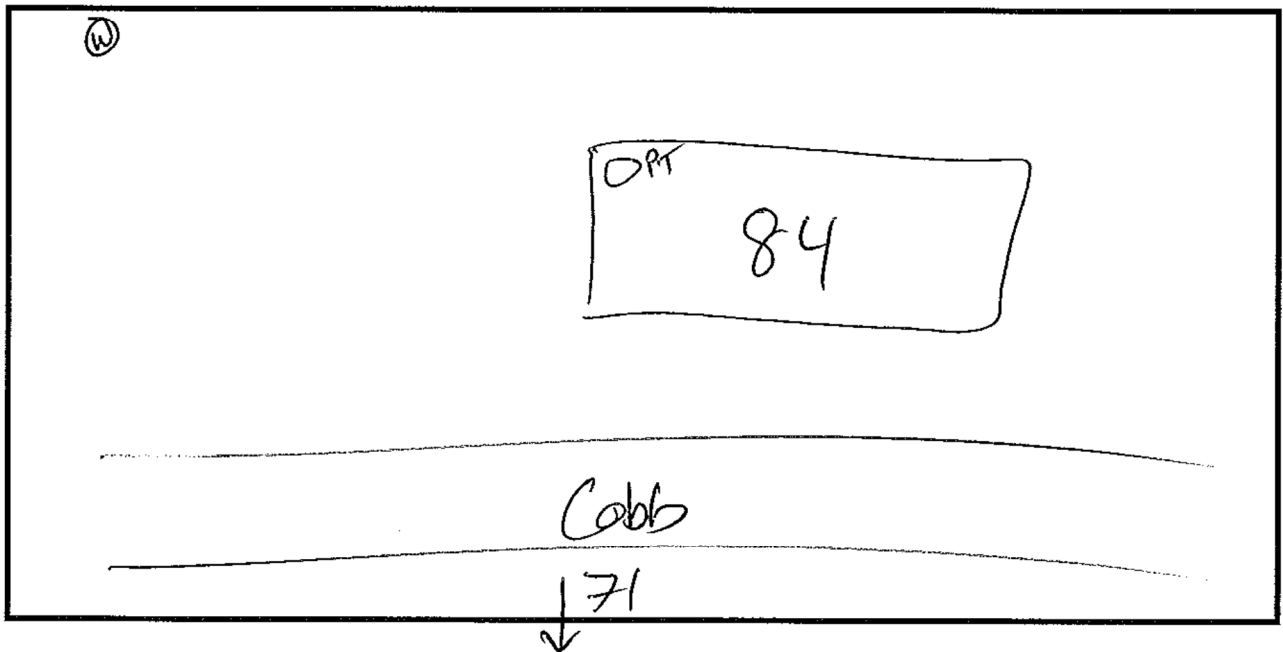
SAMPLE AREA INVENTORY/USE:

NOTES:

basement - PT

nothing of note in vicinity

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	29 Cobb / 56 Parsonage		
SAMPLER(S)	AP	DATE/TIME	7/24/18
OWNER NAME	Judith Faltrey	E-MAIL	
ADDRESS (IF DIFFERENT)	56 Parsonage	TELEPHONE	
RENTAL?	YES <input checked="" type="radio"/> NO	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR,...) hole in ground, left of house	
DATE OF INSTALLATION	-	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: 43° 31.028'	WELL TAG NUMBER	-
	LONG: 72° 58.214'	DRILLER ID #	-
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO UNKNOWN
WATER FILTER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT <input type="radio"/> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 1550 SAMPLE TIME: 1600	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	56 Pars	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

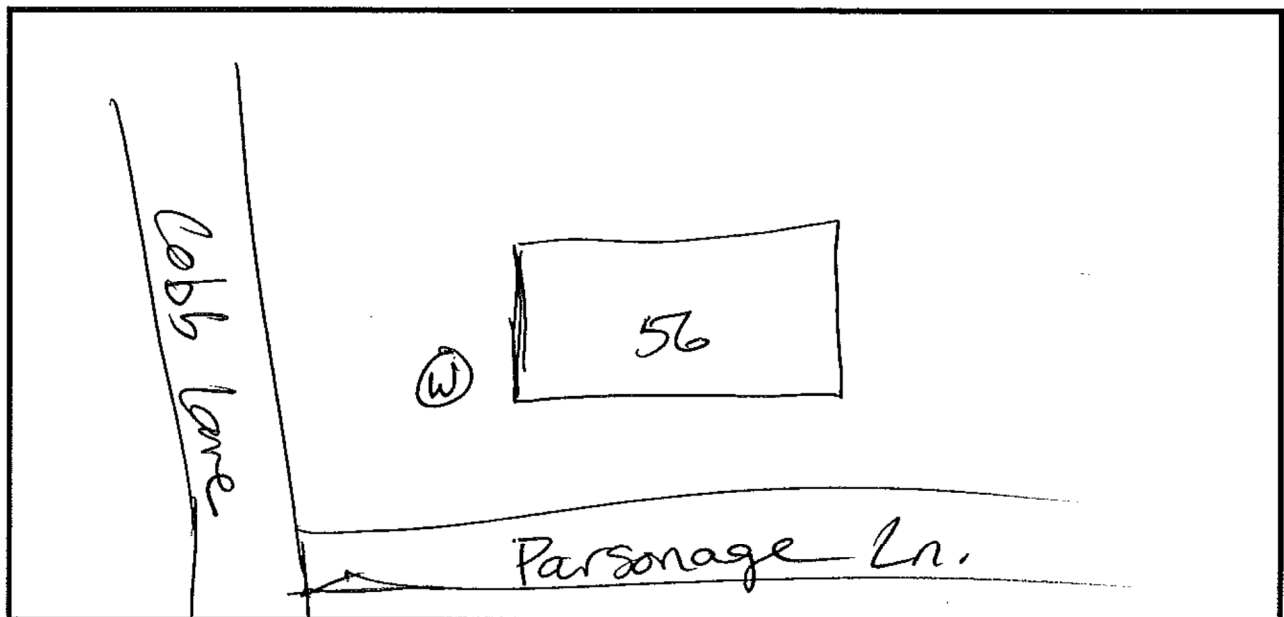
AB-56 Pars @ 1601

SAMPLE AREA INVENTORY/USE:

NOTES:

In basement
- dirt floor, unfinished

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:



Middle Rd.



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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	43 Middle Rd		
SAMPLER(S)	JR	DATE/TIME	7/24/18
OWNER NAME	James Colburn	E-MAIL	-
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-770-9135
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING <input type="radio"/> OVERBURDEN <input type="radio"/> BEDROCK <input checked="" type="radio"/> UNKNOWN <input type="radio"/> <i>artesian</i>	WELL LOCATION (IE. FRONT YARD, CELLAR...)	
DATE OF INSTALLATION	-	<i>front yard - right</i>	
GPS COORDINATES	LAT: 43° 31.028'	WELL TAG NUMBER	10
	LONG: -72° 58.214'	DRILLER ID #	-
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO NONE PRESENT <i>NA</i>
PURGING TIMES	START: <i>1415</i> SAMPLE TIME: <i>1625</i> <i>R1425</i>	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	<i>43 Middle</i>	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

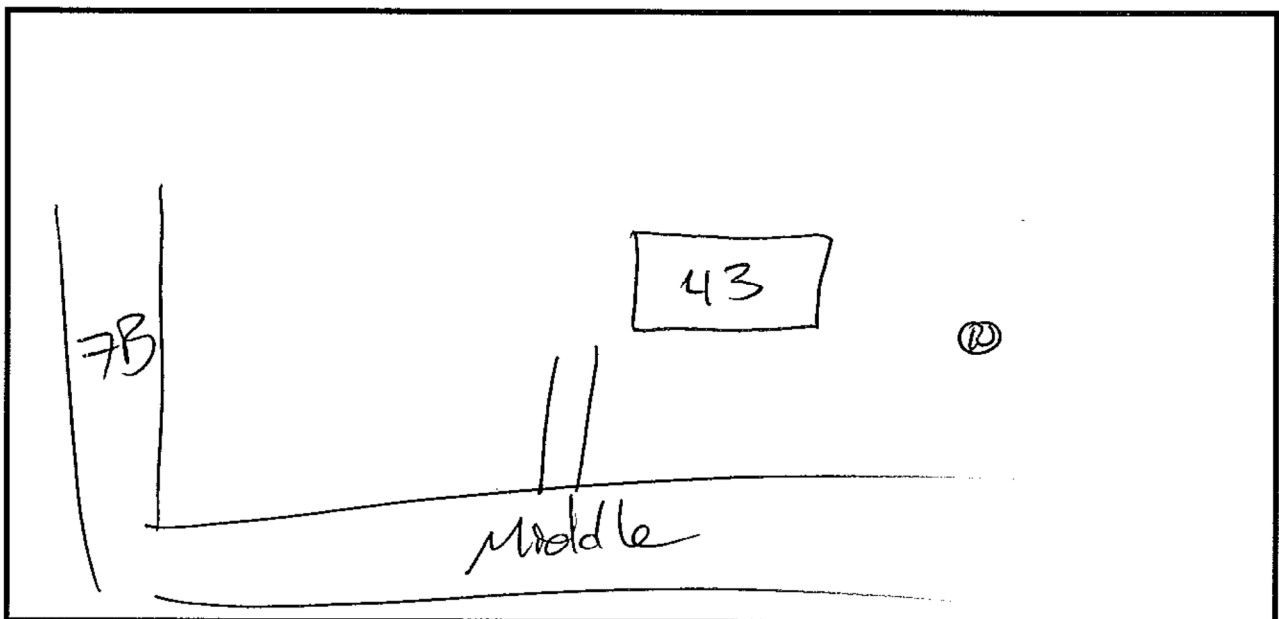
*FB - 43 Middle @ 1424
1624 JR*

SAMPLE AREA INVENTORY/USE:

NOTES:

Basement - PT spigot

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	42 Middle Rd		
SAMPLER(S)	JP	DATE/TIME	7/24/18
OWNER NAME	Teresa Trujillo	E-MAIL	gannfishnn@gmail.com
ADDRESS (IF DIFFERENT)	-	TELEPHONE	505-259-3468
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) side left yard	
DATE OF INSTALLATION	5/1974	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 175 COORDINATES	LAT: 43° 30.978'	WELL TAG NUMBER	#6 ? painted green
	LONG: -72° 58.145'	DRILLER ID #	-
WATER SOFTENER	<input checked="" type="radio"/> YES NO TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES NO UNKNOWN
WATER FILTER	<input checked="" type="radio"/> YES NO TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT <input type="radio"/> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 1635 SAMPLE TIME: 1645	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	42 Middle	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

PB-42 Middle @ 1644

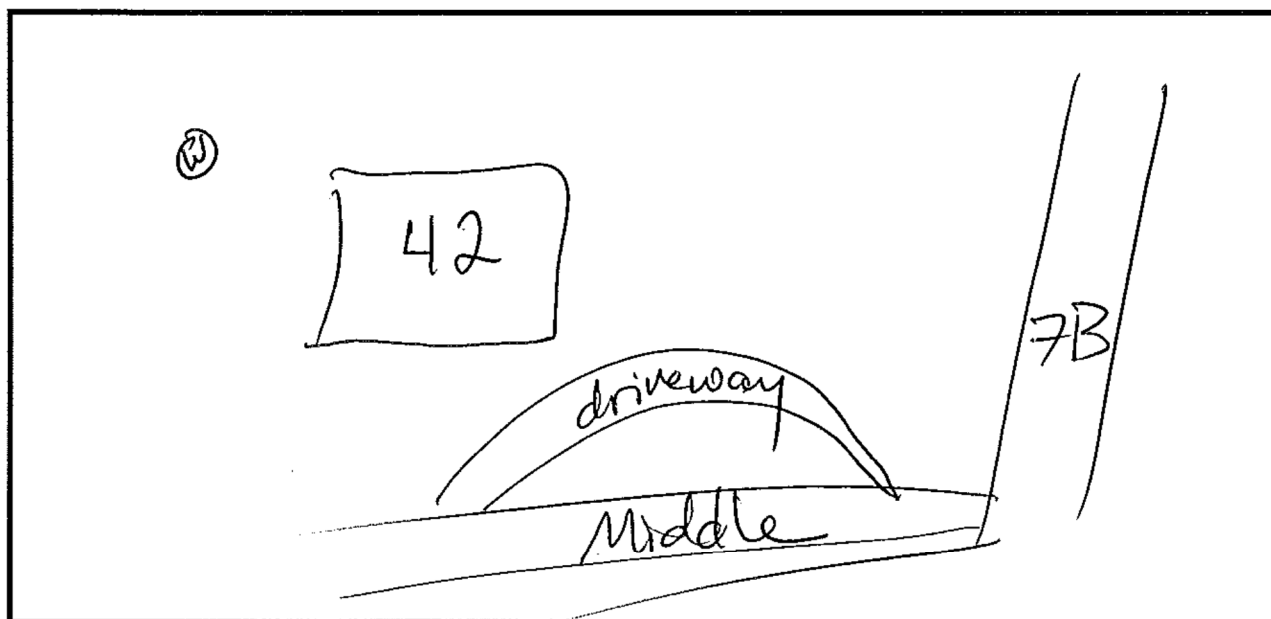
SAMPLE AREA INVENTORY/USE:

NOTES:

basement - PT spigot
on floor

household chems

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	118 Middle Road		
SAMPLER(S)	AP	DATE/TIME	7/24/18
OWNER NAME	Deb Esslinger	E-MAIL	-
ADDRESS (IF DIFFERENT)	118 Middle Rd.	TELEPHONE	802-775-6001
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...)	
DATE OF INSTALLATION	-	In driveway near spigot, buried	
GPS COORDINATES	LAT: 43° 30.973'	WELL TAG NUMBER	no
	LONG: -72° 58.195'	DRILLER ID #	-
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE: bypassed	ONSITE SEPTIC?	YES <input type="radio"/> NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input checked="" type="radio"/> OUTSIDE SPIGOT	AERATOR REMOVED?	YES NO NONE PRESENT NA
PURGING TIMES	START: 1710 1710 SAMPLE TIME: 1720	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	118 Middle	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

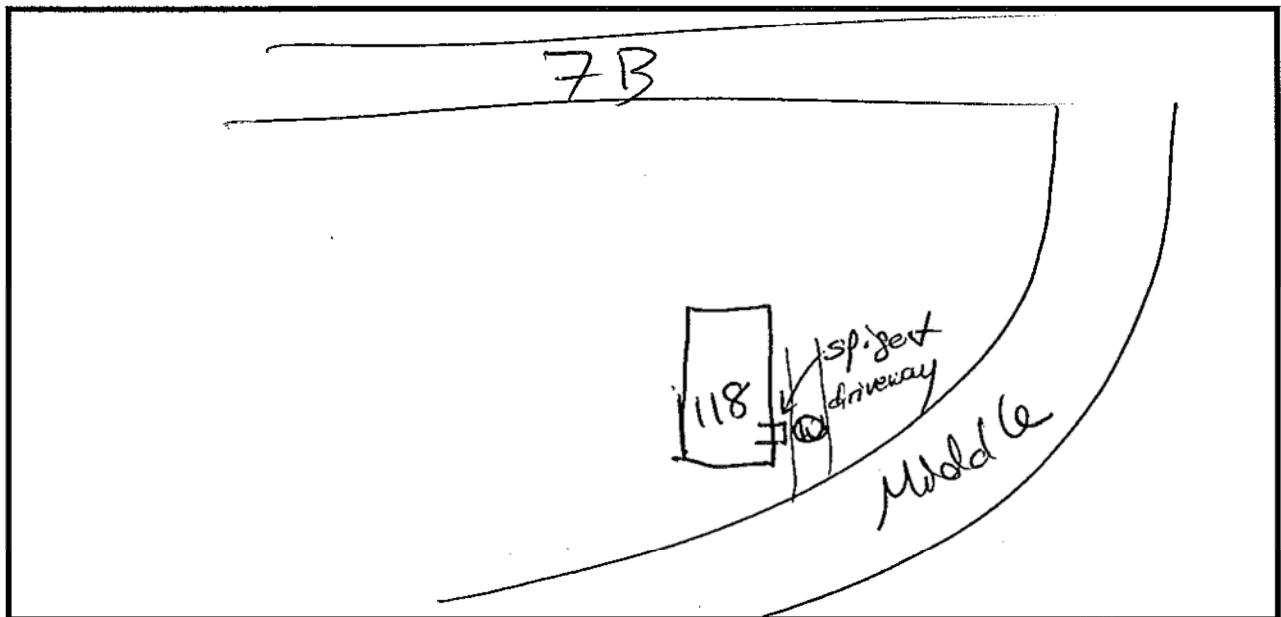
FB-118 Middle @ 1721

SAMPLE AREA INVENTORY/USE:

NOTES:

outside spriget

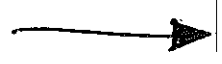
SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:



8/21/18

Rustland SURA DW	280EN00247	Aug. DW Sample
656 FB @ 0940	FB- ⁶⁵⁶ @ 0941	
705 FB @ 1010	FB-705 @ 1008	
205 FB @ 1035	FB-205 @ 1034	
VTRANS @ 1055	FB- vtrans @ 1054	
859 FB @ 1130	FB-859 @ 1131	
581 FB @ 1158	FB-581 @ 1157	
443 FB @ 1215	FB-443 @ 1214	
940 Middle @ 1254	FB- ⁹⁴⁰ @ 1253	
866 FB @ 1310	FB- ⁸⁶⁶ @ 1308	
84 FB @ 1355	FB-84 @ 1354	
↖ Dup @ 1200		
339 FB @ 1410	FB-339 @ 1411	
742 FB @ 1440	FB-742 @ 1441	
30 Jones @ 1500	FB-30 J @ 1458	
82 Jones @ 1520	FB-82 J @ 1518	
895 FB @ 1616	FB-895 @ 1617	

* Joe Thompson's spigot not working - called @ 1545, not home til Thursday; sample after BP?



* no one home at 129 Rt 7B - called
Mary @ 1540 - no outside spigot
- will sample after BP on Thursday

475 Gorge ~~75~~ @ 1640 FB-475G @ 1641

375 Gorge @ 1700 FB-375G @ 1658

alt site 1715

- drop samples at Test America Burlington
on 8/22/18



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PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	656 Rt 7B		
SAMPLER(S)	JP	DATE/TIME	8/21/18
OWNER NAME	Phyllis Carlson	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-773-0405
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	<input checked="" type="radio"/> SPRING <input type="radio"/> OVERBURDEN <input checked="" type="radio"/> BEDROCK <input type="radio"/> UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) Rear right side yard	
DATE OF INSTALLATION	—	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: 43°31.435'	WELL TAG NUMBER	—
	LONG: -72°57.604'	DRILLER ID #	?
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	?
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input type="radio"/> <input checked="" type="radio"/> OUTSIDE SPIGOT	AERATOR REMOVED?	YES <input type="radio"/> NO <input checked="" type="radio"/> NONE PRESENT NA
	KITCHEN FAUCET OTHER:		
PURGING TIMES	START: 0930 SAMPLE TIME: 0940	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	656 7B	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

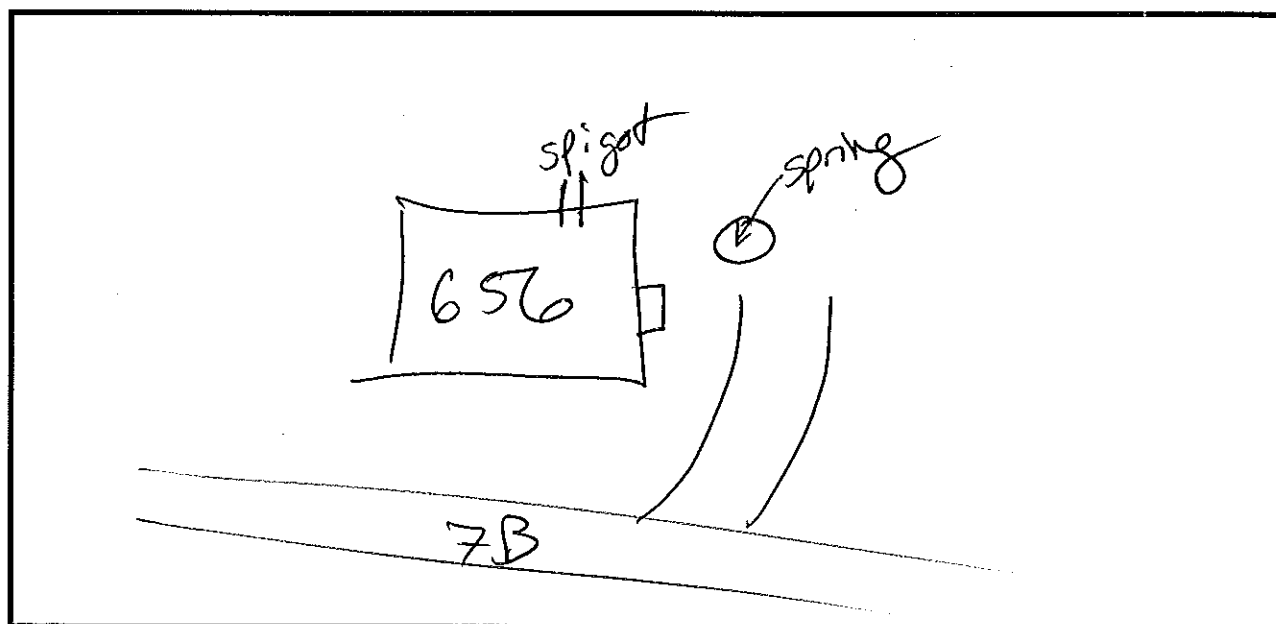
SAMPLE AREA INVENTORY/USE:

NOTES:

spigot

next to fill/vent pipes

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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PROJECT: SVRA PFAS ASSESSMENT

SAMPLE E911 ADDRESS	VTRANS Garage 1628 Rt. 7B		
SAMPLER(S)	JR	DATE/TIME	8/21/18
OWNER NAME	Andy Shively VTRANS	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-229-8740
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) back right near gate to runway TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
DATE OF INSTALLATION	1/29/93	WELL TAG NUMBER	9339
GPS COORDINATES	LAT: 43°32.179' LONG: -72°57.084'	DRILLER ID #	?
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	<input checked="" type="radio"/> YES <input type="radio"/> NO UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	front roadside
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT <input type="radio"/> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES <input type="radio"/> NO <input checked="" type="radio"/> NONE PRESENT
PURGING TIMES	START: 1045 SAMPLE TIME: 1055	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	Vtrans	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

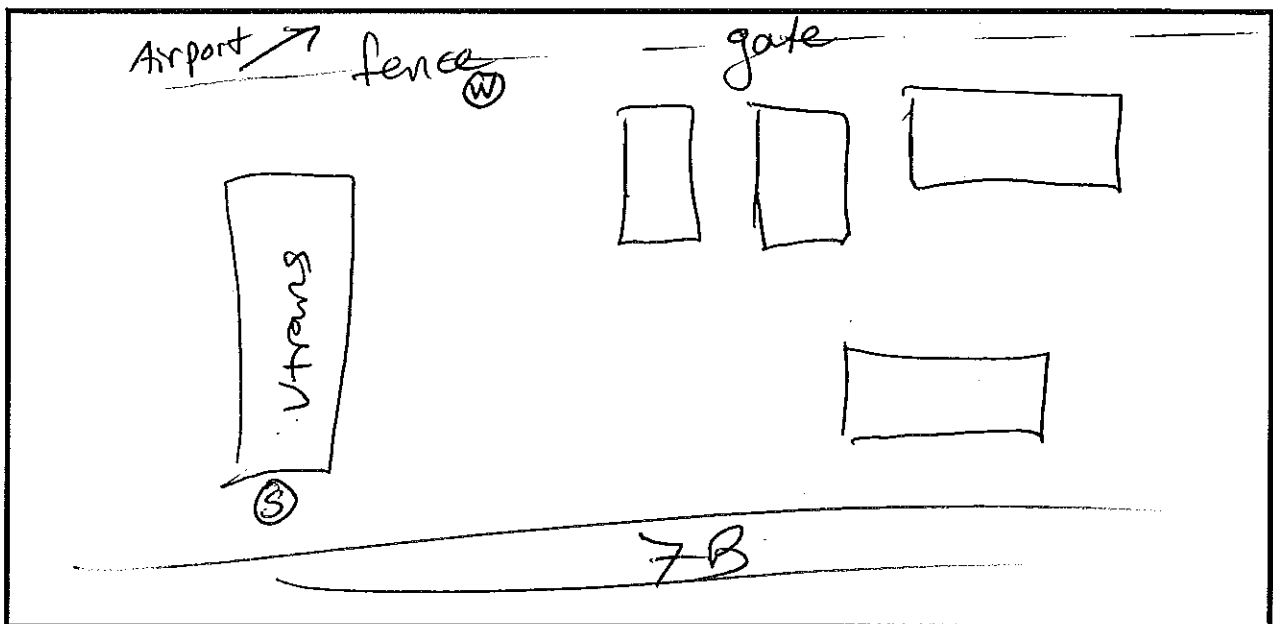
SAMPLE AREA INVENTORY/USE:

NOTES:

pressure tank in back tool room
near bathroom

had to move piles of trash +
safety gear to get to it (photo)

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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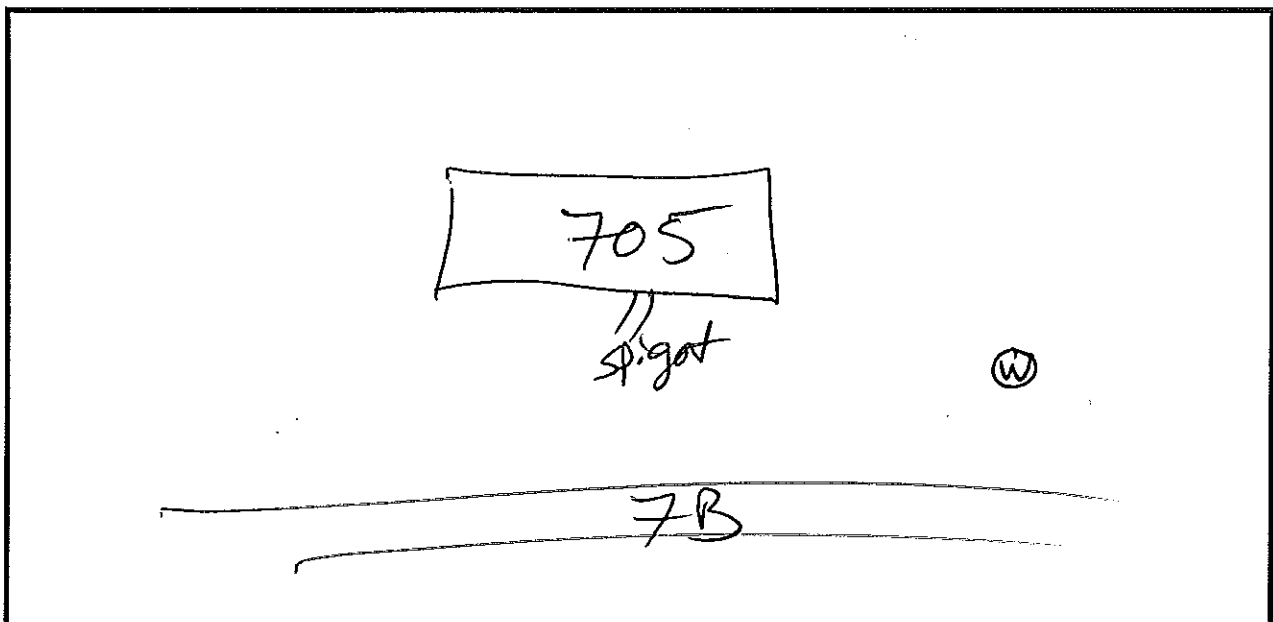
SAMPLE E911 ADDRESS	705 Rt 7B		
SAMPLER(S)	Jo Palmer	DATE/TIME	8/21/18
OWNER NAME	Jim Eddy Andy Shively	E-MAIL	
ADDRESS (IF DIFFERENT)	HR.	TELEPHONE	802-775-2140
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...)	
DATE OF INSTALLATION	?	front yard right	
GPS COORDINATES	LAT: 43° 31.479'	WELL TAG NUMBER	—
	LONG: -72° 57.613'	DRILLER ID #	—
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE: bypassed	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input checked="" type="radio"/> OUTSIDE SPIGOT	AERATOR REMOVED?	YES NO <input checked="" type="radio"/> NONE PRESENT
	KITCHEN FAUCET OTHER:		
PURGING TIMES	START: 1600 SAMPLE TIME: 1010	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	705 7B	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

outside

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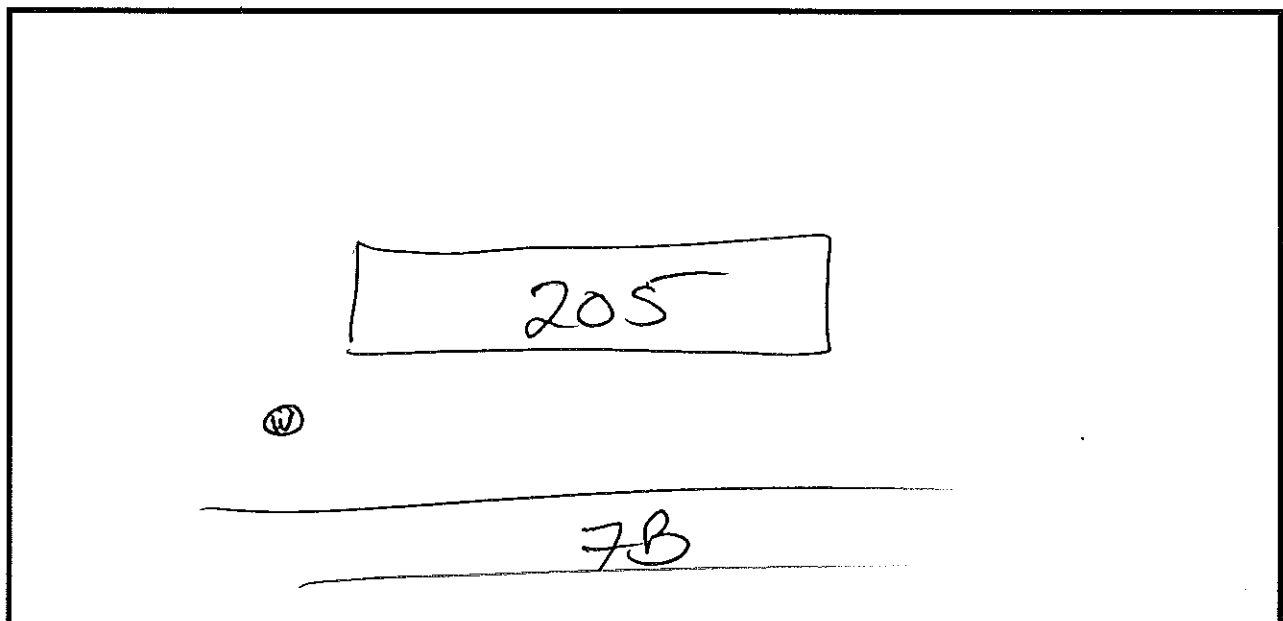
SAMPLE E911 ADDRESS	205 Rt. 7B		
SAMPLER(S)	J8	DATE/TIME	8/20/18
OWNER NAME	Gary Renner	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-747-4949
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) front yard left	
DATE OF INSTALLATION	—	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: 43°31.102'	WELL TAG NUMBER	—
	LONG: -72°57.943'	DRILLER ID #	—
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT <input checked="" type="radio"/> KITCHEN FAUCET OTHER: _____	AERATOR REMOVED?	<input checked="" type="radio"/> YES <input type="radio"/> NO NONE PRESENT
PURGING TIMES	START: 1025 SAMPLE TIME: 1035	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	205 7B	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

clean kitchen

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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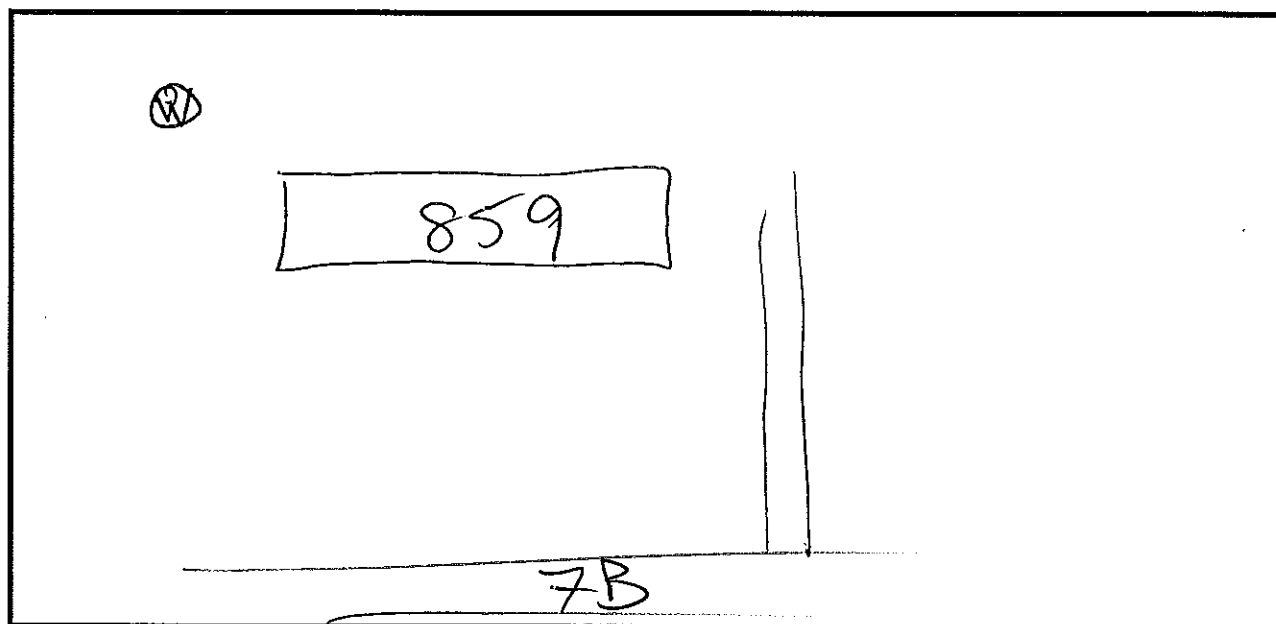
SAMPLE E911 ADDRESS	859 Rt. 7B		
SAMPLER(S)	JP	DATE/TIME	8/20/18
OWNER NAME	Shirley Whittmore	E-MAIL	
ADDRESS (IF DIFFERENT)	✓	TELEPHONE	802-558-8872
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK <input checked="" type="radio"/> UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) back yard	
DATE OF INSTALLATION	11/91	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: 43° 31.581'	WELL TAG NUMBER	147
	LONG: -72° 57.567'	DRILLER ID #	?
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT <input checked="" type="radio"/> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	<input checked="" type="radio"/> YES <input type="radio"/> NO NONE PRESENT
PURGING TIMES	START: 1120 SAMPLE TIME: 1130	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	859 7B	COLOR?	<input checked="" type="radio"/> YES <input type="radio"/> NO DESCRIBE:

SAMPLE AREA INVENTORY/Use:

NOTES:

Kitchen sink

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SAMPLE E911 ADDRESS	581 Rt 7B		
SAMPLER(S)	JP	DATE/TIME	8/21/18
OWNER NAME	Tom Weeks	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-773-5614
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK <input type="radio"/> UNKNOWN <input type="radio"/>	WELL LOCATION (IE. FRONT YARD, CELLAR...) front left yard	
DATE OF INSTALLATION	—	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 201 COORDINATES	LAT: 43° 31.365'	WELL TAG NUMBER	—
	LONG: -72° 57.713'	DRILLER ID #	—
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE:	ONSITE SEPTIC?	YES <input type="radio"/> NO <input checked="" type="radio"/> UNKNOWN <input type="radio"/>
WATER FILTER	YES <input checked="" type="radio"/> NO <input type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER: _____	AERATOR REMOVED?	YES <input checked="" type="radio"/> NO <input type="radio"/> NONE PRESENT NA
PURGING TIMES	START: 1148 SAMPLE TIME: 11:58	ODOR?	YES <input checked="" type="radio"/> NO <input type="radio"/> DESCRIBE:
SAMPLE ID:	581 7B	COLOR?	YES <input checked="" type="radio"/> NO <input type="radio"/> DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

basement

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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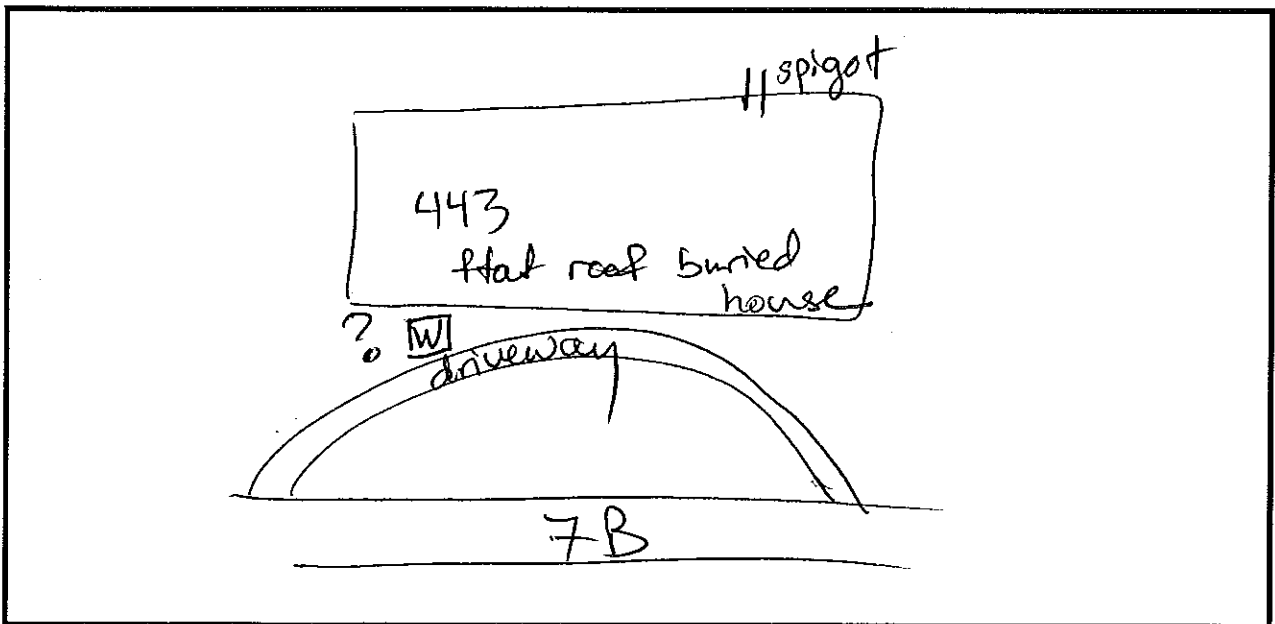
SAMPLE E911 ADDRESS	443 Rt 7B		
SAMPLER(S)	JP	DATE/TIME	8/21/18
OWNER NAME	Sarah Gregory		E-MAIL
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-683-7115
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) front yard somewhere	
DATE OF INSTALLATION	—	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: none taken - unsure of location	WELL TAG NUMBER	—
	LONG: —	DRILLER ID #	—
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE: bypassed	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input checked="" type="radio"/> NO <input type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input checked="" type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES <input checked="" type="radio"/> NONE PRESENT
PURGING TIMES	START: 1205 SAMPLE TIME: 1215	ODOR?	YES <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	443 7B		COLOR? YES <input checked="" type="radio"/> DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

outside spigot

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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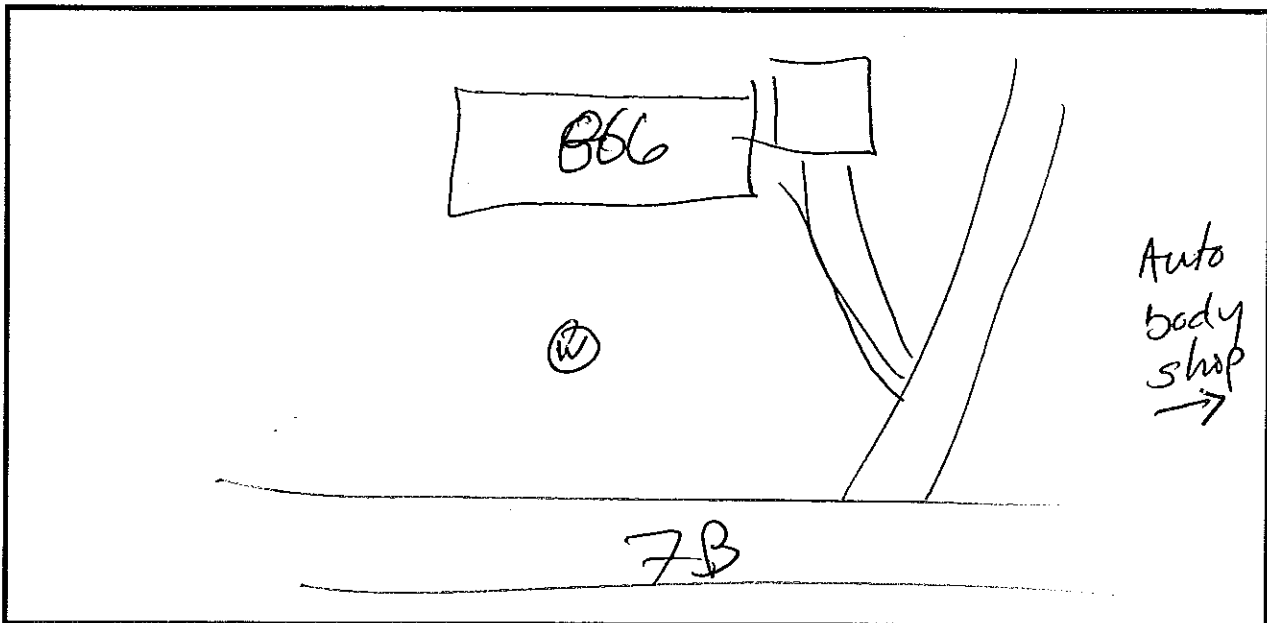
SAMPLE E911 ADDRESS	866 Rt. 7B		
SAMPLER(S)	JF	DATE/TIME	8/21/18
OWNER NAME	Tammy Potter	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-770-0843
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) front yard center	
DATE OF INSTALLATION	9/89	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: 43° 31.578'	WELL TAG NUMBER	227/44
	LONG: -72° 57.486'	DRILLER ID #	—
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT <input checked="" type="radio"/> KITCHEN FAUCET OTHER: _____	AERATOR REMOVED?	<input checked="" type="radio"/> YES <input type="radio"/> NO NONE PRESENT
PURGING TIMES	START: 1300 SAMPLE TIME: 1310	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	866 7B	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

Kitchen

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SAMPLE E911 ADDRESS	84 Rt. 7B		
SAMPLER(S)	J8	DATE/TIME	8/21/18
OWNER NAME	Katie Dayton	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-353-3989
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...)	
DATE OF INSTALLATION	?	—	
GPS COORDINATES	LAT: none - unsure of location	WELL TAG NUMBER	—
	LONG: —	DRILLER ID #	—
WATER SOFTENER	YES <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT <input checked="" type="radio"/> KITCHEN FAUCET OTHER: _____	AERATOR REMOVED?	<input checked="" type="radio"/> YES <input type="radio"/> NO NONE PRESENT
PURGING TIMES	START: 1345 SAMPLE TIME: 1355	ODOR?	YES <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	84 7B	COLOR?	YES <input checked="" type="radio"/> DESCRIBE:

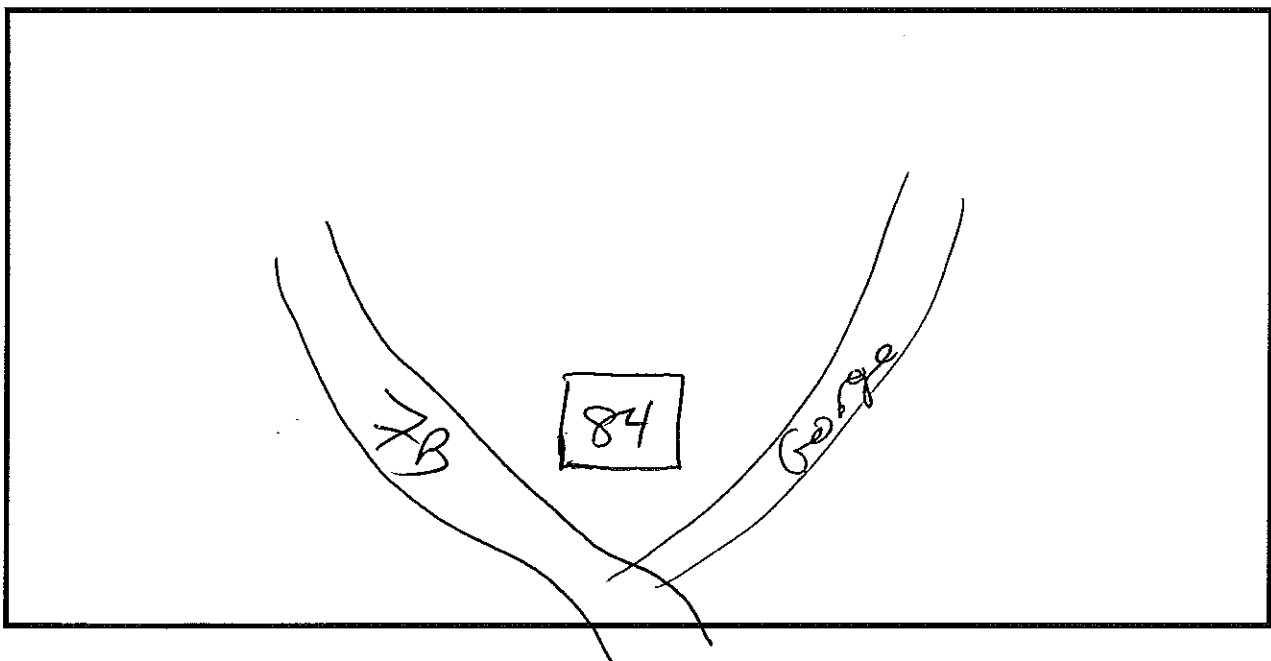
+ Dwp @ 1200

SAMPLE AREA INVENTORY/USE:

NOTES:

Kitchen

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

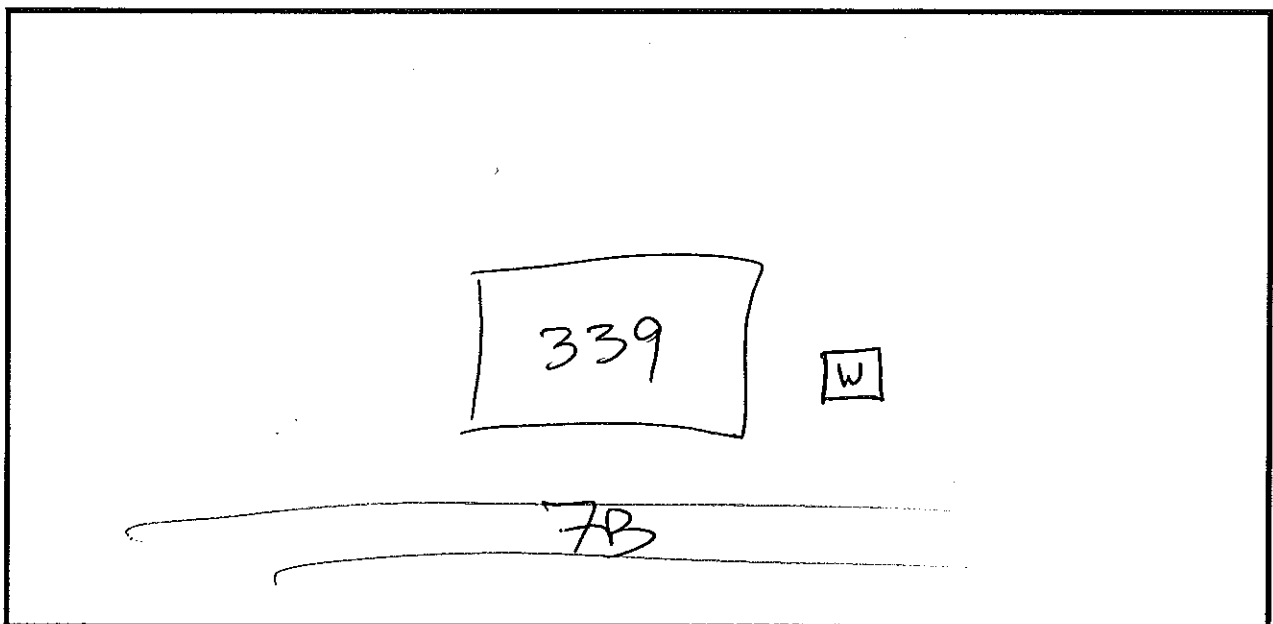
SAMPLE E911 ADDRESS	339 Rt. 7B		
SAMPLER(S)	R	DATE/TIME	8/21/18
OWNER NAME	Carol Guyette	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-773-9666
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) right side yard - well house	
DATE OF INSTALLATION	too deep in well house to see anything	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 207 COORDINATES	LAT: 43° 31.212'	WELL TAG NUMBER	—
	LONG: -72° 57.837'	DRILLER ID #	—
WATER SOFTENER	YES <input checked="" type="radio"/> NO TYPE:	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input checked="" type="radio"/> NO TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES <input checked="" type="radio"/> NO NONE PRESENT <input checked="" type="radio"/>
PURGING TIMES	START: 1400 SAMPLE TIME: 1410	ODOR?	YES <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	339 7B	COLOR?	YES <input checked="" type="radio"/> DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

basement

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

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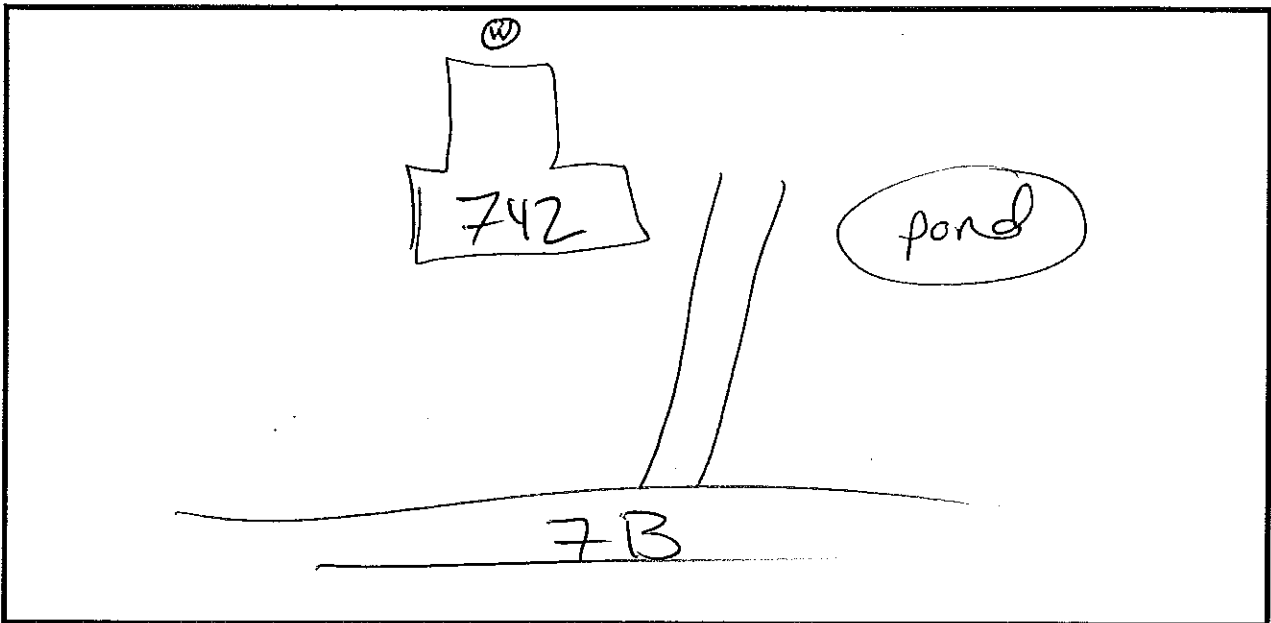
SAMPLE E911 ADDRESS	742 Rt. 7B		
SAMPLER(S)	R	DATE/TIME	8/21/18
OWNER NAME	Kipp + Mary Mullin	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-747-0517
RENTAL?	YES <input checked="" type="radio"/> NO	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) back yard	
DATE OF INSTALLATION	—	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: 43° 31.501'	WELL TAG NUMBER	—
	LONG: -72° 57.498'	DRILLER ID #	—
WATER SOFTENER	<input checked="" type="radio"/> YES <input type="radio"/> NO TYPE: bypassed	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input checked="" type="radio"/> NO TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES <input checked="" type="radio"/> NO NONE PRESENT NA
PURGING TIMES	START: 1430 SAMPLE TIME: 1440	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	7427B	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

basement
bypass softener

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

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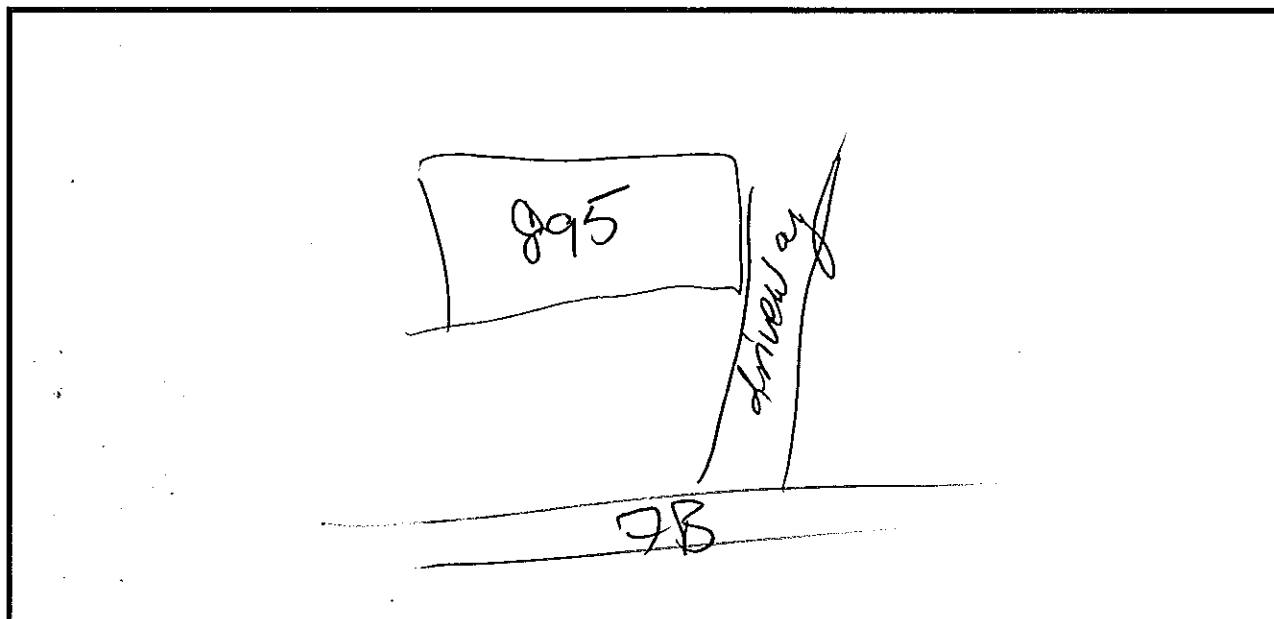
SAMPLE E911 ADDRESS	895 Rt. 7B Central		
SAMPLER(S)	JF	DATE/TIME	8/21/18
OWNER NAME	Jerry Flood	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-236-6206
RENTAL?	YES <input checked="" type="radio"/> NO	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...)	
DATE OF INSTALLATION	—	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES	LAT: none taken	WELL TAG NUMBER	—
	LONG: —	DRILLER ID #	—
WATER SOFTENER	YES <input checked="" type="radio"/> NO TYPE: bypassed	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input checked="" type="radio"/> NO TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	<input checked="" type="radio"/> PRESSURE TANK SPIGOT <input type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO <input checked="" type="radio"/> NONE PRESENT
PURGING TIMES	START: 1606 SAMPLE TIME: 1616	ODOR?	YES <input checked="" type="radio"/> NO DESCRIBE:
SAMPLE ID:	895 7B	COLOR?	YES <input checked="" type="radio"/> NO DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

basement

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SUPPLY WELL FIELD COLLECTION FORM

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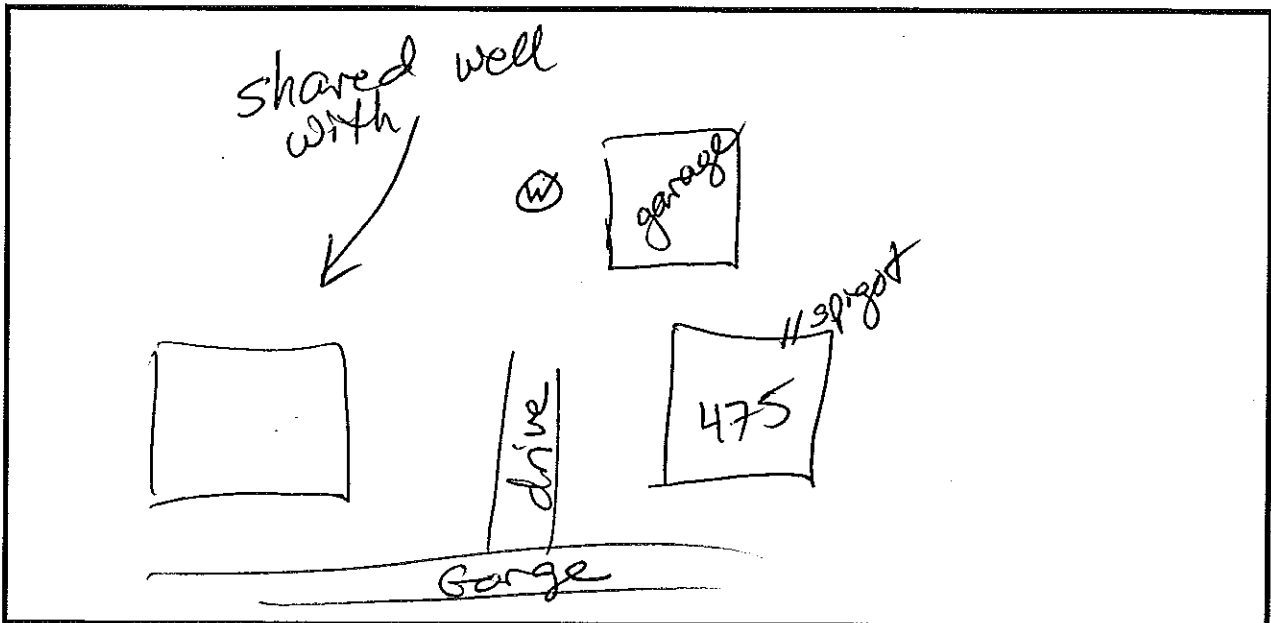
SAMPLE E911 ADDRESS	475 Gorge Rd.		
SAMPLER(S)	JP	DATE/TIME	8/21/18
OWNER NAME	Lisa Buyette	E-MAIL	
ADDRESS (IF DIFFERENT)		TELEPHONE	802-747-4132
RENTAL?	<input checked="" type="radio"/> YES <input type="radio"/> NO	E-MAIL	wdellis ¹⁶⁵⁸ @gmail.com
TENANT NAME	William Ellis	TELEPHONE	—
WATER SUPPLY TYPE	SPRING <input type="radio"/> OVERBURDEN <input type="radio"/> <input checked="" type="radio"/> BEDROCK <input type="radio"/> UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) back yard left	
DATE OF INSTALLATION	—	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 211 COORDINATES	LAT: 43° 31.115'	WELL TAG NUMBER	—
	LONG: -72° 57.503'	DRILLER ID #	—
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES <input type="radio"/> NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input type="radio"/> <input checked="" type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES <input type="radio"/> NO <input checked="" type="radio"/> NONE PRESENT NA
PURGING TIMES	START: 1630 SAMPLE TIME: 1640	ODOR?	YES <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	475 Gorge	COLOR?	YES <input checked="" type="radio"/> DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

outside

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

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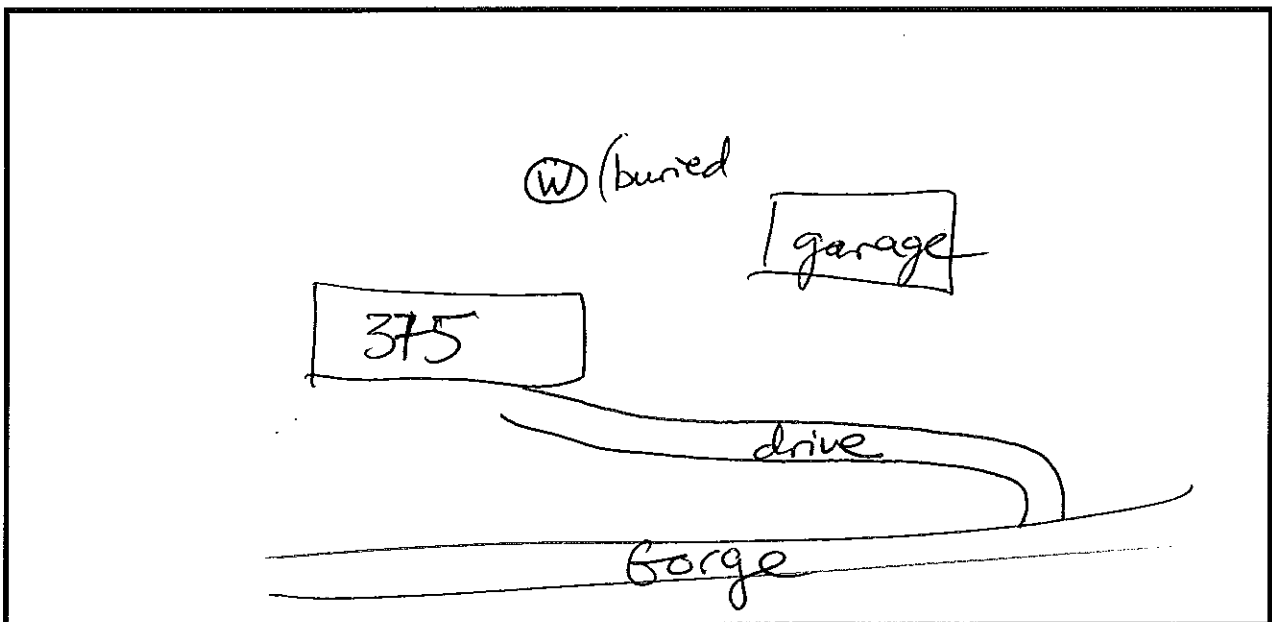
SAMPLE E911 ADDRESS	375 Gorge Rd.		
SAMPLER(S)	JR	DATE/TIME	8/21/18
OWNER NAME	Geraldyn + David Hance	E-MAIL	gerih42@mylanpoint.net
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-775-4417
RENTAL?	YES <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING OVERBURDEN <input checked="" type="radio"/> BEDROCK UNKNOWN	WELL LOCATION (IE. FRONT YARD, CELLAR...) behind house, buried	
DATE OF INSTALLATION	50+	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 212 COORDINATES (approximate)	LAT: 43° 31.099'	WELL TAG NUMBER	—
	LONG: -72° 57.582'	DRILLER ID #	—
WATER SOFTENER	YES <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES <input checked="" type="radio"/> NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT <input checked="" type="radio"/> KITCHEN FAUCET OTHER: _____	AERATOR REMOVED?	YES <input checked="" type="radio"/> NO NONE PRESENT
PURGING TIMES	START: 1650 SAMPLE TIME: 1700	ODOR?	YES <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	375 Gorge	COLOR?	YES <input checked="" type="radio"/> DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

Kitchen

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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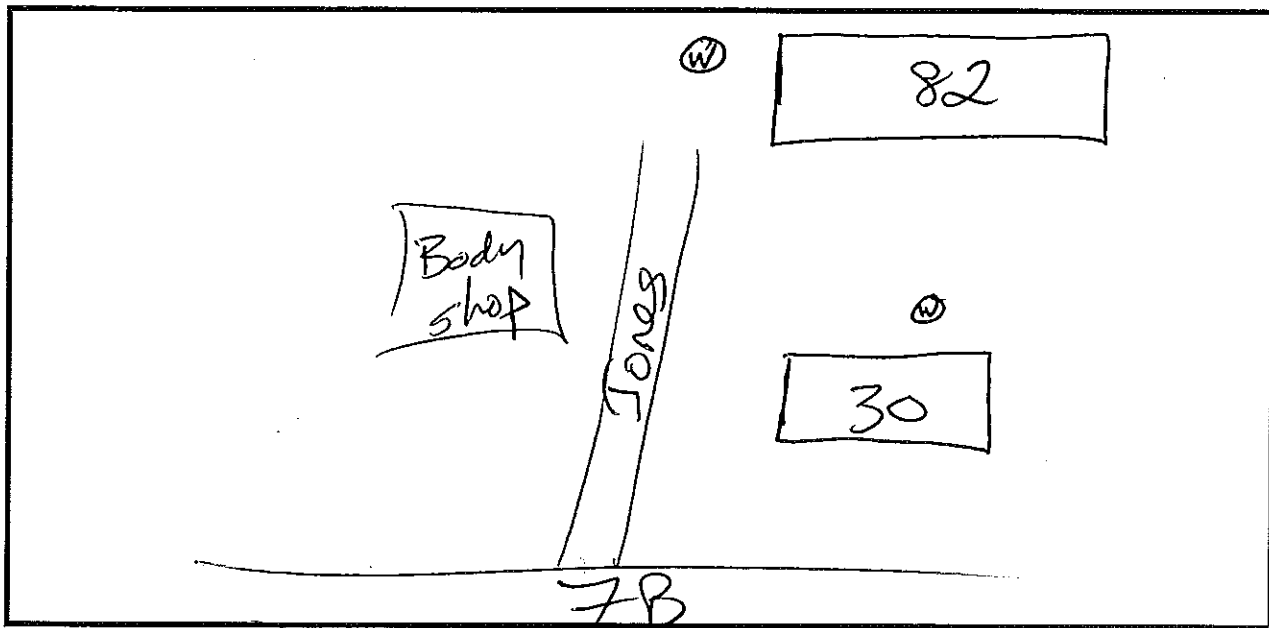
SAMPLE E911 ADDRESS	30 Jones Lane 82 Jones		
SAMPLER(S)	JP	DATE/TIME	8/20/18
OWNER NAME	Gary Jones	E-MAIL	
ADDRESS (IF DIFFERENT)	-	TELEPHONE	802-747-8894
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	-
TENANT NAME	-	TELEPHONE	-
WATER SUPPLY TYPE	SPRING OVERBURDEN <input type="radio"/> <u>BEDROCK</u> <input checked="" type="radio"/> UNKNOWN <input type="radio"/>	WELL LOCATION (IE. FRONT YARD, CELLAR...) back yard (30) side left yard (82)	
DATE OF INSTALLATION	- / 5/1/93	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS COORDINATES 209/30 210/82	LAT: 43° 31.529'	WELL TAG NUMBER	-
	LONG: -72° 57.480'	DRILLER ID #	- / 179
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE: bypassed	ONSITE SEPTIC?	YES <input type="radio"/> NO <input type="radio"/> UNKNOWN <input checked="" type="radio"/>
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	-
SAMPLE LOCATION	<u>PRESSURE TANK SPIGOT</u> <input checked="" type="radio"/> OUTSIDE SPIGOT <input type="radio"/> KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES <input type="radio"/> NO <input checked="" type="radio"/> NONE PRESENT <i>NA</i>
PURGING TIMES	START: 1450 SAMPLE TIME: 1500	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	30 Jones	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

basement

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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SUPPLY WELL FIELD COLLECTION FORM

PROJECT: SVRA PFAS ASSESSMENT

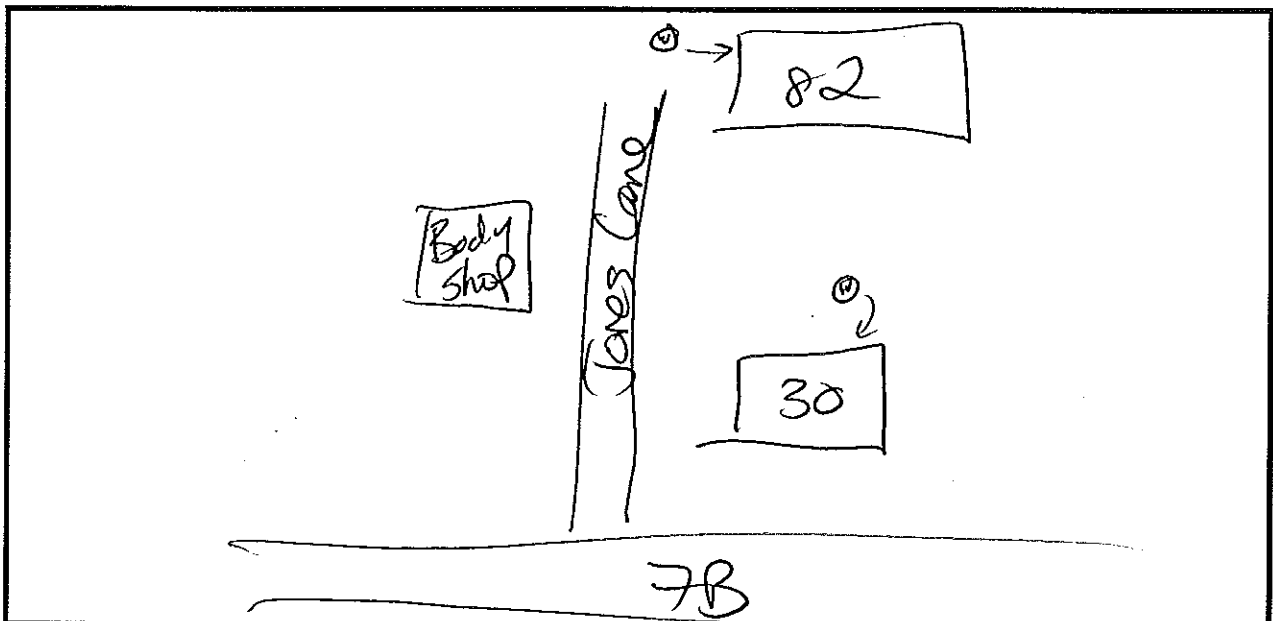
SAMPLE E911 ADDRESS	82 Jones Lane			
SAMPLER(S)	J8	DATE/TIME	8/21/18	
OWNER NAME	Gary Jones	E-MAIL		
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-747-8894	
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—	
TENANT NAME	—	TELEPHONE	—	
WATER SUPPLY TYPE	SPRING OVERBURDEN <input type="radio"/> BEDROCK <input checked="" type="radio"/> UNKNOWN		WELL LOCATION (IE. FRONT YARD, CELLAR...) left side yard	
DATE OF INSTALLATION	5/1/93		TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 210 COORDINATES	LAT:	43° 31.526'	WELL TAG NUMBER	1
	LONG:	-72° 57.403'	DRILLER ID #	179
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN	
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—	
SAMPLE LOCATION	PRESSURE TANK SPIGOT OUTSIDE SPIGOT KITCHEN FAUCET OTHER: bathroom	AERATOR REMOVED?	<input checked="" type="radio"/> YES <input type="radio"/> NO NONE PRESENT	
PURGING TIMES	START: 1500 SAMPLE TIME: 1520	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:	
SAMPLE ID:	82 Jones	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:	

SAMPLE AREA INVENTORY/USE:

NOTES:

Bathroom sink

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:





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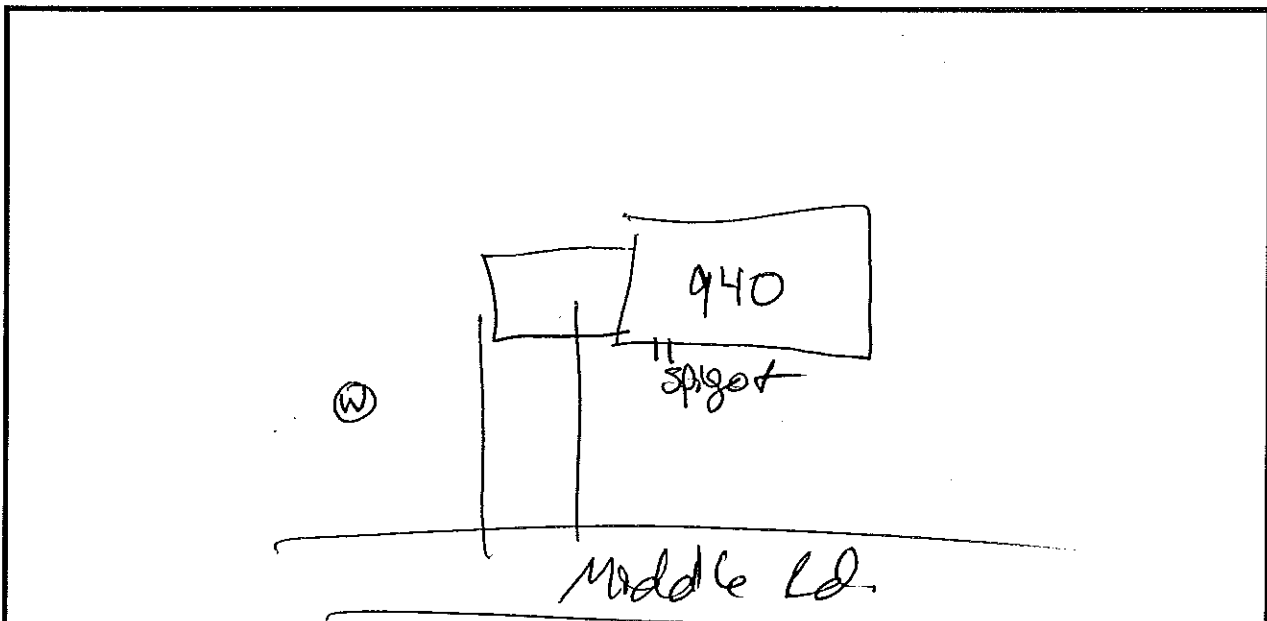
SAMPLE E911 ADDRESS	940 Middle Rd.		
SAMPLER(S)	JP	DATE/TIME	8/20/18
OWNER NAME	Ed Baker	E-MAIL	
ADDRESS (IF DIFFERENT)	—	TELEPHONE	802-747-5537
RENTAL?	YES <input type="radio"/> NO <input checked="" type="radio"/>	E-MAIL	—
TENANT NAME	—	TELEPHONE	—
WATER SUPPLY TYPE	SPRING <input checked="" type="radio"/> OVERBURDEN <input checked="" type="radio"/> BEDROCK <input type="radio"/> UNKNOWN <input type="radio"/>	WELL LOCATION (IE. FRONT YARD, CELLAR...) front yard left	
DATE OF INSTALLATION	—	TAKE A PICTURE OF THE WELL TAG (IF THE WELL HAS ONE)	
GPS 205 COORDINATES	LAT: 43° 31.631'	WELL TAG NUMBER	none
	LONG: -72° 58.090'	DRILLER ID #	—
WATER SOFTENER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	ONSITE SEPTIC?	YES NO <input checked="" type="radio"/> UNKNOWN
WATER FILTER	YES <input type="radio"/> NO <input checked="" type="radio"/> TYPE:	SEPTIC LOCATION	—
SAMPLE LOCATION	PRESSURE TANK SPIGOT <input type="radio"/> <input checked="" type="radio"/> OUTSIDE SPIGOT KITCHEN FAUCET OTHER:	AERATOR REMOVED?	YES NO <input checked="" type="radio"/> NONE PRESENT
PURGING TIMES	START: 1244 SAMPLE TIME: 1254	ODOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:
SAMPLE ID:	940 Middle	COLOR?	YES <input type="radio"/> NO <input checked="" type="radio"/> DESCRIBE:

SAMPLE AREA INVENTORY/USE:

NOTES:

outside

SITE SKETCH SHOWING GENERAL LOCATION OF SUPPLY WELL, HOUSE, SEPTIC, ROAD:



8/23/18

Rutland SURA | 280EM00

Bus. Park DW

JP meet Peder at business park 900
- sample bus. park treatment system + 8 businesses

BP - influent @ 0915

BP - effluent A @ 0910 (closest to building)

FB - BP @ 0912

BP - effluent B @ 0911

① 20 Innovation Drive (Knight Kitchens)

20 Im. @ 0945

(staff kitchen sink)
removed aerator

FB - 20I @ 0944

② 106 Innovation Drive

(Elison Surface Tech.)
(bathroom sink)
removed aerator

106 Inn. @ 1002

FB - 106I @ 1000

③ 238 Innovation Drive (Kalow Tech.)

* ④ - 2 samples from this location - separate
water supplies ("back" + "front")
(turned on both faucets at 1005)

238 Back @ 1018

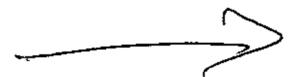
FB - 238 B @ 1016

} back warehouse
utility sink

238 Front @ 1021

FB - 238 F @ 1022

} staff kitchen
sink
- removed aerator



⑤ 310 Innovation Drive (Schwan's)
310 Inn. @ 1040 } ~~bathroom~~ ^{overflowed!} sink
FB-310I @ 1041 } staff kitchen sink
- removed aerator

⑥ 364 Innovation Drive (Atomic Prod. Audio)
364 Inn. @ 1054 } staff kitchen sink
FB-364I @ 1050 } - removed aerator

⑦ 401 Innovation Drive (Vermont Country Store)
401 Inn. @ 1110 } from "clinic" bathroom
FB-401I @ 1108 } - removed aerator

⑧ 311 Innovation Drive (Fed Ex)
311 Inn. @ 1135 } staff kitchen sink
FB-311I @ 1134 } - removed aerator

- stopped by 452 Rt. 7B (Joe Thompson's) to
attempt to sample - still no water, no one home

- had to call Mary Marriotte - no one home at
129 7B; sent Trevor out to unlock home
Trevor arrived at 1210

129 7B @ 1220 } kitchen sink
FB-129 @ 1218 } - no aerator
- well location unknown

offsite 1230

JP

APPENDIX C

AGENCY OF NATURAL RESOURCES MAPS



LEGEND

- Bedrock Outcrops (points)
- Bedrock Faults and Contacts**
- <all other values>
- concealed contact
- contact
- - - dashed contact
- fault
- - - fault ?
- high angle fault
- normal fault
- scratch boundary
- strike slip fault
- ▲ thrust fault open barb
- ▲ thrust fault solid barb
- Roads**
- Interstate
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local
- Not part of function Classification S
- Waterbody
- Stream
- Town Boundary

1: 33,173
December 11, 2018

NOTES

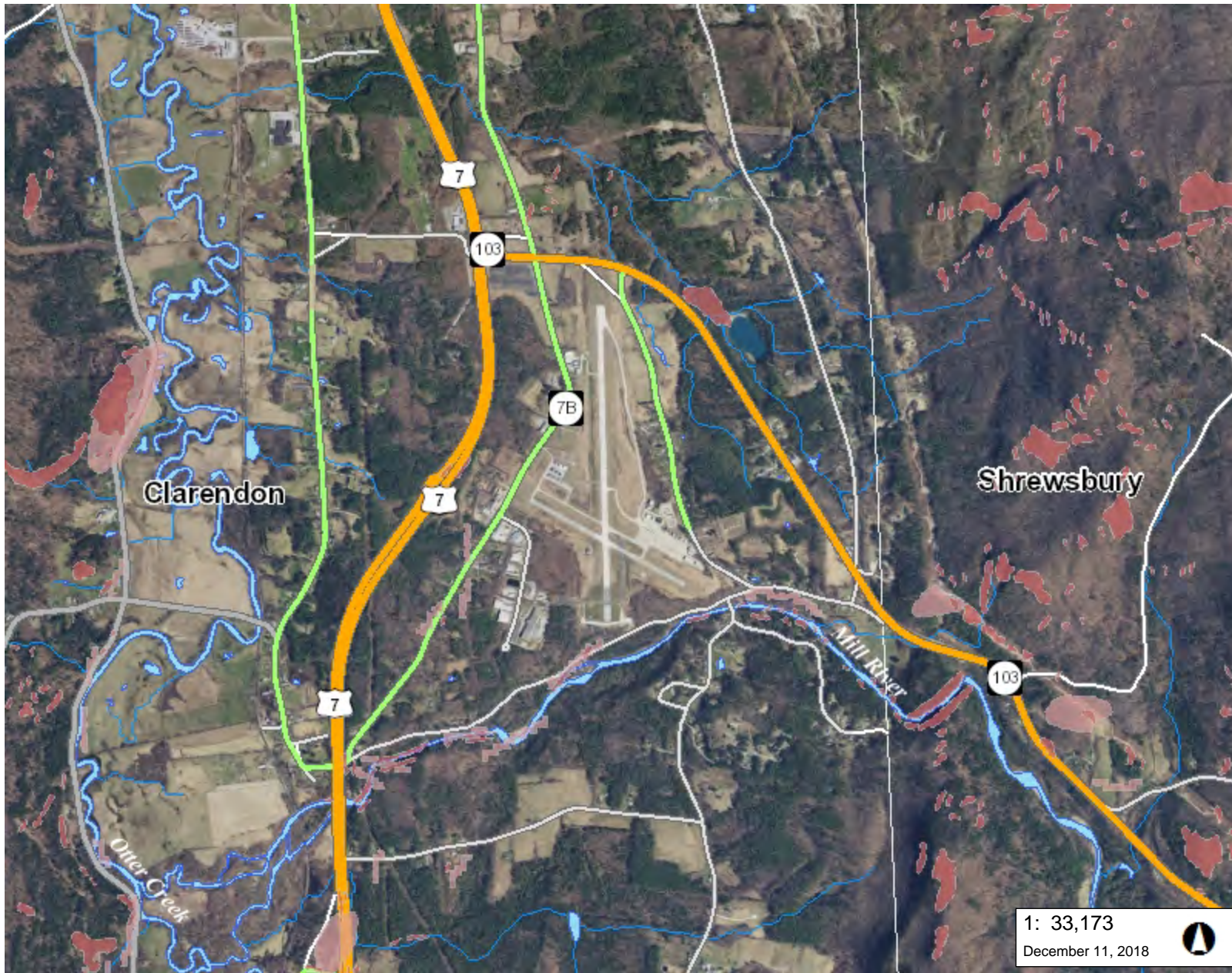
Map created using ANR's Natural Resources Atlas

1,685.0 0 842.00 1,685.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 2764 Ft. 1cm = 332 Meters

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LEGEND

Bedrock Outcrops (polygon)

- 1:24,000
- 1:62,500

Roads

- Interstate
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local
- Not part of function Classification S

Waterbody

- Waterbody
- Stream

Town Boundary

- Town Boundary

1: 33,173
December 11, 2018

NOTES

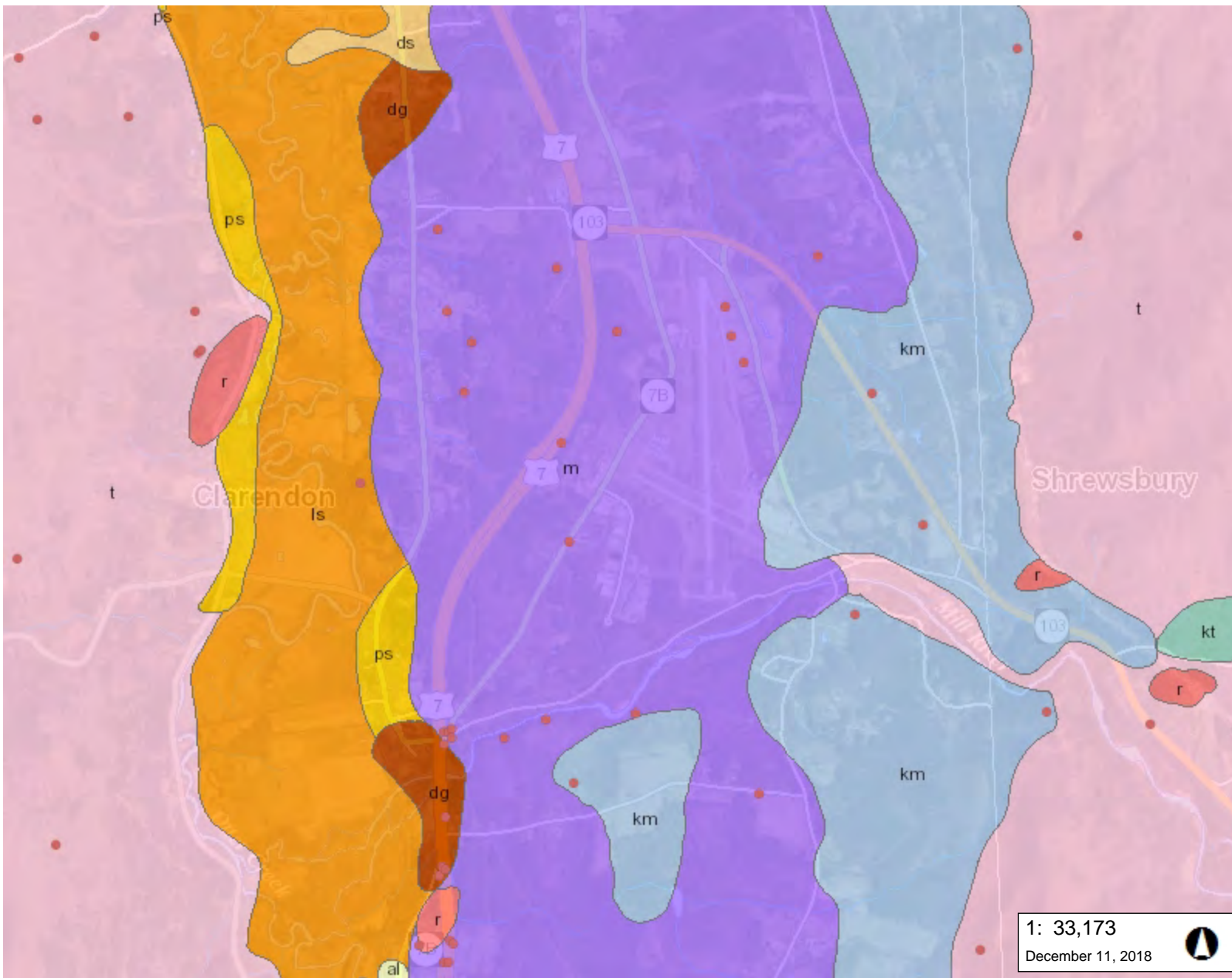
Map created using ANR's Natural Resources Atlas

1,685.0 0 842.00 1,685.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 2764 Ft. 1cm = 332 Meters

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LEGEND

- Bedrock Outcrops (points)
- Surficial Geology (Lithology)
- till
- terminal moraine
- moraine
- isolated kame
- kame terrace
- kame moraine
- outwash
- esker
- eolian sand
- lake gravel
- beach gravel
- delta gravel
- delta
- lake sand
- pebbly sand
- boulders in sand
- delta sand
- silt, silty clay, and clay
- varved clay
- boulders in clay
- wave-washed till
- fluvial gravel
- fluvial sand
- alluvium
- marine beach gravel
- water road

1: 33,173
December 11, 2018

NOTES

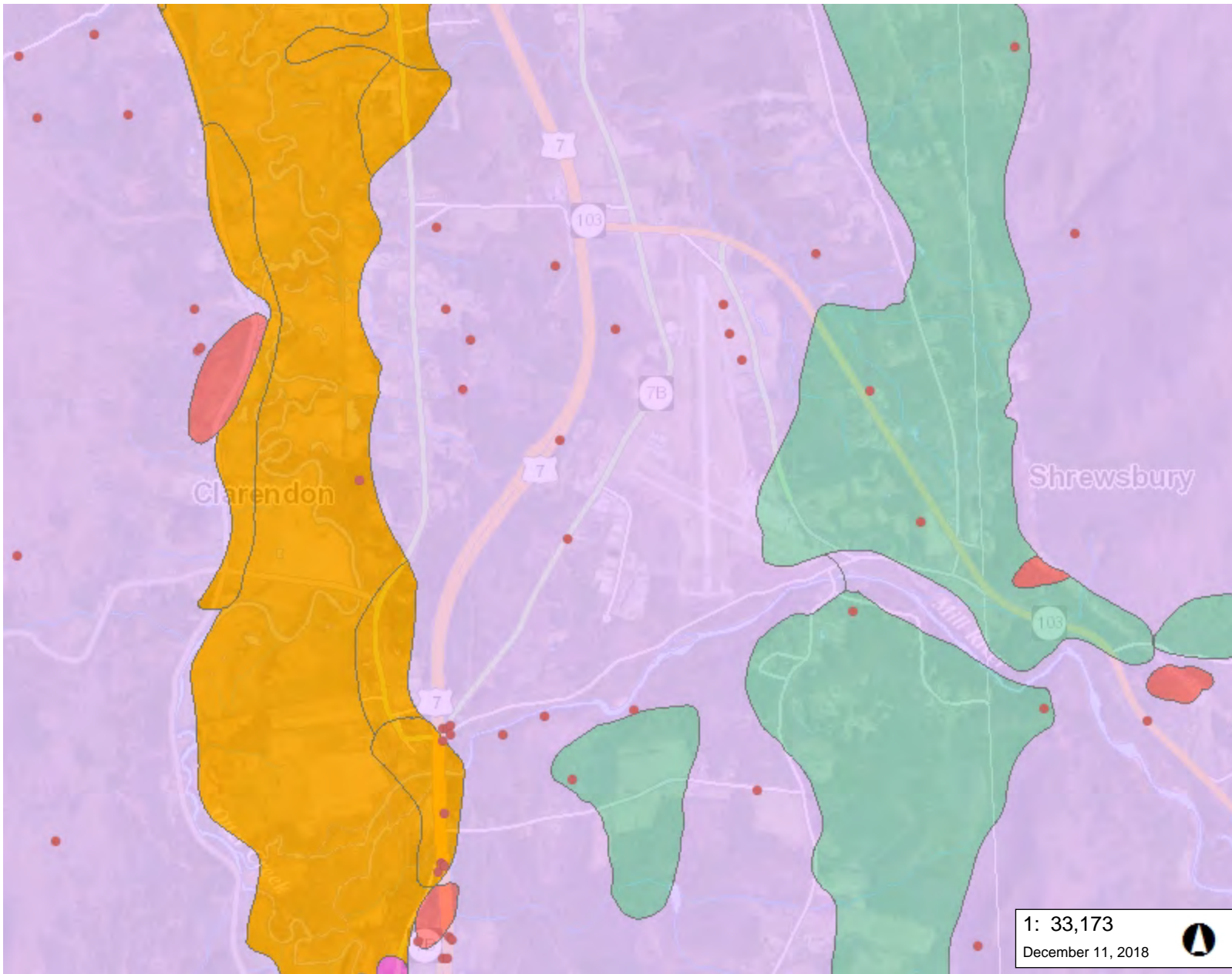
Map created using ANR's Natural Resources Atlas

1,685.0 0 842.00 1,685.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 2764 Ft. 1cm = 332 Meters

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LEGEND

- Bedrock Outcrops (points)
- Surficial Geology (Feature Typ)**
 - Glacial deposit
 - Glaciofluvial deposit
 - Glaciofluvial
 - Eolian deposit
 - Glaciolacustrine deposit
 - Postglacial fluvial deposit
 - Champlain Sea deposit
 - Champlain Sea landform
 - Pluvial deposit
 - Bedrock exposure
 - Surface Water
- Roads**
 - Interstate
 - Principal Arterial
 - Minor Arterial
 - Major Collector
 - Minor Collector
 - Local
 - Not part of function Classification S
- Waterbody**
 - Waterbody
 - Stream
- Town Boundary

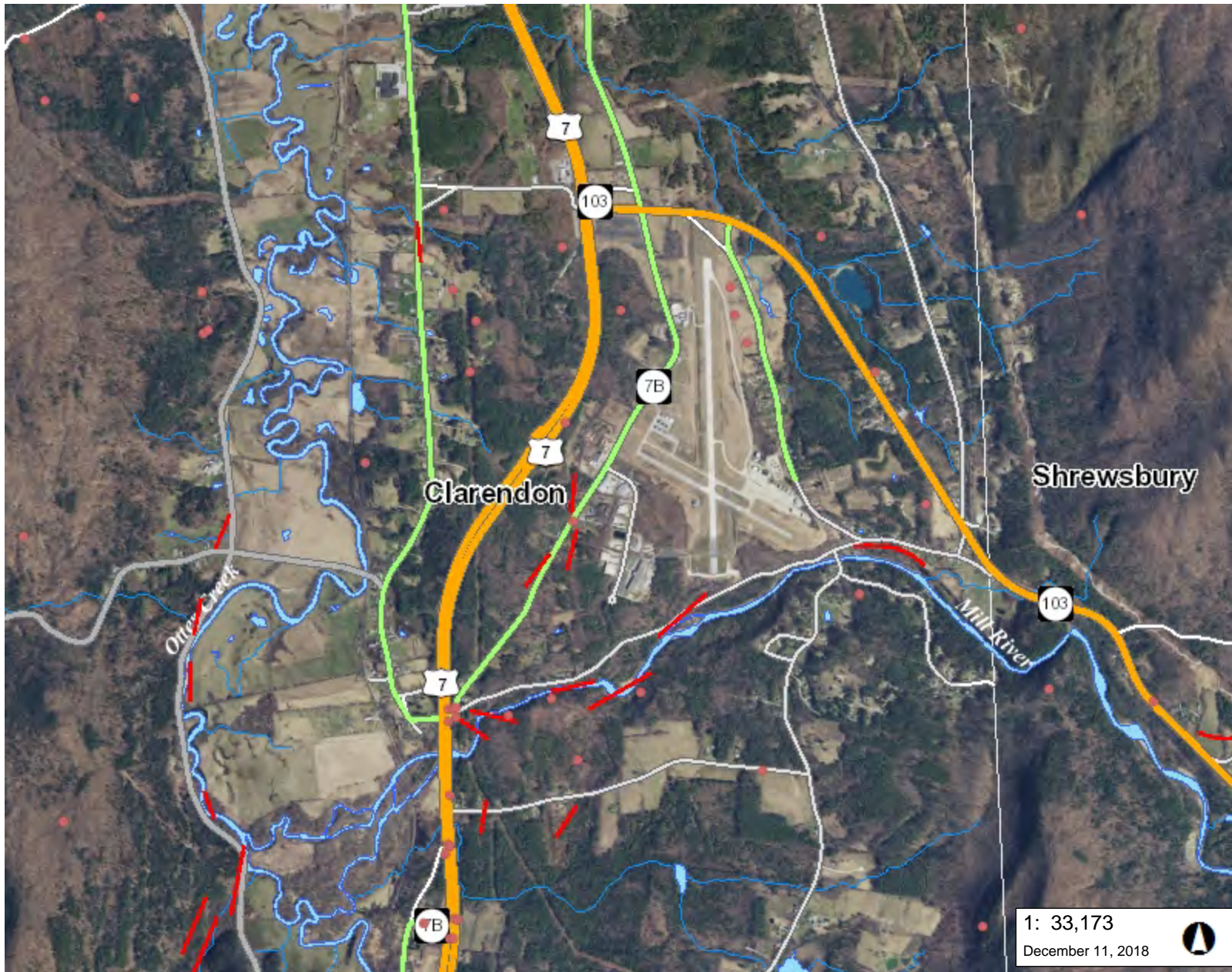
1: 33,173
December 11, 2018

1,685.0 0 842.00 1,685.0 Meters
 WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 2764 Ft. 1cm = 332 Meters
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NOTES

Map created using ANR's Natural Resources Atlas



LEGEND

- Bedrock Outcrops (points)
- Surficial Geology (Linear Feat)
 - Rockline
 - Striation
 - Till Fabric
- Roads
 - Interstate
 - Principal Arterial
 - Minor Arterial
 - Major Collector
 - Minor Collector
 - Local
 - Not part of function Classification S
- Waterbody
 - Waterbody
 - Stream
- Town Boundary

1: 33,173
December 11, 2018

NOTES

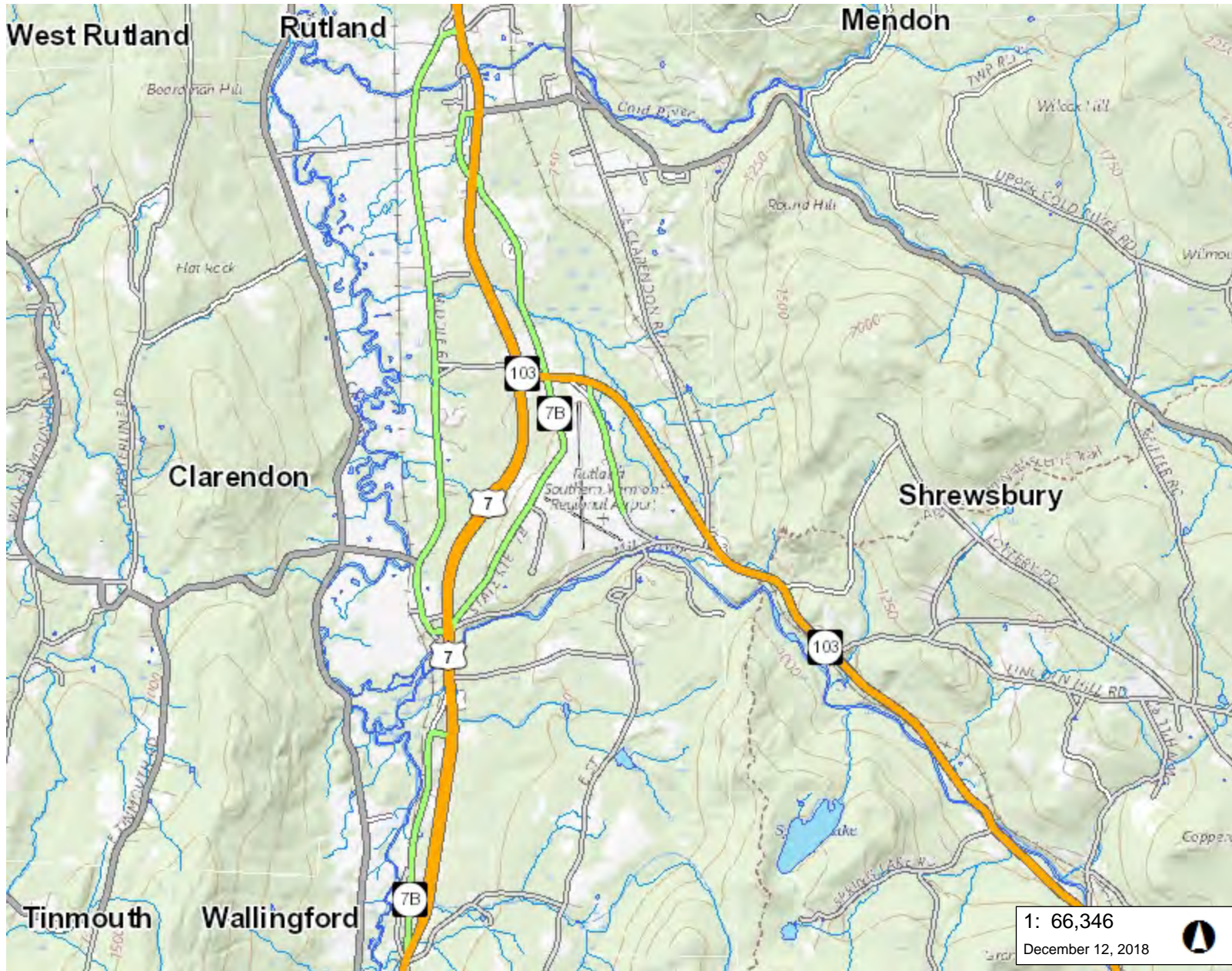
Map created using ANR's Natural Resources Atlas

1,685.0 0 842.00 1,685.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 2764 Ft. 1cm = 332 Meters

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LEGEND

- Roads**
- Interstate
 - Principal Arterial
 - Minor Arterial
 - Major Collector
 - Minor Collector
 - Local
 - Not part of function Classification S
- Waterbody
- Stream
- Town Boundary

1: 66,346
December 12, 2018

NOTES

Map created using ANR's Natural Resources Atlas

3,370.0 0 1,685.00 3,370.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 5529 Ft. 1cm = 663 Meters

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