July 7, 2023

Port Washington Water District
PWS ID No. NY2912267
MCL Deferral for 1,4-Dioxane
Quarterly Report – Second Quarter 2023

Introduction

On behalf of the Port Washington Water District (PWWD or District), D&B Engineers and Architects (D&B) has prepared this document in accordance with the requirements of the New York State Department of Health (NYSDOH) for public water suppliers who have been granted deferrals from maximum contaminant level (MCL) violations for 1,4-dioxane. The District was granted an MCL deferral for 1,4-dioxane in 2020. The District was granted a deferral because it has been proactive in its efforts to establish and implement an action plan for managing the above-referenced compound.

While very effort has been made to shorten the initial duration of each project, circumstances beyond the District's control impacting contractors and water suppliers, locally and nationwide, have made the District's goal of completing work ahead of schedule impossible. The last three years have been a time of unprecedented disruption in the supply chain of chemical supplies, equipment, infrastructure components, pipe and materials (e.g., steel), and treatment systems. Shortages of necessary items have significantly impacted the District, primarily in terms of price increases, decreased availability, and longer lead times.

In addition, due to the rapidly changing regulatory environment through an expanded list of contaminants with lower regulatory advisory levels or MCLs, local and state regulators are experiencing a large number of capital project submissions, in addition to their regular workload. This increased workload has led to longer regulatory review times of engineering reports, detailed design plans, and specifications. In many cases, these factors have caused delays in obtaining final regulatory approval, commencing construction, procuring equipment and necessary components, and conforming to proposed construction schedules.

The District has done everything within its power to adhere to the project schedules approved in the original deferral request, as described in the previous quarterly deferral reports. Each of the three required treatment projects had initial schedules that extended beyond the initial 24-month deferral period, due to necessary steps required to complete the design, permitting, bidding, construction, and startup testing. In addition, the Morley Park Station project required obtaining property through the parkland alienation process in order to accommodate the new treatment building. The full impact of supply chain issues and delays was not known at the time of the original compliance deferrals and due to these regulatory changes, these delays were expected to become worse before improving because of increased national demand. Recognizing these exceptional circumstances, the District requested and received a 12-month deferral renewal which extended the MCL compliance deadline to August 25, 2023.

The District's goal, as always, is to provide an adequate supply of potable water to its consumers and it has done everything in its ability to move forward on the treatment projects to further that goal and meet consumer demands. These impacts of the last three years are expected to continue for the foreseeable future and will most likely affect the ability of the District to conform to the project schedules outlined in the original deferral request, even with the initial deferral renewal.

The enclosed is a report describing the PWWD's progress towards maintaining the highest quality of water for our customers. Updated schedules for each project are contained in **Attachment A**.

Corrective Action Plan Milestones

Hewlett Station Well 4

Construction of the new building, including installation of the advanced oxidation process (AOP) treatment system to be used for the removal of 1,4-dioxane, is complete and undergoing startup testing. The new booster pump building is complete and the associated pump system has been installed and is ready for startup. In addition, the granular activated carbon (GAC) vessels have been rehabilitated and filled with new carbon media. The GAC vessels have been backwashed with system water and successfully sampled for all necessary return to service water quality parameters.

As noted in the last quarterly report and in the Introduction of this report, obtaining regulatory approval took longer than initially anticipated and, in conjunction with the continued supply chain issues, the schedule of the project has been delayed. The construction is currently substantially completed and it is expected that the plant will have conditional approval to operate in the coming weeks.

Christopher Morley Park Station Wells 8, 9, and 11

The general, electrical, and plumbing construction contracts for the project were executed on June 10, 2022. Construction has been on-going. The entire new building foundation for the structure has been completed and the new GAC vessels have been delivered. The new AOP reactors are set to be delivered in late July 2023. As noted in the Introduction, obtaining regulatory approval took longer than initially anticipated and, in conjunction with the continued supply chain issues, the schedule of the project was delayed. The construction is scheduled to be substantially completed in the spring of 2024.

As stated previously, only one of the three wells (Well 9) at the Station has previously exhibited an MCL violation for 1,4-dioxane. Although a deferral renewal has been granted, the District will continue to implement conservation requirements and operational changes to ensure the use of Well 9 is avoided or minimized to the greatest extent practicable.

Stonytown Station Well 10

The project is currently in the permitting and pre-construction phase. The general, electrical, and plumbing construction contracts were executed and the Notices to Proceed were issued to

contractors in February 2023. The construction has not yet begun as the District is working to return the Hewlett Well 4 facility to service. The District cannot meet summer peak demands with both wells out of service. Demolition and removals, followed by the excavation necessary for the new treatment building foundation, is expected to begin onsite in September 2023. As described in previous quarterly reports, the scope of this project had to be adjusted to include treatment for nitrate removal. The District is responding to review comments on the plans and specifications from the NYSDOH and NCDH that were received in this quarter. It is anticipated that the facility will be operational by spring of 2025.

Although a deferral renewal has been granted, the District continued to implement conservation requirements and operational changes to ensure the use of Stonytown Well 10 was either minimized or avoided to the greatest extent possible.

Public Notification

In accordance with the terms of the deferral, the PWWD has maintained an open line of communication with the public regarding its deferral. The deferral public notification documentation is still featured prominently on the District website, as are previous quarterly reports.

Analytical Sampling

Sample results for the wells for which deferrals were granted (Christopher Morley Park Wells 9 and 11 and Stonytown Well 10), taken during the second quarter of 2023, are listed in the below table. Hewlett Well 4 was not sampled this quarter as the well was out of service while treatment was being installed. Christopher Morley Park Well 8 was not sampled this quarter as the well was out of service while it was being rehabilitated. Full laboratory reports for each sample are contained in **Attachment B**.

1,4-Dioxane (parts per billion, ppb)

Well	Date		
	April 2023	**May 2023**	**June 2023**
Hewlett Well 4[1] (N-2052)	NS	NS	NS
Christopher Morley Park Well 8[1] (N-7551)	NS	NS	NS
Christopher Morley Park Well 9 (N-7552)	11.1	10.8	10.8
Christopher Morley Park Well 11 (N-13510)	0.21	NS	NS
Stonytown Well 10 (N-9809)	0.69	NS	0.57

NS - Not Sampled

[1]As noted earlier, Wells 4 and 8 were not sampled in this quarter as they were out of service for the installation of treatment and rehabilitation, respectively.

Conclusion

As demonstrated above, the Port Washington Water District is actively working to preserve the quality of water for its customers and comply with the requirements put forth by the NYSDOH. The District looks forward to continuing to work towards completion of its treatment facilities. Should you have any questions, please contact the District at 516-767-0171 or visit the website at www.pwwd.org.

Very truly yours,

Board of Commissioners
Port Washington Water District

Enclosures

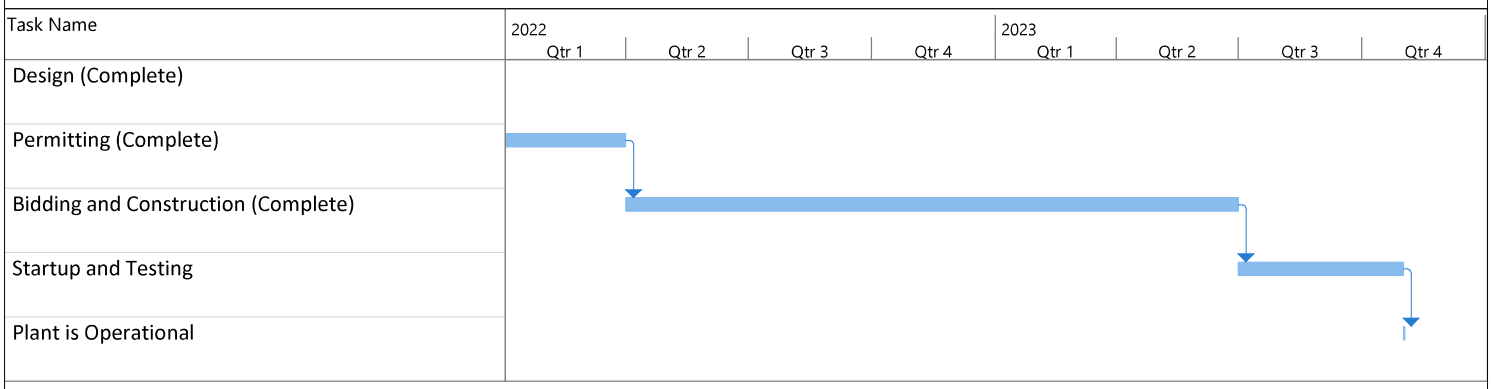
cc: K. Wheeler (NYSDOH)
B. Rogers (NYSDOH)
W. Provoncha (NCDH)
P. Young (NCDH)
R. Putnam (NCDH)
P. Prignano (PWWD)
W. Merklin (D&B)
M. Savarese (D&B)
L. Ortiz (D&B)
P. Connell (D&B)

ATTACHMENT A

Project Schedules Associated with MCL Deferral

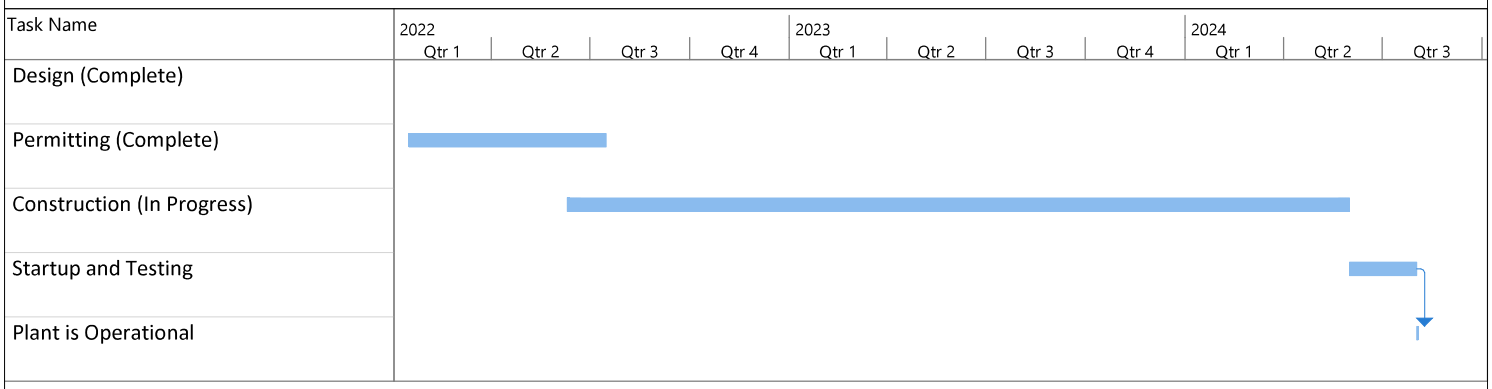
Port Washington Water District
MCL Deferral
Quarterly Report - Q2 2023

Hewlett Well 4
AOP Project Schedule



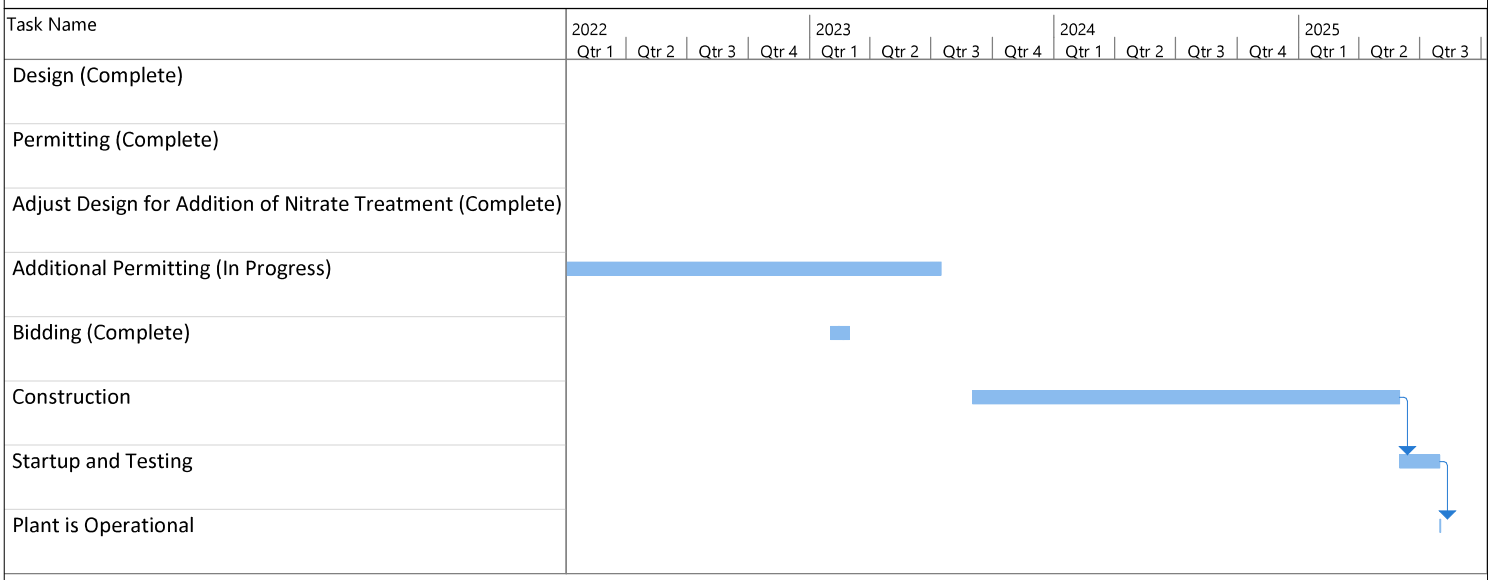
Port Washington Water District
MCL Deferral
Quarterly Report - Q2 2023

Christopher Morley Park Station
AOP Project Schedule



Port Washington Water District
MCL Deferral
Quarterly Report - Q2 2023

Stonytown Well 10
AOP Project Schedule



ATTACHMENT B

Water Quality Data

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70251418001
Client Sample ID.: N-09809

Federal ID : 2912267
Collected : 04/03/2023 09:46 AM Point N-09809
Received : 04/03/2023 05:39 PM Location Stoneytown 10
Collected By CLIENT Flwr Hl

Analytical Method:ASTM D7237-10

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Cyanide, Free	<10.0		1	ug/L	200	04/12/2023 7:14 PM	001 BP3C1/1

Analytical Method:EPA 180.1

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Turbidity	<1.0		1	NTU	5	04/04/2023 12:41	001 BP1U1/1

Analytical Method:EPA 200.7

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Ca Hardness as CaCO3 (SM 2340B	60.7		1	mg/L		04/07/2023 7:37 PM	001 BP3N1/1
Calcium	24.3		1	mg/L		04/07/2023 7:37 PM	001 BP3N1/1
Iron	<0.020		1	mg/L	0.3	04/07/2023 7:37 PM	001 BP3N1/1
Magnesium	14.7		1	mg/L		04/07/2023 7:37 PM	001 BP3N1/1
Manganese	<0.010		1	mg/L	0.3	04/07/2023 7:37 PM	001 BP3N1/1
Sodium	21.0		1	mg/L		04/07/2023 7:37 PM	001 BP3N1/1
Tot Hardness asCaCO3 (SM 2340B	121	N3	1	mg/L		04/07/2023 7:37 PM	001 BP3N1/1
Zinc	0.083		1	mg/L	5	04/07/2023 7:37 PM	001 BP3N1/1

Analytical Method:EPA 200.8

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Antimony	<0.40		1	ug/L	6	04/05/2023 4:54 PM	001 BP3N1/1
Arsenic	<1.0		1	ug/L	10	04/05/2023 4:54 PM	001 BP3N1/1
Barium	0.064		1	mg/L	2	04/05/2023 4:54 PM	001 BP3N1/1
Beryllium	<0.30		1	ug/L	4	04/05/2023 4:54 PM	001 BP3N1/1
Cadmium	<1.0		1	ug/L	5	04/05/2023 4:54 PM	001 BP3N1/1
Chromium	<0.0070		1	mg/L	0.1	04/05/2023 4:54 PM	001 BP3N1/1
Copper	0.014		1	mg/L	1.3	04/05/2023 4:54 PM	001 BP3N1/1
Lead	<1.0		1	ug/L	15	04/05/2023 4:54 PM	001 BP3N1/1
Mercury	<0.20		1	ug/L	2	04/05/2023 4:54 PM	001 BP3N1/1
Nickel	0.0020		1	mg/L		04/05/2023 4:54 PM	001 BP3N1/1
Selenium	<2.0		1	ug/L	50	04/05/2023 4:54 PM	001 BP3N1/1
Silver	<0.0010		1	mg/L	0.1	04/05/2023 4:54 PM	001 BP3N1/1
Thallium	<0.30		1	ug/L	2	04/05/2023 4:54 PM	001 BP3N1/1

Analytical Method:EPA 300.0

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Chloride	52.5		1	mg/L	250	04/07/2023 8:30 AM	001 BP1U1/1
Fluoride	<0.10		1	mg/L	2.2	04/07/2023 8:30 AM	001 BP1U1/1
Sulfate	39.7		1	mg/L	250	04/07/2023 8:30 AM	001 BP1U1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70251418001
Client Sample ID.: N-09809

Federal ID : 2912267
Collected : 04/03/2023 09:46 AM Point N-09809
Received : 04/03/2023 05:39 PM Location Stoneytown 10
Collected By CLIENT Flwr Hl

Analytical Method: EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrate as N	4.7		5	mg/L	10	04/03/2023 11:39	001 BP1U1/1
Nitrate-Nitrite (as N)	4.7		5	mg/L		04/03/2023 11:39	001 BP1U1/1

Analytical Method: EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrite as N	<0.050		1	mg/L	1	04/03/2023 9:39 PM	001 BP1U1/1

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 04/04/2023 12:19

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.69		1	ug/L	1	04/06/2023 11:30	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	95%		1	%REC		04/06/2023 11:30	001 AG2R1/2

Analytical Method: EPA 524.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,1,1-Trichloroethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,1,2,2-Tetrachloroethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,1,2-Trichloroethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,1,2-Trichlorotrifluoroethane	<0.50	N3,L1	1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,1-Dichloroethane	0.82		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,1-Dichloroethene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,1-Dichloropropene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,2,3-Trichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,2,3-Trichloropropane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,2,4-Trichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,2,4-Trimethylbenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,2-Dichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,2-Dichloroethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,2-Dichloropropane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,3,5-Trimethylbenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,3-Dichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,3-Dichloropropane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
1,4-Dichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
2,2-Dichloropropane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
2-Chlorotoluene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
4-Chlorotoluene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Benzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Bromobenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70251418001
Client Sample ID.: N-09809

Federal ID : 2912267
Collected : 04/03/2023 09:46 AM Point N-09809
Received : 04/03/2023 05:39 PM Location Stoneytown 10
Collected By CLIENT Flwr Hl

Bromochloromethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Bromodichloromethane	<0.50		1	ug/L		04/04/2023 2:56 PM	001 VG9C1/2
Bromoform	<0.50		1	ug/L		04/04/2023 2:56 PM	001 VG9C1/2
Bromomethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Carbon tetrachloride	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Chlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Chlorodifluoromethane	<0.50	N3	1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Chloroethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Chloroform	<0.50		1	ug/L		04/04/2023 2:56 PM	001 VG9C1/2
Chloromethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Dibromochloromethane	<0.50		1	ug/L		04/04/2023 2:56 PM	001 VG9C1/2
Dibromomethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Dichlorodifluoromethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Ethylbenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Hexachloro-1,3-butadiene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Isopropylbenzene (Cumene)	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Methyl-tert-butyl ether	<0.50		1	ug/L	10	04/04/2023 2:56 PM	001 VG9C1/2
Methylene Chloride	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Styrene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Tetrachloroethene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Toluene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Total Trihalomethanes (Calc.)	<0.50		1	ug/L	80	04/04/2023 2:56 PM	001 VG9C1/2
Trichloroethene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Trichlorofluoromethane	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Vinyl chloride	<0.50		1	ug/L	2	04/04/2023 2:56 PM	001 VG9C1/2
cis-1,2-Dichloroethene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
cis-1,3-Dichloropropene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
m&p-Xylene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
n-Butylbenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
n-Propylbenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
o-Xylene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
p-Isopropyltoluene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
sec-Butylbenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
tert-Butylbenzene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
trans-1,2-Dichloroethene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
trans-1,3-Dichloropropene	<0.50		1	ug/L	5	04/04/2023 2:56 PM	001 VG9C1/2
Surr: 1,2-Dichlorobenzene-d4 (S)	103%		1	%REC		04/04/2023 2:56 PM	001 VG9C1/2
Surr: 4-Bromofluorobenzene (S)	85%		1	%REC		04/04/2023 2:56 PM	001 VG9C1/2

Analytical Method: Field Method

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Field Temperature	13.8	N3	1	deg C		04/03/2023 9:46 AM	001 BP1U1/1
Field pH	6.3	N3	1	Std. Units		04/03/2023 9:46 AM	001 BP1U1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70251418001
Client Sample ID.: N-09809

Federal ID : 2912267
Collected : 04/03/2023 09:46 AM Point N-09809
Received : 04/03/2023 05:39 PM Location Stoneytown 10
Collected By CLIENT Flwr Hl

Analytical Method: SM22 2120B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Apparent Color	<5.0		1	units		04/04/2023 12:00	001 BP1U1/1
pH	6.2		1	Std. Units		04/04/2023 12:00	001 BP1U1/1

Analytical Method: SM22 2150B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Odor @ 60 Degrees C	No odor observed		1		3	04/03/2023 10:12	001 BP1U1/1

Analytical Method: SM22 2320B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Alkalinity, Total as CaCO3	53.7		1	mg/L		04/05/2023 10:35	001 BP1U1/1

Analytical Method: SM22 2330 LSI

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Corrosivity	-2.24		1			04/13/2023 2:50 PM	001 BP1U1/1

Analytical Method: SM22 2540C

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Total Dissolved Solids	227		1	mg/L		04/06/2023 5:37 PM	001 BP1U1/1

Analytical Method: SM22 4500 NH3 H

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrogen, Ammonia	<0.10		1	mg/L		04/05/2023 1:18 PM	001 BP1U1/1

Analytical Method: SM22 5540C Prep Method: SM22 5540C Prep Date: 04/04/2023 12:00

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
LAS Molecular Weight, g/mol	320		1			04/04/2023 12:12	001 BP1U1/1
MBAS, Calculated as LAS	<0.080		1	mg/L		04/04/2023 12:12	001 BP1U1/1

Analytical Method: SM22 9223B Colilert Prep Method: SM22 9223B Colilert Prep Date: 04/03/2023 6:00 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
E.coli	Absent		1		Absent	04/04/2023 12:00	001 SP5T1/1
Total Coliforms	Absent		1		Absent	04/04/2023 12:00	001 SP5T1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:

Type: Drinking Water
Origin: Treated Well
Routine

Treatment

GAC

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70251418003
Client Sample ID.: GAC-09809

Federal ID : 2912267
Collected : 04/03/2023 08:20 AM Point GAC-09809
Received : 04/03/2023 05:39 PM Location Stoneytown 10
Collected By CLIENT GAC

Analytical Method: ASTM D7237-10

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Cyanide, Free	<10.0		1	ug/L	200	04/12/2023 7:18 PM	003 BP3C1/1

Analytical Method: EPA 180.1

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Turbidity	<1.0		1	NTU	5	04/04/2023 12:40	003 BP1U1/1

Analytical Method: EPA 200.7

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Ca Hardness as CaCO3 (SM 2340B	60.4		1	mg/L		04/07/2023 7:45 PM	003 BP3N1/1
Calcium	24.2		1	mg/L		04/07/2023 7:45 PM	003 BP3N1/1
Iron	<0.020		1	mg/L	0.3	04/07/2023 7:45 PM	003 BP3N1/1
Magnesium	14.7		1	mg/L		04/07/2023 7:45 PM	003 BP3N1/1
Manganese	<0.010		1	mg/L	0.3	04/07/2023 7:45 PM	003 BP3N1/1
Sodium	21.0		1	mg/L		04/07/2023 7:45 PM	003 BP3N1/1
Tot Hardness asCaCO3 (SM 2340B	121	N3	1	mg/L		04/07/2023 7:45 PM	003 BP3N1/1
Zinc	<0.020		1	mg/L	5	04/07/2023 7:45 PM	003 BP3N1/1

Analytical Method: EPA 200.8

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Antimony	<0.40		1	ug/L	6	04/05/2023 4:58 PM	003 BP3N1/1
Arsenic	<1.0		1	ug/L	10	04/05/2023 4:58 PM	003 BP3N1/1
Barium	0.064		1	mg/L	2	04/05/2023 4:58 PM	003 BP3N1/1
Beryllium	<0.30		1	ug/L	4	04/05/2023 4:58 PM	003 BP3N1/1
Cadmium	<1.0		1	ug/L	5	04/05/2023 4:58 PM	003 BP3N1/1
Chromium	<0.0070		1	mg/L	0.1	04/05/2023 4:58 PM	003 BP3N1/1
Copper	<0.0020		1	mg/L	1.3	04/05/2023 4:58 PM	003 BP3N1/1
Lead	<1.0		1	ug/L	15	04/05/2023 4:58 PM	003 BP3N1/1
Mercury	<0.20		1	ug/L	2	04/05/2023 4:58 PM	003 BP3N1/1
Nickel	0.0014		1	mg/L		04/05/2023 4:58 PM	003 BP3N1/1
Selenium	<2.0		1	ug/L	50	04/05/2023 4:58 PM	003 BP3N1/1
Silver	<0.0010		1	mg/L	0.1	04/05/2023 4:58 PM	003 BP3N1/1
Thallium	<0.30		1	ug/L	2	04/05/2023 4:58 PM	003 BP3N1/1

Analytical Method: EPA 300.0

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Chloride	51.9		1	mg/L	250	04/07/2023 8:44 AM	003 BP1U1/1
Fluoride	<0.10		1	mg/L	2.2	04/07/2023 8:44 AM	003 BP1U1/1
Sulfate	39.1		1	mg/L	250	04/07/2023 8:44 AM	003 BP1U1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:

Type: Drinking Water
Origin: Treated Well
Routine

Treatment

GAC

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70251418003
Client Sample ID.: GAC-09809

Federal ID : 2912267
Collected : 04/03/2023 08:20 AM Point GAC-09809
Received : 04/03/2023 05:39 PM Location Stoneytown 10
Collected By CLIENT GAC

Analytical Method: EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrate as N	4.7		5	mg/L	10	04/03/2023 11:20	003 BP1U1/1
Nitrate-Nitrite (as N)	4.7		5	mg/L		04/03/2023 11:20	003 BP1U1/1

Analytical Method: EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrite as N	<0.050		1	mg/L	1	04/03/2023 9:24 PM	003 BP1U1/1

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 04/04/2023 12:19

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.62		1	ug/L	1	04/06/2023 11:47	003 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	96%		1	%REC		04/06/2023 11:47	003 AG2R1/2

Analytical Method: EPA 524.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,1,1-Trichloroethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,1,2,2-Tetrachloroethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,1,2-Trichloroethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,1,2-Trichlorotrifluoroethane	<0.50	N3,L1	1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,1-Dichloroethane	0.91		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,1-Dichloroethene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,1-Dichloropropene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,2,3-Trichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,2,3-Trichloropropane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,2,4-Trichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,2,4-Trimethylbenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,2-Dichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,2-Dichloroethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,2-Dichloropropane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,3,5-Trimethylbenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,3-Dichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,3-Dichloropropane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
1,4-Dichlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
2,2-Dichloropropane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
2-Chlorotoluene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
4-Chlorotoluene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Benzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Bromobenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:

Type: Drinking Water
Origin: Treated Well
Routine

Treatment

GAC

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70251418003
Client Sample ID.: GAC-09809

Federal ID : 2912267
Collected : 04/03/2023 08:20 AM Point GAC-09809
Received : 04/03/2023 05:39 PM Location Stoneytown 10
Collected By CLIENT GAC

Bromochloromethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Bromodichloromethane	<0.50		1	ug/L		04/04/2023 2:34 PM	003 VG9C1/2
Bromoform	<0.50		1	ug/L		04/04/2023 2:34 PM	003 VG9C1/2
Bromomethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Carbon tetrachloride	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Chlorobenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Chlorodifluoromethane	<0.50	N3	1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Chloroethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Chloroform	<0.50		1	ug/L		04/04/2023 2:34 PM	003 VG9C1/2
Chloromethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Dibromochloromethane	<0.50		1	ug/L		04/04/2023 2:34 PM	003 VG9C1/2
Dibromomethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Dichlorodifluoromethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Ethylbenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Hexachloro-1,3-butadiene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Isopropylbenzene (Cumene)	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Methyl-tert-butyl ether	<0.50		1	ug/L	10	04/04/2023 2:34 PM	003 VG9C1/2
Methylene Chloride	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Styrene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Tetrachloroethene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Toluene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Total Trihalomethanes (Calc.)	<0.50		1	ug/L	80	04/04/2023 2:34 PM	003 VG9C1/2
Trichloroethene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Trichlorofluoromethane	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Vinyl chloride	<0.50		1	ug/L	2	04/04/2023 2:34 PM	003 VG9C1/2
cis-1,2-Dichloroethene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
cis-1,3-Dichloropropene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
m&p-Xylene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
n-Butylbenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
n-Propylbenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
o-Xylene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
p-Isopropyltoluene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
sec-Butylbenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
tert-Butylbenzene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
trans-1,2-Dichloroethene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
trans-1,3-Dichloropropene	<0.50		1	ug/L	5	04/04/2023 2:34 PM	003 VG9C1/2
Surr: 1,2-Dichlorobenzene-d4 (S)	104%		1	%REC		04/04/2023 2:34 PM	003 VG9C1/2
Surr: 4-Bromofluorobenzene (S)	81%		1	%REC		04/04/2023 2:34 PM	003 VG9C1/2

Analytical Method:Field Method

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Field Temperature	13.3	N3	1	deg C		04/03/2023 8:20 AM	003 BP1U1/1
Field pH	6.3	N3	1	Std. Units		04/03/2023 8:20 AM	003 BP1U1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:

Type: Drinking Water
Origin: Treated Well
Routine

Treatment
GAC

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70251418003
Client Sample ID.: GAC-09809

Federal ID : 2912267
Collected : 04/03/2023 08:20 AM Point GAC-09809
Received : 04/03/2023 05:39 PM Location Stoneytown 10
Collected By CLIENT GAC

Analytical Method: SM22 2120B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Apparent Color	<5.0		1	units		04/04/2023 11:58	003 BP1U1/1
pH	5.9		1	Std. Units		04/04/2023 11:58	003 BP1U1/1

Analytical Method: SM22 2150B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Odor @ 60 Degrees C	No odor observed		1		3	04/03/2023 10:10	003 BP1U1/1

Analytical Method: SM22 2320B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Alkalinity, Total as CaCO3	57.5		1	mg/L		04/05/2023 10:42	003 BP1U1/1

Analytical Method: SM22 2330 LSI

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Corrosivity	-2.22		1			04/13/2023 2:50 PM	003 BP1U1/1

Analytical Method: SM22 2540C

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Total Dissolved Solids	214		1	mg/L		04/06/2023 5:37 PM	003 BP1U1/1

Analytical Method: SM22 4500 NH3 H

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrogen, Ammonia	<0.10		1	mg/L		04/05/2023 1:22 PM	003 BP1U1/1

Analytical Method: SM22 5540C Prep Method: SM22 5540C Prep Date: 04/04/2023 11:57

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
LAS Molecular Weight, g/mol	320		1			04/04/2023 12:09	003 BP1U1/1
MBAS, Calculated as LAS	<0.080		1	mg/L		04/04/2023 12:09	003 BP1U1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

WorkOrder :
70251418

Laboratory Certifications

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

WorkOrder :
70251418

Additional Qualifiers

L1 - Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
N3 - Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **Pace Analytical Services, Inc.-NY**

Project BACT/POC/IOC/1,4/PFAS 4/3
Workorder 3296212
Report ID 236452 on 4/11/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Apr 05, 2023.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Sarah Leung (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Tara Bernier - Pace Analytical Services, Inc.-NY
Reporting - Pace Analytical Services, Inc.-NY

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sarah Leung

Sarah Leung *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3296212001	N-09809	NY Potable Water	04/03/2023 09:46	04/05/2023 08:53	CBC	Collected By Client
3296212002	GAC-09809	NY Potable Water	04/03/2023 08:20	04/05/2023 08:53	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.

Detected Results Summary

Not applicable for this WO.

Results

Client Sample ID	N-09809	Collected	04/03/2023 09:46
Lab Sample ID	3296212001	Lab Receipt	04/05/2023 08:53

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Perchlorate	ND	ND	ug/L	4.0	1.4	EPA 314.0	1	04/11/2023 01:20	DMG	A

Results

Client Sample ID	GAC-09809	Collected	04/03/2023 08:20
Lab Sample ID	3296212002	Lab Receipt	04/05/2023 08:53

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Perchlorate	ND	ND	ug/L	4.0	1.4	EPA 314.0	1	04/11/2023 01:49	DMG	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3296212001	N-09809	EPA 314.0	N/A	
3296212002	GAC-09809	EPA 314.0	N/A	

QUALITY CONTROL SAMPLES

WET CHEMISTRY

QC Batch

QC Batch	970574	Prep Method	N/A
Date	N/A	Analysis Method	EPA 314.0
Tech.			

Associated Samples

3296212001 3296212002

Matrix Spike 3649447 (MS) 3295486002 (non-Project Sample) For QC Batch 970574

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3649448 (MSD) 3295486002 (non-Project Sample) For QC Batch 970574

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Perchlorate	14797-73-0	MS	23	0	25	92.1	80 - 120		
Perchlorate	14797-73-0	MSD	23	0	25	92.1	80 - 120	RPD 0.0040 (Max-15)	

Matrix Spike 3650023 (MS) 3296214002 (non-Project Sample) For QC Batch 970574

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3650024 (MSD) 3296214002 (non-Project Sample) For QC Batch 970574

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Perchlorate	14797-73-0	MS	28.40	4.60	25	95.4	80 - 120		
Perchlorate	14797-73-0	MSD	28.70	4.60	25	96.4	80 - 120	RPD 0.83 (Max-15)	

Lab Control Standard 3649443 (LCS) Created on 04/05/2023 10:56 For QC Batch 970574

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Perchlorate	14797-73-0	LCS	23.10		25	92.3	85 - 115		

Lab Control Standard 3650022 (LCS) Created on 04/06/2023 09:03 For QC Batch 970574

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Perchlorate	14797-73-0	LCS	24.20		25	97	85 - 115		

QUALITY CONTROL SAMPLES

WET CHEMISTRY (cont.)

Method Blank 3650025 (MB) Created on 04/06/2023 09:03 For QC Batch 970574

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Perchlorate	14797-73-0	BLK	ND	ug/L	4.0	ND

Method Blank 3651394 (MB) Created on 04/10/2023 11:02 For QC Batch 970574

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Perchlorate	14797-73-0	BLK	ND	ug/L	4.0	ND

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3296212001	N-09809	N/A	N/A	N/A		EPA 314.0	970574
3296212002	GAC-09809	N/A	N/A	N/A		EPA 314.0	970574

Chain of Custody

PASI New York Laboratory

3296212

Logged By: MJE
PM: SSL

nalytical®
w.pacelabs.com

Workorder: 70251418 **Workorder Name:** BACT/POC/IOC/1,4/PFAS 4/3 **Results Requested By:** 4/18/2023

Report / Invoice To

Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040
Email: jennifer.aracri@pacelabs.com

Subcontract To

ALS -Middletown
301 Fulling Mill Road
Middletown, PA 17057

P.O. 70251418 JSA

State of Sample Origin: NY

Requested Analysis

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved						3140 Perchlorate by IC		
1	N-09809	4/3/2023 09:46	70251418001	Drinking							X1		
2	GAC-09809	4/3/2023 08:20	70251418003	Drinking							X1		
3													
4													
5													

Temp By: DD | WO Temp (°C): 3° | Therm ID: 573

Receipt Info Completed By: DD

Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Headspace Present	Y N NA
Voa Trip Blank	Y N NA
NJ≤ 4 Days?	Y N
Rad Screen (uCi)	—
Courier/Tracking #: 6428 6354 0989	
SDWA Compliance	Y N
PWSID	
WV Containers 0-6°C	Y N NA

LAB USE ONLY

Transfers	Released By	Date/Time	Received By	Date/Time
1	DSM (pace)	4/4/23 1800	FEDEX	
2	FEDEX		DD/ALS	4/5/23 08:53
3				

Please report in ug/L.

Cooler Temperature on Receipt ____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

No G/C
Sampler - client
DD
4/5/23

WO#: 70251418

70251418

Sample Request Form
PUBLIC WATER SUPPLIER

Rel. by: 17:39 4/3/23

Date: 4/3/23

Collected By: R. Mallon

Accepted By: 13:57 4/3/23

Cooler Temp: 3.6 °C

☐ WELL OFF LINE

☑ WELL RUN TO SYSTEM

☐ YES ☐ NO VOC'S PRESERVED WITH HCl

Client Info:

Name or Code: Italo J. Vacchio, Superintendent

Address: Port Washington Water District
P.O. Box 432
38 Sandy Hollow Road
Port Washington, NY 11050

Phone #:

Attn:

Proj. # or (Name):

Bill To:

Copies To:

Sample Types	Purpose	Origin	Treatment Types
PW - Potable Water	RO - Routine	D - Distribution	AST - Air Stripper
GW - Groundwater	RE - Resample	RW - Raw Well	GAC - Granular Activated Charcoal
SW - Surface Water	S - Special	TW - Treated Well	N - Nitrate Removal Plant
WW - Waste Water		T - Tank	FE - Iron Removal Plant
AQ - Aqueous		MW - Monitoring Well	O - Other
S - Soil		I - Influent	
		E - Effluent	

Sample Info:

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl_2	Field Readings pH/Temp	Analysis	Lab No.
4-3-23 0946	GW	Stonytown 10 N-09809	RW	O	RO		6.3/57°	BAC, POC, IOC/NO3, Dioxane 533 w/Field Blank, Perchlorate	001 + 002
4-3-23 0820	GW	Stonytown 10 GAC-09809	TW	GAC	RO		6.3/56°	GAC series, POC, IOC/NO3 Dioxane, 533 w/Field Blank, Perchlorate	003 + 004

Remarks: * Perchlorates are field

COC PAGE ___ of ___

Sample Container Count

WO#: 70251418

PM: JSA **Due Date: 04/14/23**

CLIENT: PWW

Client: PWW

Profile # 5141

Work ID: Bact/FOC/IOC/1,4/PFAS 4/3

Notes

☐ Use Point Number Spreadsheet

☐ Add SCLOGFD to first sample for Field Charge

COC Line Item	Matrix	VG9U	VG9C	VG9H	VG9S	DG9T	DG9Y	DG9P	DG9A	DG6T	DG9S	AG4U	AG3U	AG2U	AG1U	AG34	AG3S	AG4E	AG3T	AG2R	AG1T	AG1H	AG1A	CG1U	BP4U	BP3U	BP2U	BP1U	BP3S	BP2S	BP4N	BP3N	BP2N	BP3C	BP3T	BP3S	BP3R	BP1Z	BP1N	BP1B	SP5T	R	WG2U	WGFU	WGKU	WGDU	ZPLC	GN	WP	IOC	SOC
1			2																	2					1			1				1		1		2					1										
2																																				1														
3			2																	2					1			1				1		1		2					1										
4																																				1														
5																																																			
6																																																			
7																																																			
8																																																			
9																																																			
10																																																			
11																																																			
12																																																			

Container Codes

Glass			
VG9U	40mL unpres clear vial	AG4U	125mL unpres amber glass
VG9C	40mL Ascorbic-HCl clear vial	AG3U	250mL unpres amber glass
VG9H	40mL HCl clear vial	AG2U	500mL unpres amber glass
VG9S	40mL Sulfuric clear vial	AG1U	1liter unpres amber glass
DG9T	40mL Na Thiosulfate vial	AG34	Ammonium Cl 250mL bottle
DG9Y	40mL Citrate-Na Thiosulfate	AG3S	250mL H2SO4 amber glass
DG9P	40mL amber vial - TSP	AG4E	125mL EDA amber glass
DG9A	Ascorbic/Maleic Acid 40mL	AG3T	250mL Na Thio amber glass
DG6T	Na Thio 60mL Vial	AG2R	Na Sulfite 500mL (blue Cap)
DG9S	Ammonium Cl/CuSO4 40mL	AG1T	Na Thiosulfate 1L bottle
CG1U	1L Unpres Jar (Con Ed)	AG1H	1L HCl amber glass
		AG1A	(NH4Cl)
WG9O	8oz clear soil jar		
WG4O	4oz clear soil jar		

Plastic	
BP4U	125mL unpreserved plastic
BP3U	250mL unpreserved plastic
BP2U	500mL unpreserved plastic
BP1U	1L unpreserved plastic
BP4N	125mL HNO3 plastic
BP3N	250mL HNO3 plastic
BP2N	500mL HNO3 plastic
BP3S	250mL H2SO4 plastic
BP2S	500mL H2SO4 plastic
BP3C	NaOH 250mL bottle
BP3T	250mL Trizma
BP3S	250mL Ammonium Acetate
BP3R	250mL NH4SO4-NH4OH
BP1Z	1L NaOH, Zn Acetate
BP1N	1L HNO3 plastic
BP1B	Na Thiosulfate Amber Bottle

Misc.	
SP5T	120mL Coliform Na Thio
R	Terracode Kit
WG2U	2oz Unpreserved Jar
WGFU	4oz Unpreserved Jar
WGKU	8oz Unpreserved Jar
WGDU	16oz Unpreserved Jar
ZPLC	Ziplock Bag
TEDL	Tedlar Bag
BG1H	1L HCL Clear Glass
GN	General
WP	Wipe

IOC	
BP1U	1L unpreserved plastic
BP3N*	250mL HNO3 plastic
BP3C	250mL Sodium Hydroxide
AG2U	500mL unpres amber glass

* Can also be a BP4N

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

SOC		
DG9T	40mL Na Thio amber vial	2
DG9A	40mL Ascorbic acid vials	2
DG9Y	Citrate/Na Thiosulfate 40mL	2
DG6T	Na Thiosulfate 60mL vial	1
AG3U	250mL unpres amber glass	
AG3T	Na Thiosulfate 250mL bottle	
BP1B	Na Thiosulfate Amber bottle	
AG1T	Na Thiosulfate 1L Amber	2
AG1A	(NH4CL)	2

Additional Comments

Sample 2 + 4 are field blanks

Sample ID's should be point number + FB for samples 002 + 004

Pace Analytical®

Client Name: Port Washington

WO#: 70251418

PM: JSA **Due Date: 04/14/23**

CLIENT: PWW

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No Seals intact: ☑ Yes ☐ No ☐ N/A

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☑ None ☐ Other

Type of Ice: ☑ Wet Blue None

Thermometer Used: TH091 Correction Factor: +0.1

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 3.6 Cooler Temperature Corrected(°C): 3.7

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample)

Date and Initials of person examining contents: 4/3/23 EU

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☑ Yes	☐ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for TS)	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☐ Yes	☐ No		12.
-Includes date/time/ID/Matrix: SL WT OIL				
All containers needing preservation have been checked?	☑ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC293085				
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☑ Yes	☐ No	☐ N/A	Sample #
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☐ Yes	☐ No	☑ N/A	14.
KI starch test strips Lot #.				
Residual chlorine strips Lot #				Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide?	☑ Yes	☐ No	☐ N/A	15.
Lead Acetate Strips Lot # 14-802				Positive for Sulfide? Y (N)
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☐ Yes	☑ No	☐ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS

ENV-FRM-MELV-0024 01

con-test®
A Pace Analytical® Laboratory

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

April 17, 2023

Jennifer Aracri
Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747

Project Location: BAC/POC/IOC/1,4/PFAS 4/3
Client Job Number:
Project Number: [none]
Laboratory Work Order Number: 23D0500

Enclosed are results of analyses for samples as received by the laboratory on April 5, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jordan Zoe Ross
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 5

23D0500-01 5

23D0500-02 6

23D0500-03 7

23D0500-04 8

Sample Preparation Information 9

QC Data 10

Semivolatile Organic Compounds by - LC/MS-MS 10

B336537 10

Flag/Qualifier Summary 13

Certifications 14

Chain of Custody/Sample Receipt 15

con-test®
A Pace Analytical® Laboratory

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

Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747
ATTN: Jennifer Aracri

REPORT DATE: 4/17/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23D0500

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: BAC/POC/IOC/1,4/PFAS 4/3

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
N-09809	23D0500-01	Drinking Water		EPA 533	
N-09809 FB	23D0500-02	Field Blank		EPA 533	
GAC-09809	23D0500-03	Drinking Water		EPA 533	
GAC-09809 FB	23D0500-04	Field Blank		EPA 533	

con-test®
A Pace Analytical® Laboratory

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

CASE NARRATIVE SUMMARY

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

EPA 533

Qualifications:

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:

Hexafluoropropylene oxide dimer a
B336537-BSD1

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

M2-4:2FTS
S085987-CCV1, S085987-CCV2, S085987-CCV3

M2-6:2FTS
S085987-CCV3

M9PFNA
S085987-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Meghan E. Kelley
Reporting Specialist

con-test® A Pace Analytical® Laboratory

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

Project Location: BAC/POC/IOC/1,4/PFAS 4/3 Sample Description: Work Order: 23D0500

Date Received: 4/5/2023

Field Sample #: N-09809 Sampled: 4/3/2023 09:46

Sample ID: 23D0500-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.5	1.9	0.67		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluorobutanesulfonic acid (PFBS)	1.1	1.9	0.43		ng/L	1	J	EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluoropentanoic acid (PFPeA)	3.2	1.9	0.55		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluorohexanoic acid (PFHxA)	3.3	1.9	0.56		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
11Cl-PF3OUdS (F53B Major)	ND	1.9	0.66		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
9Cl-PF3ONS (F53B Minor)	ND	1.9	0.73		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.73		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.84		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
8:2 Fluorotelomersulfonic acid (8:2FTSA)	ND	1.9	0.60		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluorodecanoic acid (PFDA)	ND	1.9	0.52		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.47		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.72		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluoroheptanesulfonic acid (PFHpS)	0.67	1.9	0.33		ng/L	1	J	EPA 533	4/7/23	4/11/23 17:21	QNW
4:2 Fluorotelomersulfonic acid (4:2FTSA)	ND	1.9	0.50		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluorohexanesulfonic acid (PFHxS)	3.1	1.9	0.68		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	0.35		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	0.70		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
6:2 Fluorotelomersulfonic acid (6:2FTSA)	ND	1.9	1.4		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluoropetanesulfonic acid (PFPeS)	0.58	1.9	0.54		ng/L	1	J	EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.49		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.76		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluoroheptanoic acid (PFHpA)	2.0	1.9	0.85		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluorooctanoic acid (PFOA)	5.3	1.9	0.72		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluorooctanesulfonic acid (PFOS)	1.5	1.9	0.43		ng/L	1	J	EPA 533	4/7/23	4/11/23 17:21	QNW
Perfluorononanoic acid (PFNA)	ND	1.9	0.51		ng/L	1		EPA 533	4/7/23	4/11/23 17:21	QNW

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	50.9	50-200		4/11/23 17:21
M2-8:2FTS	111	50-200		4/11/23 17:21
MPFBA	91.5	50-200		4/11/23 17:21
M3HFPO-DA	75.5	50-200		4/11/23 17:21
M6PFDA	105	50-200		4/11/23 17:21
M3PFBS	90.8	50-200		4/11/23 17:21
M7PFUnA	79.8	50-200		4/11/23 17:21
M2-6:2FTS	84.8	50-200		4/11/23 17:21
M5PFPeA	85.7	50-200		4/11/23 17:21
M5PFHxA	83.5	50-200		4/11/23 17:21
M3PFHxS	87.2	50-200		4/11/23 17:21
M4PFHpA	78.5	50-200		4/11/23 17:21
M8PFOA	88.8	50-200		4/11/23 17:21
M8PFOS	95.7	50-200		4/11/23 17:21
M9PFNA	101	50-200		4/11/23 17:21
MPFDoA	70.7	50-200		4/11/23 17:21

con-test® A Pace Analytical® Laboratory

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

Project Location: BAC/POC/IOC/1,4/PFAS 4/3 Sample Description: Work Order: 23D0500

Date Received: 4/5/2023

Field Sample #: N-09809 FB Sampled: 4/3/2023 09:46

Sample ID: 23D0500-02

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.9	0.65		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	0.42		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.53		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluorohexanoic acid (PFHxA)	ND	1.9	0.54		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
11Cl-PF3OUdS (F53B Major)	ND	1.9	0.64		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
9Cl-PF3ONS (F53B Minor)	ND	1.9	0.72		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.71		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.81		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
8:2 Fluorotelomersulfonic acid (8:2FTSA)	ND	1.9	0.59		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluorodecanoic acid (PFDA)	ND	1.9	0.50		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.46		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.70		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	0.32		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
4:2 Fluorotelomersulfonic acid (4:2FTSA)	ND	1.9	0.49		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	0.67		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	0.34		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	0.68		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
6:2 Fluorotelomersulfonic acid (6:2FTSA)	ND	1.9	1.4		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluoropetanesulfonic acid (PFPeS)	ND	1.9	0.52		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.48		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.74		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluoroheptanoic acid (PFHpA)	ND	1.9	0.83		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluorooctanoic acid (PFOA)	ND	1.9	0.70		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	0.42		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW
Perfluorononanoic acid (PFNA)	ND	1.9	0.50		ng/L	1		EPA 533	4/7/23	4/11/23 17:28	QNW

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	67.0	50-200		4/11/23 17:28
M2-8:2FTS	189	50-200		4/11/23 17:28
MPFBA	104	50-200		4/11/23 17:28
M3HFPO-DA	98.3	50-200		4/11/23 17:28
M6PFDA	119	50-200		4/11/23 17:28
M3PFBS	101	50-200		4/11/23 17:28
M7PFUnA	90.6	50-200		4/11/23 17:28
M2-6:2FTS	122	50-200		4/11/23 17:28
M5PFPeA	98.1	50-200		4/11/23 17:28
M5PFHxA	101	50-200		4/11/23 17:28
M3PFHxS	93.5	50-200		4/11/23 17:28
M4PFHpA	97.3	50-200		4/11/23 17:28
M8PFOA	108	50-200		4/11/23 17:28
M8PFOS	104	50-200		4/11/23 17:28
M9PFNA	121	50-200		4/11/23 17:28
MPFDoA	80.6	50-200		4/11/23 17:28

con-test® A Pace Analytical® Laboratory

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

Project Location: BAC/POC/IOC/1,4/PFAS 4/3 Sample Description: Work Order: 23D0500

Date Received: 4/5/2023

Field Sample #: GAC-09809 Sampled: 4/3/2023 08:20

Sample ID: 23D0500-03

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.7	1.9	0.65		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluorobutanesulfonic acid (PFBS)	1.2	1.9	0.42		ng/L	1	J	EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluoropentanoic acid (PFPeA)	3.6	1.9	0.53		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluorohexanoic acid (PFHxA)	3.5	1.9	0.54		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
11Cl-PF3OUdS (F53B Major)	ND	1.9	0.64		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
9Cl-PF3ONS (F53B Minor)	ND	1.9	0.71		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.71		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.81		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
8:2 Fluorotelomersulfonic acid (8:2FTSA)	ND	1.9	0.59		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluorodecanoic acid (PFDA)	ND	1.9	0.50		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.46		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.70		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	0.32		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
4:2 Fluorotelomersulfonic acid (4:2FTSA)	ND	1.9	0.49		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluorohexanesulfonic acid (PFHxS)	1.7	1.9	0.66		ng/L	1	J	EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	0.34		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	0.68		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
6:2 Fluorotelomersulfonic acid (6:2FTSA)	ND	1.9	1.4		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluoropetanesulfonic acid (PFPeS)	ND	1.9	0.52		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.48		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.73		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluoroheptanoic acid (PFHpA)	1.7	1.9	0.82		ng/L	1	J	EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluorooctanoic acid (PFOA)	3.4	1.9	0.70		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	0.42		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW
Perfluorononanoic acid (PFNA)	ND	1.9	0.50		ng/L	1		EPA 533	4/7/23	4/11/23 17:35	QNW

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	52.1	50-200		4/11/23 17:35
M2-8:2FTS	149	50-200		4/11/23 17:35
MPFBA	89.9	50-200		4/11/23 17:35
M3HFPO-DA	80.1	50-200		4/11/23 17:35
M6PFDA	116	50-200		4/11/23 17:35
M3PFBS	99.9	50-200		4/11/23 17:35
M7PFUnA	83.1	50-200		4/11/23 17:35
M2-6:2FTS	96.7	50-200		4/11/23 17:35
M5PFPeA	85.4	50-200		4/11/23 17:35
M5PFHxA	88.4	50-200		4/11/23 17:35
M3PFHxS	94.8	50-200		4/11/23 17:35
M4PFHpA	83.5	50-200		4/11/23 17:35
M8PFOA	100	50-200		4/11/23 17:35
M8PFOS	106	50-200		4/11/23 17:35
M9PFNA	114	50-200		4/11/23 17:35
MPFDoA	81.1	50-200		4/11/23 17:35

con-test® A Pace Analytical® Laboratory

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

Project Location: BAC/POC/IOC/1,4/PFAS 4/3 Sample Description: Work Order: 23D0500

Date Received: 4/5/2023

Field Sample #: GAC-09809 FB Sampled: 4/3/2023 08:20

Sample ID: 23D0500-04

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.8	0.63		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	0.41		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluoropentanoic acid (PFPeA)	ND	1.8	0.52		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluorohexanoic acid (PFHxA)	ND	1.8	0.53		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.62		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.70		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.69		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	0.79		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
8:2 Fluorotelomersulfonic acid (8:2FTSA)	ND	1.8	0.57		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluorodecanoic acid (PFDA)	ND	1.8	0.49		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.45		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.68		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8	0.31		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
4:2 Fluorotelomersulfonic acid (4:2FTSA)	ND	1.8	0.48		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	0.65		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8	0.33		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8	0.66		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
6:2 Fluorotelomersulfonic acid (6:2FTSA)	ND	1.8	1.4		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluoropetanesulfonic acid (PFPeS)	ND	1.8	0.51		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.46		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.72		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluoroheptanoic acid (PFHpA)	ND	1.8	0.80		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluorooctanoic acid (PFOA)	ND	1.8	0.68		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluorooctanesulfonic acid (PFOS)	ND	1.8	0.41		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW
Perfluorononanoic acid (PFNA)	ND	1.8	0.48		ng/L	1		EPA 533	4/7/23	4/11/23 17:42	QNW

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	62.9	50-200		4/11/23 17:42
M2-8:2FTS	156	50-200		4/11/23 17:42
MPFBA	100	50-200		4/11/23 17:42
M3HFPO-DA	109	50-200		4/11/23 17:42
M6PFDA	115	50-200		4/11/23 17:42
M3PFBS	93.5	50-200		4/11/23 17:42
M7PFUnA	87.8	50-200		4/11/23 17:42
M2-6:2FTS	97.9	50-200		4/11/23 17:42
M5PFPeA	94.5	50-200		4/11/23 17:42
M5PFHxA	99.3	50-200		4/11/23 17:42
M3PFHxS	87.3	50-200		4/11/23 17:42
M4PFHpA	95.0	50-200		4/11/23 17:42
M8PFOA	104	50-200		4/11/23 17:42
M8PFOS	98.8	50-200		4/11/23 17:42
M9PFNA	122	50-200		4/11/23 17:42
MPFDoA	79.2	50-200		4/11/23 17:42

con-test®
A Pace Analytical® Laboratory

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

Sample Extraction Data

Prep Method: EPA 533-EPA 533

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23D0500-01 [N-09809]	B336537	262	1.00	04/07/23
23D0500-02 [N-09809 FB]	B336537	269	1.00	04/07/23
23D0500-03 [GAC-09809]	B336537	270	1.00	04/07/23
23D0500-04 [GAC-09809 FB]	B336537	277	1.00	04/07/23

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B336537 - EPA 533											
Blank (B336537-BLK1)					Prepared: 04/07/23 Analyzed: 04/11/23						
Perfluorobutanoic acid (PFBA)	ND	1.8	0.63	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	0.41	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	1.8	0.51	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	1.8	0.52	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.62	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.69	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.68	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	0.79	ng/L							
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8	0.57	ng/L							
Perfluorodecanoic acid (PFDA)	ND	1.8	0.48	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.44	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.67	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8	0.31	ng/L							
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8	0.47	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	0.64	ng/L							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8	0.33	ng/L							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8	0.65	ng/L							
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8	1.3	ng/L							
Perfluoropetanesulfonic acid (PFPeS)	ND	1.8	0.50	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.46	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.71	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	1.8	0.79	ng/L							
Perfluorooctanoic acid (PFOA)	ND	1.8	0.68	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	1.8	0.41	ng/L							
Perfluorononanoic acid (PFNA)	ND	1.8	0.48	ng/L							
Surrogate: M2-4:2FTS	*31.6*			ng/L	33.6		94.2	50-200			
Surrogate: M2-8:2FTS	*47.5*			ng/L	34.3		138	50-200			
Surrogate: MPFBA	*44.2*			ng/L	35.8		123	50-200			
Surrogate: M3HFPO-DA	*12400*			ng/L	10000		124	50-200			
Surrogate: M6PFDA	*54.2*			ng/L	35.8		151	50-200			
Surrogate: M3PFBS	*41.0*			ng/L	33.3		123	50-200			
Surrogate: M7PFUnA	*35.1*			ng/L	35.8		98.1	50-200			
Surrogate: M2-6:2FTS	*42.9*			ng/L	34.0		126	50-200			
Surrogate: M5PFPeA	*40.7*			ng/L	35.8		114	50-200			
Surrogate: M5PFHxA	*44.6*			ng/L	35.8		125	50-200			
Surrogate: M3PFHxS	*36.4*			ng/L	33.9		107	50-200			
Surrogate: M4PFHpA	*41.9*			ng/L	35.8		117	50-200			
Surrogate: M8PFOA	*46.6*			ng/L	35.8		130	50-200			
Surrogate: M8PFOS	*45.1*			ng/L	34.3		131	50-200			
Surrogate: M9PFNA	*53.3*			ng/L	35.8		149	50-200			
Surrogate: MPFDoA	*33.1*			ng/L	35.8		92.6	50-200			
LCS (B336537-BS1)					Prepared: 04/07/23 Analyzed: 04/11/23						
Perfluorobutanoic acid (PFBA)	1.48	1.8	0.64	ng/L	1.81		81.4	50-150			J
Perfluorobutanesulfonic acid (PFBS)	1.38	1.8	0.41	ng/L	1.60		86.0	50-150			J
Perfluoropentanoic acid (PFPeA)	1.42	1.8	0.52	ng/L	1.81		78.5	50-150			J
Perfluorohexanoic acid (PFHxA)	1.50	1.8	0.53	ng/L	1.81		82.7	50-150			J
11Cl-PF3OUdS (F53B Major)	1.04	1.8	0.62	ng/L	1.71		60.9	50-150			J

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B336537 - EPA 533											
LCS (B336537-BS1)					Prepared: 04/07/23 Analyzed: 04/11/23						
9Cl-PF3ONS (F53B Minor)	1.18	1.8	0.70	ng/L	1.69		69.9	50-150			J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.24	1.8	0.69	ng/L	1.71		72.7	50-150			J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.19	1.8	0.80	ng/L	1.81		65.8	50-150			J
8:2 Fluorotelomersulfonic acid (8:2FTS A)	1.31	1.8	0.57	ng/L	1.74		75.2	50-150			J
Perfluorodecanoic acid (PFDA)	1.31	1.8	0.49	ng/L	1.81		72.1	50-150			J
Perfluorododecanoic acid (PFDoA)	1.68	1.8	0.45	ng/L	1.81		92.9	50-150			J
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.32	1.8	0.68	ng/L	1.61		81.6	50-150			J
Perfluoroheptanesulfonic acid (PFHpS)	1.39	1.8	0.31	ng/L	1.73		80.0	50-150			J
4:2 Fluorotelomersulfonic acid (4:2FTS A)	1.47	1.8	0.48	ng/L	1.70		86.6	50-150			J
Perfluorohexanesulfonic acid (PFHxS)	1.41	1.8	0.65	ng/L	1.66		85.2	50-150			J
Perfluoro-4-oxapentanoic acid (PFMPA)	1.38	1.8	0.33	ng/L	1.81		76.0	50-150			J
Perfluoro-5-oxahexanoic acid (PFMBA)	1.26	1.8	0.66	ng/L	1.81		69.6	50-150			J
6:2 Fluorotelomersulfonic acid (6:2FTS A)	1.36	1.8	0.0	ng/L	1.72		78.7	50-150			J
Perfluoropetanesulfonic acid (PFPeS)	1.31	1.8	0.51	ng/L	1.70		76.7	50-150			J
Perfluoroundecanoic acid (PFUnA)	1.45	1.8	0.47	ng/L	1.81		80.1	50-150			J
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.73	1.8	0.72	ng/L	1.81		95.3	50-150			J
Perfluoroheptanoic acid (PFHpA)	1.49	1.8	0.81	ng/L	1.81		81.9	50-150			J
Perfluorooctanoic acid (PFOA)	1.33	1.8	0.69	ng/L	1.81		73.4	50-150			J
Perfluorooctanesulfonic acid (PFOS)	1.26	1.8	0.41	ng/L	1.68		75.0	50-150			J
Perfluorononanoic acid (PFNA)	1.31	1.8	0.49	ng/L	1.81		72.5	50-150			J
Surrogate: M2-4:2FTS	*27.4*			ng/L	34.0		80.5	50-200			
Surrogate: M2-8:2FTS	*40.5*			ng/L	34.8		116	50-200			
Surrogate: MPFBA	*40.3*			ng/L	36.3		111	50-200			
Surrogate: M3HFPO-DA	*10300*			ng/L	10000		103	50-200			
Surrogate: M6PFDA	*49.4*			ng/L	36.3		136	50-200			
Surrogate: M3PFBS	*34.7*			ng/L	33.8		103	50-200			
Surrogate: M7PFUnA	*35.8*			ng/L	36.3		98.6	50-200			
Surrogate: M2-6:2FTS	*38.2*			ng/L	34.5		111	50-200			
Surrogate: M5PFPeA	*36.7*			ng/L	36.3		101	50-200			
Surrogate: M5PFHxA	*41.7*			ng/L	36.3		115	50-200			
Surrogate: M3PFHxS	*32.7*			ng/L	34.4		95.2	50-200			
Surrogate: M4PFHpA	*40.6*			ng/L	36.3		112	50-200			
Surrogate: M8PFOA	*45.3*			ng/L	36.3		125	50-200			
Surrogate: M8PFOS	*39.1*			ng/L	34.8		112	50-200			
Surrogate: M9PFNA	*49.7*			ng/L	36.3		137	50-200			
Surrogate: MPFDoA	*31.8*			ng/L	36.3		87.6	50-200			
LCS Dup (B336537-BSD1)					Prepared: 04/07/23 Analyzed: 04/11/23						
Perfluorobutanoic acid (PFBA)	1.86	1.8	0.65	ng/L	1.85		101	50-150	23.1	50	
Perfluorobutanesulfonic acid (PFBS)	1.76	1.8	0.42	ng/L	1.64		108	50-150	24.4	50	J
Perfluoropentanoic acid (PFPeA)	1.76	1.8	0.53	ng/L	1.85		95.3	50-150	21.2	50	J
Perfluorohexanoic acid (PFHxA)	1.92	1.8	0.54	ng/L	1.85		104	50-150	24.6	50	
11Cl-PF3OUdS (F53B Major)	1.25	1.8	0.64	ng/L	1.74		71.6	50-150	18.0	50	J
9Cl-PF3ONS (F53B Minor)	1.67	1.8	0.71	ng/L	1.72		97.2	50-150	34.6	50	J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.45	1.8	0.71	ng/L	1.74		83.4	50-150	15.5	50	J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	2.55	1.8	0.81	ng/L	1.85		138	50-150	**72.5** *	50	R-05
8:2 Fluorotelomersulfonic acid (8:2FTS A)	1.66	1.8	0.59	ng/L	1.77		93.7	50-150	23.8	50	J

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B336537 - EPA 533											
LCS Dup (B336537-BSD1)					Prepared: 04/07/23 Analyzed: 04/11/23						
Perfluorodecanoic acid (PFDA)	2.11	1.8	0.50	ng/L	1.85		114	50-150	46.9	50	
Perfluorododecanoic acid (PFDoA)	1.88	1.8	0.46	ng/L	1.85		102	50-150	11.1	50	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.59	1.8	0.70	ng/L	1.65		96.8	50-150	19.0	50	J
Perfluoroheptanesulfonic acid (PFHpS)	2.06	1.8	0.32	ng/L	1.77		117	50-150	39.0	50	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	1.77	1.8	0.49	ng/L	1.73		102	50-150	18.8	50	J
Perfluorohexanesulfonic acid (PFHxS)	1.68	1.8	0.66	ng/L	1.69		99.2	50-150	17.1	50	J
Perfluoro-4-oxapentanoic acid (PFMPA)	1.72	1.8	0.34	ng/L	1.85		93.1	50-150	22.2	50	J
Perfluoro-5-oxahexanoic acid (PFMBA)	1.56	1.8	0.67	ng/L	1.85		84.6	50-150	21.4	50	J
6:2 Fluorotelomersulfonic acid (6:2FTS A)	1.79	1.8	1.4	ng/L	1.76		102	50-150	27.6	50	J
Perfluoropetanesulfonic acid (PFPeS)	1.46	1.8	0.52	ng/L	1.74		84.2	50-150	11.2	50	J
Perfluoroundecanoic acid (PFUnA)	1.96	1.8	0.47	ng/L	1.85		106	50-150	29.8	50	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.15	1.8	0.73	ng/L	1.85		116	50-150	21.6	50	
Perfluoroheptanoic acid (PFHpA)	1.82	1.8	0.82	ng/L	1.85		98.2	50-150	20.0	50	
Perfluorooctanoic acid (PFOA)	1.84	1.8	0.70	ng/L	1.85		99.3	50-150	32.0	50	
Perfluorooctanesulfonic acid (PFOS)	1.54	1.8	0.42	ng/L	1.71		90.3	50-150	20.4	50	J
Perfluorononanoic acid (PFNA)	1.65	1.8	0.50	ng/L	1.85		89.4	50-150	22.7	50	J
Surrogate: M2-4:2FTS	*23.8*			ng/L	34.7		68.7	50-200			
Surrogate: M2-8:2FTS	*32.2*			ng/L	35.5		90.8	50-200			
Surrogate: MPFBA	*37.8*			ng/L	37.0		102	50-200			
Surrogate: M3HFPO-DA	*9640*			ng/L	10000		96.4	50-200			
Surrogate: M6PFDA	*42.2*			ng/L	37.0		114	50-200			
Surrogate: M3PFBS	*30.6*			ng/L	34.5		88.9	50-200			
Surrogate: M7PFUnA	*31.4*			ng/L	37.0		85.0	50-200			
Surrogate: M2-6:2FTS	*33.3*			ng/L	35.2		94.7	50-200			
Surrogate: M5PFPeA	*34.4*			ng/L	37.0		93.1	50-200			
Surrogate: M5PFHxA	*36.5*			ng/L	37.0		98.8	50-200			
Surrogate: M3PFHxS	*29.7*			ng/L	35.0		84.8	50-200			
Surrogate: M4PFHpA	*36.8*			ng/L	37.0		99.5	50-200			
Surrogate: M8PFOA	*39.8*			ng/L	37.0		108	50-200			
Surrogate: M8PFOS	*34.0*			ng/L	35.5		95.9	50-200			
Surrogate: M9PFNA	*45.3*			ng/L	37.0		122	50-200			
Surrogate: MPFDoA	*30.1*			ng/L	37.0		81.3	50-200			

con-test®
A Pace Analytical® Laboratory

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

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
S-29	Extracted Internal Standard is outside of control limits.

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 533 in Drinking Water	
Perfluorobutanoic acid (PFBA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorobutanesulfonic acid (PFBS)	NH,NY,VT-DW,ME,NJ,PA
Perfluoropentanoic acid (PFPeA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorohexanoic acid (PFHxA)	NH,NY,VT-DW,ME,NJ,PA
11Cl-PF3OUdS (F53B Major)	NH,NY,VT-DW,ME,NJ,PA
9Cl-PF3ONS (F53B Minor)	NH,NY,VT-DW,ME,NJ,PA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH,NY,VT-DW,ME,NJ,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH,NY,VT-DW,ME,NJ,PA
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH,NY,VT-DW,ME,NJ,PA
Perfluorodecanoic acid (PFDA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorododecanoic acid (PFDoA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoroheptanesulfonic acid (PFHpS)	NH,NY,VT-DW,ME,NJ,PA
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH,NY,VT-DW,ME,NJ,PA
Perfluorohexanesulfonic acid (PFHxS)	NH,NY,VT-DW,ME,NJ,PA
Perfluoro-4-oxapentanoic acid (PFMPA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoro-5-oxahexanoic acid (PFMBA)	NH,NY,VT-DW,ME,NJ,PA
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH,NY,VT-DW,ME,NJ,PA
Perfluoropetanesulfonic acid (PFPeS)	NH,NY,VT-DW,ME,NJ,PA
Perfluoroundecanoic acid (PFUnA)	NH,NY,VT-DW,ME,NJ,PA
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoroheptanoic acid (PFHpA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorooctanoic acid (PFOA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorooctanesulfonic acid (PFOS)	NH,NY,VT-DW,ME,NJ,PA
Perfluorononanoic acid (PFNA)	NH,NY,VT-DW,ME,NJ,PA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2023
ME	State of Maine	MA00100	06/9/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023

23D0500 JAR

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: NY
Cert. Needed: [X] Yes ☐ No
Owner Received Date: 4/3/2023 Results Requested By: 4/18/2023

Workorder: 70251418 **Workorder Name:** BACT/POC/IOC/1,4/PFAS 4/3

Report To

Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040

Subcontract To

Pace New England
39 Spruce St.
East Longmeadow, MA 01028
Phone (413)525-2332

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	Requested Analysis: PFAS by 533	LAB USE ONLY
1	N-09809	PS	4/3/2023 09:46	70251418001	Drinking	1	X	
2	N-09809 FB	PS	4/3/2023 09:46	70251418002	Drinking	1	X	
3	GAC-09809	PS	4/3/2023 08:20	70251418003	Drinking	1	X	
4	GAC-09809 FB	PS	4/3/2023 08:20	70251418004	Drinking	1	X	
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature] PACE-LI	4/4/23 18:00	[signature]	4/5/23
2				
3				

Comments

25 Compound List

Cooler Temperature on Receipt 2.9 °C | Custody Seal Y or (N) | Received on Ice (Y) or N | Samples Intact (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*

This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO#: 70251418

70251418

Sample Request Form
PUBLIC WATER SUPPLIER

Rel. by: [signature] 17:39 4/3/23

Date: 4/3/23

Collected By: R. Mallon

Accepted By: [signature] 13:57 4/3/23

Cooler Temp: 3.6 °C

☐ WELL OFF LINE

☑ WELL RUN TO SYSTEM

☐ YES ☐ NO VOC'S PRESERVED WITH HCl

Client Info:

Name or Code: Italo J. Vacchio, Superintendent

Address: Port Washington Water District
P.O. Box 432
38 Sandy Hollow Road
Port Washington, NY 11050

Phone #:

Attn:

Proj. # or (Name):

Bill To:

Copies To:

Sample Types	Purpose	Origin	Treatment Types
PW - Potable Water	RO - Routine	D - Distribution	AST - Air Stripper
GW - Groundwater	RE - Resample	RW - Raw Well	GAC - Granular Activated Charcoal
SW - Surface Water	S - Special	TW - Treated Well	N - Nitrate Removal Plant
WW - Waste Water		T - Tank	FE - Iron Removal Plant
AQ - Aqueous		MW - Monitoring Well	O - Other
S - Soil		I - Influent	
		E - Effluent	

Sample Info:

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl2	Field Readings pH/Temp	Analysis	Lab No.
4-3-23 0946	GW	Stonytown 10 N-09809	RW	O	RO		6.3/57°	BAC, POC, IOC/NO3, Dioxane 533 w/Field Blank, Perchlorate	001+002
4-3-23 0820	GW	Stonytown 10 GAC-09809	TW	GAC	RO		6.3/56°	BAC series, POC, IOC/NO3 Dioxane, 533 w/Field Blank, Perchlorate	003+004

Remarks: * Perchlorates are field

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F:413-525-6405
www.pacelabs.com

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Pace
PEOPLE ADVANCING SCIENCE

Client: Pace - NY
Project: 70251418
MCP/RCP Required: N/A
Deliverable Package Req.: N/A
Location: New York
PWSID# (When Applicable): N/A
Arrival Method:
Courier ☐ Fed Ex ☒ Walk In ☐ Other ☐
Received By / Date / Time: LA 4/5/23 1003
Back-Sheet By / Date / Time: DWW 4/5/23 1625
Temperature Method: GUN # 3
Temp ☒ < 6° C Actual Temperature: 2.4
Rush Samples: Yes / (No) Notify
Short Hold: Yes / (No) Notify

Notes regarding Samples/COC outside of SOP:

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☐	☒
Trip Blanks	☐	☒
Lab to Filters	☐	☒
COC Legible	☒	☐

COC Included: (Check all included)

Client ☒ Analysis ☒ Sampler Name ☒
Project ☒ IDs ☒ Collection Date/Time ☒

All Samples Proper pH: (N/A) ☐ ☐

Container (Circle when applicable)	UnP	HCl	HNO3	H2SO4	NaOH	Trizma	NaS2O3	Other Preservative
1L Amber Plastic								
500 mL Amber Plastic								
250 mL Amber (Plastic)								6 - Ammonium Acetate
Other Amber Clear Plastic								
16oz Amber Clear								
8oz Amber Clear								
4oz Amber Clear								
2oz Amber Clear								
Col/Bacteria								
Flashpoint								
Plastic Bag								
SOC Kit								
Perchlorate								
Encore								
Frozen								

	Proper Headspace	UnP	HCl	MeOH	Bisulfate	DI	Thiosulfate	Sulfuric	Other
Vials									

[redacted]

FedEx® Tracking

DELIVERED

Wednesday

4/5/2023 at 10:03 am

Signed for by: C.HENRIQUEZ

Obtain Proof of delivery

How was your delivery?

DELIVERY STATUS

Delivered

TRACKING ID

642863540923

FROM
MELVILLE, NY US

Label Created
4/4/2023 3:13 PM

PACKAGE RECEIVED BY FEDEX
MELVILLE, NY
4/4/2023 5:47 PM

IN TRANSIT
WINDSOR LOCKS, CT
4/5/2023 7:18 AM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
4/5/2023 7:27 AM

DELIVERED
EAST LONGMEADOW, MA US

Delivered
4/5/2023 at 10:03 AM

View travel history

Want updates on this shipment? Enter your email and we will do the rest!

YOUR EMAIL

SUBMIT

MORE OPTIONS

Manage Delivery

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70253869001
Client Sample ID.: N-07552

Federal ID : 2912267
Collected : 04/24/2023 08:36 AM Point N-07552
Received : 04/24/2023 03:19 PM Location Morely Pk 9
Collected By CLIENT No Hls

Sample Comments:
RUN TO WASTE

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 04/25/2023 11:23

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	**11.1***		5	ug/L	1	04/27/2023 2:31 PM	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	103%		5	%REC		04/27/2023 2:31 PM	001 AG2R1/2

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Date Reported: 05/02/2023

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

WorkOrder :
70253869

Laboratory Certifications

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

con-test®
A Pace Analytical® Laboratory

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

May 2, 2023

Jennifer Aracri
Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747

Project Location: NY
Client Job Number:
Project Number: 70253869
Laboratory Work Order Number: 23D3148

Enclosed are results of analyses for samples as received by the laboratory on April 26, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 5

23D3148-01 5

23D3148-02 6

Sample Preparation Information 7

QC Data 8

Semivolatile Organic Compounds by - LC/MS-MS 8

B338515 8

Flag/Qualifier Summary 11

Certifications 12

Chain of Custody/Sample Receipt 13

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

Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747
ATTN: Jennifer Aracri

REPORT DATE: 5/2/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 70253869

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23D3148

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
N-07552	23D3148-01	Drinking Water		EPA 533	
N-07552 FB	23D3148-02	Field Blank		EPA 533	

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

CASE NARRATIVE SUMMARY

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

EPA 533

Qualifications:

PF-17

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

Analyte & Samples(s) Qualified:

M2-8:2FTS

23D3148-01[N-07552], 23D3148-02[N-07552 FB]

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

M3HFPO-DA

S086714-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test®
A Pace Analytical® Laboratory

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

Project Location: NY | Sample Description: | Work Order: 23D3148

Date Received: 4/26/2023

Field Sample #: N-07552 | Sampled: 4/24/2023 08:36

Sample ID: 23D3148-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	4.3	1.8	0.65		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluorobutanesulfonic acid (PFBS)	1.6	1.8	0.42		ng/L	1	J	EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluoropentanoic acid (PFPeA)	5.5	1.8	0.53		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluorohexanoic acid (PFHxA)	4.3	1.8	0.54		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.64		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.71		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.71		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	0.81		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
8:2 Fluorotelomersulfonic acid (8:2FTSA)	ND	1.8	0.59		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluorodecanoic acid (PFDA)	1.0	1.8	0.50		ng/L	1	J	EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.46		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.70		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluoroheptanesulfonic acid (PFHpS)	0.62	1.8	0.32		ng/L	1	J	EPA 533	4/27/23	4/28/23 20:05	JR2
4:2 Fluorotelomersulfonic acid (4:2FTSA)	ND	1.8	0.49		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluorohexanesulfonic acid (PFHxS)	3.0	1.8	0.66		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8	0.34		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8	0.67		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
6:2 Fluorotelomersulfonic acid (6:2FTSA)	ND	1.8	1.4		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluoropetanesulfonic acid (PFPeS)	ND	1.8	0.52		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluoroundecanoic acid (PFUnA)	0.62	1.8	0.47		ng/L	1	J	EPA 533	4/27/23	4/28/23 20:05	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.73		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluoroheptanoic acid (PFHpA)	3.9	1.8	0.82		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluorooctanoic acid (PFOA)	10	1.8	0.70		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluorooctanesulfonic acid (PFOS)	9.4	1.8	0.42		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2
Perfluorononanoic acid (PFNA)	7.5	1.8	0.50		ng/L	1		EPA 533	4/27/23	4/28/23 20:05	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	59.4		50-200		4/28/23 20:05
M2-8:2FTS	**310**	*	50-200	PF-17	4/28/23 20:05
MPFBA	83.1		50-200		4/28/23 20:05
M3HFPO-DA	81.2		50-200		4/28/23 20:05
M6PFDA	94.5		50-200		4/28/23 20:05
M3PFBS	94.5		50-200		4/28/23 20:05
M7PFUnA	89.7		50-200		4/28/23 20:05
M2-6:2FTS	90.0		50-200		4/28/23 20:05
M5PFPeA	86.3		50-200		4/28/23 20:05
M5PFHxA	84.1		50-200		4/28/23 20:05
M3PFHxS	98.1		50-200		4/28/23 20:05
M4PFHpA	83.4		50-200		4/28/23 20:05
M8PFOA	79.7		50-200		4/28/23 20:05
M8PFOS	94.6		50-200		4/28/23 20:05
M9PFNA	83.0		50-200		4/28/23 20:05
MPFDoA	92.8		50-200		4/28/23 20:05

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

Project Location: NY | Sample Description: | Work Order: 23D3148

Date Received: 4/26/2023

Field Sample #: N-07552 FB | Sampled: 4/24/2023 08:36

Sample ID: 23D3148-02

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	2.0	0.69	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	0.45	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.57	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluorohexanoic acid (PFHxA)	ND	2.0	0.58	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
11Cl-PF3OUdS (F53B Major)	ND	2.0	0.68	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
9Cl-PF3ONS (F53B Minor)	ND	2.0	0.76	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	0.75	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	0.86	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
8:2 Fluorotelomersulfonic acid (8:2FTSA)	ND	2.0	0.62	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluorodecanoic acid (PFDA)	ND	2.0	0.53	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluorododecanoic acid (PFDoA)	ND	2.0	0.49	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.74	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	0.34	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
4:2 Fluorotelomersulfonic acid (4:2FTSA)	ND	2.0	0.52	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	0.71	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	2.0	0.36	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	2.0	0.72	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
6:2 Fluorotelomersulfonic acid (6:2FTSA)	ND	2.0	1.5	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluoropetanesulfonic acid (PFPeS)	ND	2.0	0.55	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluoroundecanoic acid (PFUnA)	ND	2.0	0.51	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.78	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluoroheptanoic acid (PFHpA)	ND	2.0	0.87	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluorooctanoic acid (PFOA)	ND	2.0	0.74	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	0.45	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2
Perfluorononanoic acid (PFNA)	ND	2.0	0.53	ng/L	1		EPA 533	4/27/23	4/28/23 20:13	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	71.4		50-200		4/28/23 20:13
M2-8:2FTS	**399**	*	50-200	PF-17	4/28/23 20:13
MPFBA	93.2		50-200		4/28/23 20:13
M3HFPO-DA	104		50-200		4/28/23 20:13
M6PFDA	97.3		50-200		4/28/23 20:13
M3PFBS	94.2		50-200		4/28/23 20:13
M7PFUnA	91.0		50-200		4/28/23 20:13
M2-6:2FTS	82.9		50-200		4/28/23 20:13
M5PFPeA	94.1		50-200		4/28/23 20:13
M5PFHxA	92.2		50-200		4/28/23 20:13
M3PFHxS	92.2		50-200		4/28/23 20:13
M4PFHpA	90.4		50-200		4/28/23 20:13
M8PFOA	92.5		50-200		4/28/23 20:13
M8PFOS	91.6		50-200		4/28/23 20:13
M9PFNA	87.1		50-200		4/28/23 20:13
MPFDoA	86.8		50-200		4/28/23 20:13

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

Sample Extraction Data

Prep Method: EPA 533-EPA 533

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23D3148-01 [N-07552]	B338515	270	1.00	04/27/23
23D3148-02 [N-07552 FB]	B338515	254	1.00	04/27/23

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B338515 - EPA 533											
Blank (B338515-BLK1)					Prepared: 04/27/23 Analyzed: 04/28/23						
Perfluorobutanoic acid (PFBA)	ND	1.9	0.66	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	0.43	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.54	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	1.9	0.55	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	1.9	0.65	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	1.9	0.72	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.72	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.83	ng/L							
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9	0.60	ng/L							
Perfluorodecanoic acid (PFDA)	ND	1.9	0.51	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.47	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.71	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	0.32	ng/L							
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9	0.49	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	0.67	ng/L							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	0.35	ng/L							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	0.69	ng/L							
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9	1.4	ng/L							
Perfluoropetanesulfonic acid (PFPeS)	ND	1.9	0.53	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.48	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.75	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	1.9	0.84	ng/L							
Perfluorooctanoic acid (PFOA)	ND	1.9	0.71	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	0.43	ng/L							
Perfluorononanoic acid (PFNA)	ND	1.9	0.50	ng/L							
Surrogate: M2-4:2FTS	*28.0*			ng/L	35.3		79.3	50-200			
Surrogate: M2-8:2FTS	*69.3*			ng/L	36.1		192	50-200			
Surrogate: MPFBA	*36.9*			ng/L	37.6		98.1	50-200			
Surrogate: M3HFPO-DA	*39.5*			ng/L	37.6		105	50-200			
Surrogate: M6PFDA	*37.4*			ng/L	37.6		99.5	50-200			
Surrogate: M3PFBS	*34.4*			ng/L	35.0		98.1	50-200			
Surrogate: M7PFUnA	*37.5*			ng/L	37.6		99.6	50-200			
Surrogate: M2-6:2FTS	*36.8*			ng/L	35.8		103	50-200			
Surrogate: M5PFPeA	*36.6*			ng/L	37.6		97.5	50-200			
Surrogate: M5PFHxA	*36.8*			ng/L	37.6		97.8	50-200			
Surrogate: M3PFHxS	*34.1*			ng/L	35.6		95.7	50-200			
Surrogate: M4PFHpA	*35.8*			ng/L	37.6		95.2	50-200			
Surrogate: M8PFOA	*36.3*			ng/L	37.6		96.6	50-200			
Surrogate: M8PFOS	*35.5*			ng/L	36.1		98.3	50-200			
Surrogate: M9PFNA	*36.0*			ng/L	37.6		95.7	50-200			
Surrogate: MPFDoA	*35.4*			ng/L	37.6		94.1	50-200			
LCS (B338515-BS1)					Prepared: 04/27/23 Analyzed: 04/28/23						
Perfluorobutanoic acid (PFBA)	2.05	1.8	0.64	ng/L	1.84		112	50-150			
Perfluorobutanesulfonic acid (PFBS)	1.47	1.8	0.42	ng/L	1.63		90.4	50-150			J
Perfluoropentanoic acid (PFPeA)	1.85	1.8	0.53	ng/L	1.84		101	50-150			
Perfluorohexanoic acid (PFHxA)	1.71	1.8	0.54	ng/L	1.84		93.2	50-150			J
11Cl-PF3OUdS (F53B Major)	1.60	1.8	0.63	ng/L	1.73		92.6	50-150			J

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B338515 - EPA 533											
LCS (B338515-BS1)					Prepared: 04/27/23 Analyzed: 04/28/23						
9Cl-PF3ONS (F53B Minor)	1.76	1.8	0.71	ng/L	1.71		103	50-150			J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.70	1.8	0.70	ng/L	1.73		98.0	50-150			J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.50	1.8	0.81	ng/L	1.84		81.5	50-150			J
8:2 Fluorotelomersulfonic acid (8:2FTS A)	1.64	1.8	0.58	ng/L	1.76		92.8	50-150			J
Perfluorodecanoic acid (PFDA)	1.62	1.8	0.50	ng/L	1.84		88.2	50-150			J
Perfluorododecanoic acid (PFDoA)	1.59	1.8	0.46	ng/L	1.84		86.7	50-150			J
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.57	1.8	0.69	ng/L	1.64		96.3	50-150			J
Perfluoroheptanesulfonic acid (PFHpS)	1.54	1.8	0.32	ng/L	1.75		87.8	50-150			J
4:2 Fluorotelomersulfonic acid (4:2FTS A)	1.47	1.8	0.48	ng/L	1.72		85.7	50-150			J
Perfluorohexanesulfonic acid (PFHxS)	1.40	1.8	0.66	ng/L	1.68		83.1	50-150			J
Perfluoro-4-oxapentanoic acid (PFMPA)	1.82	1.8	0.34	ng/L	1.84		98.8	50-150			
Perfluoro-5-oxahexanoic acid (PFMBA)	1.72	1.8	0.67	ng/L	1.84		93.8	50-150			J
6:2 Fluorotelomersulfonic acid (6:2FTS A)	1.89	1.8	1.4	ng/L	1.75		108	50-150			
Perfluoropetanesulfonic acid (PFPeS)	1.67	1.8	0.52	ng/L	1.73		96.8	50-150			J
Perfluoroundecanoic acid (PFUnA)	1.80	1.8	0.47	ng/L	1.84		98.0	50-150			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.79	1.8	0.73	ng/L	1.84		97.6	50-150			J
Perfluoroheptanoic acid (PFHpA)	1.77	1.8	0.82	ng/L	1.84		96.6	50-150			J
Perfluorooctanoic acid (PFOA)	1.82	1.8	0.70	ng/L	1.84		98.9	50-150			
Perfluorooctanesulfonic acid (PFOS)	1.61	1.8	0.42	ng/L	1.70		94.8	50-150			J
Perfluorononanoic acid (PFNA)	1.57	1.8	0.49	ng/L	1.84		85.4	50-150			J
Surrogate: M2-4:2FTS	*25.4*			ng/L	34.5		73.8	50-200			
Surrogate: M2-8:2FTS	*63.8*			ng/L	35.3		181	50-200			
Surrogate: MPFBA	*34.7*			ng/L	36.7		94.5	50-200			
Surrogate: M3HFPO-DA	*37.2*			ng/L	36.7		101	50-200			
Surrogate: M6PFDA	*36.0*			ng/L	36.7		97.8	50-200			
Surrogate: M3PFBS	*32.3*			ng/L	34.2		94.2	50-200			
Surrogate: M7PFUnA	*32.7*			ng/L	36.7		89.1	50-200			
Surrogate: M2-6:2FTS	*30.4*			ng/L	34.9		87.0	50-200			
Surrogate: M5PFPeA	*34.8*			ng/L	36.7		94.7	50-200			
Surrogate: M5PFHxA	*34.1*			ng/L	36.7		92.7	50-200			
Surrogate: M3PFHxS	*33.3*			ng/L	34.8		95.5	50-200			
Surrogate: M4PFHpA	*34.0*			ng/L	36.7		92.6	50-200			
Surrogate: M8PFOA	*33.2*			ng/L	36.7		90.5	50-200			
Surrogate: M8PFOS	*30.2*			ng/L	35.2		85.6	50-200			
Surrogate: M9PFNA	*33.5*			ng/L	36.7		91.2	50-200			
Surrogate: MPFDoA	*32.4*			ng/L	36.7		88.1	50-200			
LCS Dup (B338515-BSD1)					Prepared: 04/27/23 Analyzed: 04/28/23						
Perfluorobutanoic acid (PFBA)	2.07	1.8	0.63	ng/L	1.81		115	50-150	0.882	50	
Perfluorobutanesulfonic acid (PFBS)	1.51	1.8	0.41	ng/L	1.60		94.6	50-150	3.00	50	J
Perfluoropentanoic acid (PFPeA)	1.84	1.8	0.52	ng/L	1.81		102	50-150	0.436	50	
Perfluorohexanoic acid (PFHxA)	1.81	1.8	0.53	ng/L	1.81		100	50-150	5.49	50	
11Cl-PF3OUdS (F53B Major)	1.48	1.8	0.62	ng/L	1.70		86.6	50-150	8.30	50	J
9Cl-PF3ONS (F53B Minor)	1.52	1.8	0.70	ng/L	1.69		90.4	50-150	14.4	50	J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.74	1.8	0.69	ng/L	1.70		102	50-150	2.86	50	J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.56	1.8	0.79	ng/L	1.81		86.5	50-150	4.32	50	J
8:2 Fluorotelomersulfonic acid (8:2FTS A)	1.38	1.8	0.57	ng/L	1.74		79.4	50-150	17.2	50	J

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B338515 - EPA 533											
LCS Dup (B338515-BSD1)					Prepared: 04/27/23 Analyzed: 04/28/23						
Perfluorodecanoic acid (PFDA)	1.73	1.8	0.49	ng/L	1.81		95.7	50-150	6.63	50	J
Perfluorododecanoic acid (PFDoA)	1.80	1.8	0.45	ng/L	1.81		99.5	50-150	12.1	50	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.60	1.8	0.68	ng/L	1.61		99.4	50-150	1.56	50	J
Perfluoroheptanesulfonic acid (PFHpS)	1.73	1.8	0.31	ng/L	1.73		99.9	50-150	11.3	50	J
4:2 Fluorotelomersulfonic acid (4:2FTS A)	1.57	1.8	0.48	ng/L	1.69		92.9	50-150	6.44	50	J
Perfluorohexanesulfonic acid (PFHxS)	1.52	1.8	0.65	ng/L	1.65		91.8	50-150	8.34	50	J
Perfluoro-4-oxapentanoic acid (PFMPA)	1.80	1.8	0.33	ng/L	1.81		99.4	50-150	1.00	50	
Perfluoro-5-oxahexanoic acid (PFMBA)	1.76	1.8	0.66	ng/L	1.81		97.5	50-150	2.29	50	J
6:2 Fluorotelomersulfonic acid (6:2FTS A)	1.43	1.8	1.4	ng/L	1.72		83.4	50-150	27.2	50	J
Perfluoropetanesulfonic acid (PFPeS)	1.57	1.8	0.51	ng/L	1.70		92.4	50-150	6.30	50	J
Perfluoroundecanoic acid (PFUnA)	1.64	1.8	0.46	ng/L	1.81		90.6	50-150	9.42	50	J
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.73	1.8	0.72	ng/L	1.81		95.8	50-150	3.42	50	J
Perfluoroheptanoic acid (PFHpA)	1.80	1.8	0.80	ng/L	1.81		99.5	50-150	1.40	50	
Perfluorooctanoic acid (PFOA)	1.78	1.8	0.68	ng/L	1.81		98.5	50-150	1.93	50	J
Perfluorooctanesulfonic acid (PFOS)	1.57	1.8	0.41	ng/L	1.67		93.9	50-150	2.54	50	J
Perfluorononanoic acid (PFNA)	1.79	1.8	0.48	ng/L	1.81		98.9	50-150	13.1	50	J
Surrogate: M2-4:2FTS	*24.4*			ng/L	33.9		72.0	50-200			
Surrogate: M2-8:2FTS	*66.4*			ng/L	34.7		191	50-200			
Surrogate: MPFBA	*34.4*			ng/L	36.2		95.0	50-200			
Surrogate: M3HFPO-DA	*42.4*			ng/L	36.2		117	50-200			
Surrogate: M6PFDA	*33.7*			ng/L	36.2		93.2	50-200			
Surrogate: M3PFBS	*31.3*			ng/L	33.7		92.9	50-200			
Surrogate: M7PFUnA	*32.6*			ng/L	36.2		90.1	50-200			
Surrogate: M2-6:2FTS	*30.4*			ng/L	34.4		88.4	50-200			
Surrogate: M5PFPeA	*34.0*			ng/L	36.2		94.0	50-200			
Surrogate: M5PFHxA	*34.9*			ng/L	36.2		96.6	50-200			
Surrogate: M3PFHxS	*31.8*			ng/L	34.3		92.8	50-200			
Surrogate: M4PFHpA	*34.1*			ng/L	36.2		94.3	50-200			
Surrogate: M8PFOA	*33.7*			ng/L	36.2		93.2	50-200			
Surrogate: M8PFOS	*31.0*			ng/L	34.7		89.4	50-200			
Surrogate: M9PFNA	*32.3*			ng/L	36.2		89.3	50-200			
Surrogate: MPFDoA	*33.4*			ng/L	36.2		92.3	50-200			

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

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
PF-17	Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
S-29	Extracted Internal Standard is outside of control limits.

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 533 in Drinking Water	
Perfluorobutanoic acid (PFBA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorobutanesulfonic acid (PFBS)	NH,NY,VT-DW,ME,NJ,PA
Perfluoropentanoic acid (PFPeA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorohexanoic acid (PFHxA)	NH,NY,VT-DW,ME,NJ,PA
11Cl-PF3OUdS (F53B Major)	NH,NY,VT-DW,ME,NJ,PA
9Cl-PF3ONS (F53B Minor)	NH,NY,VT-DW,ME,NJ,PA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH,NY,VT-DW,ME,NJ,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH,NY,VT-DW,ME,NJ,PA
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH,NY,VT-DW,ME,NJ,PA
Perfluorodecanoic acid (PFDA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorododecanoic acid (PFDoA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoroheptanesulfonic acid (PFHpS)	NH,NY,VT-DW,ME,NJ,PA
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH,NY,VT-DW,ME,NJ,PA
Perfluorohexanesulfonic acid (PFHxS)	NH,NY,VT-DW,ME,NJ,PA
Perfluoro-4-oxapentanoic acid (PFMPA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoro-5-oxahexanoic acid (PFMBA)	NH,NY,VT-DW,ME,NJ,PA
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH,NY,VT-DW,ME,NJ,PA
Perfluoropetanesulfonic acid (PFPeS)	NH,NY,VT-DW,ME,NJ,PA
Perfluoroundecanoic acid (PFUnA)	NH,NY,VT-DW,ME,NJ,PA
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoroheptanoic acid (PFHpA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorooctanoic acid (PFOA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorooctanesulfonic acid (PFOS)	NH,NY,VT-DW,ME,NJ,PA
Perfluorononanoic acid (PFNA)	NH,NY,VT-DW,ME,NJ,PA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2023
ME	State of Maine	MA00100	06/9/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023

23D3148

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

Pace Analytical® www.pacelabs.com

State Of Origin: NY
Cert. Needed: [X] Yes ☐ No

Workorder: 70253869 **Workorder Name:** 1,4 DIOXANE/PFAS 4/24 **Owner Received Date:** 4/24/2023 **Results Requested By:** 5/9/2023

Report To

Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040

Subcontract To

Pace New England
39 Spruce St.
East Longmeadow, MA 01028
Phone (413)525-2332

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	PFAS by 533	LAB USE ONLY
1	N-07552	PS	4/24/2023 08:36	70253869001	Drinking	1	X	1
2	N-07552 FB	PS	4/24/2023 08:36	70253869002	Drinking	1	X	2
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature] PaceCT	4/25/23 8a	CA 4/26/23	0958
2				
3				

Comments

25 Compound List

Cooler Temperature on Receipt 2.3 °C | **Custody Seal** Y or (N) | **Received on Ice** (Y) or N | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

KAF

WO#: 70253869

70253869

Sample Request Form
PUBLIC WATER SUPPLIER

Del. by: [signature] 15:19 4/24/23

Date: 4/24/23

Collected By: Andrew P.

Accepted By: [signature] 13:19 4/24/23

Cooler Temp: 3.9 °C

☑ WELL OFF LINE

☐ WELL RUN TO SYSTEM

☐ YES ☐ NO VOC'S PRESERVED WITH HCl

Client Info:

Name or Code: Italo J. Vacchio, Superintendent

Address: Port Washington Water District
P.O. Box 432
38 Sandy Hollow Road
Port Washington, NY 11050

Phone #:

Attn:

Proj. # or (Name):

Bill To:

Copies To:

Sample Types	Purpose	Origin	Treatment Types
PW - Potable Water	RO - Routine	D - Distribution	AST - Air Stripper
GW - Groundwater	RE - Resample	RW - Raw Well	GAC - Granular Activated Charcoal
SW - Surface Water	S - Special	TW - Treated Well	N - Nitrate Removal Plant
WW - Waste Water		T - Tank	FE - Iron Removal Plant
AQ - Aqueous		MW - Monitoring Well	O - Other
S - Soil		I - Influent	
		E - Effluent	

Sample Info:

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl_2	Field Readings pH/Temp	Analysis	Lab No.
4/24/23 8:36	GW	Morley 9 N-07552	RW	O	RO			Dioxane, Method 533 w/ Field Blank	

Remarks:

COC PAGE ____ of ____

Sample Container Count

WO#: 70253869

PM: JSA Due Date: 05/05/23

CLIENT: PWW

Client: PWW Profile # 5171 ☒ Use Point Number Sp

WORK ORDER: 1,4 Dioxane / PFAS Notes

COC Line Item	Matrix	VG9U	VG9C	VG9H	VG9S	DG9T	DG9Y	DG9P	DG9A	DG6T	DG9S	AG4U	AG3U	AG2U	AG1U	AG34	AG3S	AG4E	AG3T	AG2R	AG1T	AG1H	AG1A	CG1U	BP4U	BP3U	BP2U	BP1U	BP3S	BP2S	BP4N	BP3N	BP2N	BP3C	BP3T	BP3S	BP3R	BP1Z	BP1N	BP1B	SP5T	R	WG2U	WGFU	WGKU	WGDU	ZPLC	GN	WP	IOC	SOC	BP2H
1																				1																	1																		
2																																																							
3																																																							
4																																																							
5																																																							
6																																																							
7																																																							
8																																																							
9																																																							
10																																																							
11																																																							
12																																																							

Container Codes

Glass			
VG9U	40mL unpres clear vial	AG4U	125mL unpres amber
VG9C	40mL Ascorbic-HCl	AG3U	250mL unpres amber
VG9H	40mL HCl clear vial	AG2U	500mL unpres amber
VG9S	40mL Sulfuric clear vial	AG1U	1liter unpres amber
DG9T	40mL Na Thiosulfate vial	AG34	Ammonium Cl 250mL
DG9Y	40mL Citrate-Na	AG3S	250mL H2SO4 amber
DG9P	40mL amber vial - TSP	AG4E	125mL EDA amber
DG9A	Ascorbic/Malaic Acid	AG3T	250mL Na Thio amber
DG6T	Na Thio 60mL Vial	AG2R	Na Sulfite 500mL (blue
DG9S	Ammonium Cl/CuSO4	AG1T	Na Thiosulfate 1L bottle
CG1U	1L Unpres Jar (Con Ed)	AG1H	1L HCl amber glass
		AG1A	1L Ammonium Chloride
WG9O	8oz clear soil jar		
WG4O	4oz clear soil jar		

Plastic		Misc.	
BP4U	125mL unpreserved	SP5T	120mL Coliform Na Thio
BP3U	250mL unpreserved	R	Terracore Kit
BP2U	500mL unpreserved	WG2U	2oz Unpreserved Jar
BP1U	1L unpreserved plastic	WGFU	4oz Unpreserved Jar
BP4N	125mL HNO3 plastic	WGKU	8oz Unpreserved Jar
BP3N	250mL HNO3 plastic	WGDU	16oz Unpreserved Jar
BP2N	500mL HNO3 plastic	ZPLC	Ziplock Bag
BP3S	250mL H2SO4 plastic	TEDL	Tedlar Bag
BP2S	500mL H2SO4 plastic	BG1H	1L HCL Clear Glass
BP3C	NaOH 250mL bottle	GN	General
BP3T	250mL Trizma	WP	Wipe
BP3S	250mL Ammonium		
BP3R	250mL NH4SO4-		
BP1Z	1L NaOH, Zn Acetate		
BP1N	1L HNO3 plastic		
BP1B	Na Thiosulfate Amber		

IOC		
BP1U	1L unpreserved plastic	
BP3N*	250mL HNO3 plastic	
BP3C	250mL Sodium	
AG2U	500mL unpres amber	

* Can also be a BP4N

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OiL
WP	Wipe
DW	Drinking Water

SOC		
DG9T	40mL Na Thio amber	2
DG9A	40mL Ascorbic acid	2
DG9Y	Citrate/Na Thiosulfate	2
DG6T	Na Thiosulfate 60mL vial	1
AG3U	250mL unpres amber	
AG3T	Na Thiosulfate 250mL	
BP1B	Na Thiosulfate Amber	
AG1T	Na Thiosulfate 1L	2
AG1A	(NH4CL)	2

Additional Comments

Sample Condition Upon Receipt

Pace Analytical®

Client Name: Port Washington W.D.

Proj

WO#: 70253869

PM: JSA **Due Date: 05/05/23**

CLIENT: PWW

Courier: ☐ Fed-Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No Seals intact: ☑ Yes ☐ No ☐ N/A

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☑ None ☐ Other

Type of Ice: Wet Blue None

Thermometer Used: TH0 TH148 Correction Factor: -0.3

☑ Samples on ice, cooling process has begun

Cooler Temperature(°C): 3.9 Cooler Temperature Corrected(°C): 3.6

Date/Time 5035A kits placed in freezer ✓

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample)

Date and Initials of person examining contents: 4/21/23 EU

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☐ Yes	☑ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Matrix: SL WT OIL	☑ Yes	☐ No		12.
All containers needing preservation have been checked?	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot #				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☐ Yes	☐ No	☑ N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination: KI starch test strips Lot #. Residual chlorine strips Lot #	☐ Yes	☐ No	☑ N/A	14. Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide? Lead Acetate Strips Lot #	☐ Yes	☐ No	☑ N/A	15. Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☑ N/A	16.
Trip Blank Present:	☐ Yes	☐ No	☑ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if applicable):				

Field Data Required? Y / N

Client Notification/ Resolution:

Date/Time:

Person Contacted:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS

ENV-FRM-MELV-0024-01

(https://www.fedex.com/en-us/home.html) Sign Up or Log In

FedEx® Tracking

DELIVERED

Wednesday

4/26/2023 at 9:58 am

Signed for by: L.OUIS

Obtain Proof of delivery

How was your delivery?

DELIVERY STATUS

Delivered

TRACKING ID

642863548670

FROM
MELVILLE, NY US

Label Created
4/25/2023 4:48 PM

PACKAGE RECEIVED BY FEDEX
MELVILLE, NY
4/25/2023 5:58 PM

IN TRANSIT
WINDSOR LOCKS, CT
4/26/2023 7:29 AM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
4/26/2023 7:53 AM

DELIVERED
EAST LONGMEADOW, MA US

Delivered
4/26/2023 at 9:58 AM

View travel history

Want updates on this shipment? Enter your email and we will do the rest!

YOUR EMAIL

SUBMIT

MORE OPTIONS

Manage Delivery

55 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F:413-525-6405
www.pacelabs.com

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Pace
PEOPLE ADVANCING SCIEN

Client Pace - New York
Project 70253869
MCP/RCP Required N/A
Deliverable Package Req. N/A
Location Melville, NY
PWSID# (When Applicable) N/A
Arrival Method:
Courier ☐ Fed Ex ☒ Walk In ☐ Other ☐
Received By / Date / Time LA 4/26/23 0958
Back-Sheet By / Date / Time DWW 4/26/23 1625
Temperature Method GUN # 5
Temp ☒ < 6° C Actual Temperature 2.3°
Rush Samples: Yes / (No) Notify
Short Hold: Yes / (No) Notify

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☐	☒
Trip Blanks	☐	☒
Lab to Filters	☐	☒
COC Legible	☒	☐

COC Included: (Check all included)

Client ☒ Analysis ☒ Sampler Name ☒
Project ☒ IDs ☒ Collection Date/Time ☒

All Samples Proper pH: (N/A) ☐ ☐

Notes regarding Samples/COC outside of SOP:

Container (Circle when applicable)	UnP	HCl	HNO3	H2SO4	NaOH	Trizma	NaS2O3	Other Preservative
1L Amber Plastic								
500 mL Amber Plastic								
250 mL Amber (Plastic)								3-Ammonium Acetate
Other Amber Clear Plastic								
16oz Amber Clear								
8oz Amber Clear								
4oz Amber Clear								
2oz Amber Clear								
Col/Bacteria								
Flashpoint								
Plastic Bag								
SOC Kit								
Perchlorate								
Encore								
Frozen								

	Proper Headspace	UnP	HCl	MeOH	Bisulfate	DI	Thiosulfate	Sulfuric	Other
Vials									

WO#: 70253869

70253869

Sample Request Form
PUBLIC WATER SUPPLIER

Del. by: [signature] 15:19 4/24/23

Date: 4/24/23

Collected By: Andrew P.

Accepted By: [signature] 13:19 4/24/23

Cooler Temp: 3.9 °C

☑ WELL OFF LINE

☐ WELL RUN TO SYSTEM

☐ YES ☐ NO VOC'S PRESERVED WITH HCl

Client Info:

Name or Code: Italo J. Vacchio, Superintendent

Address: Port Washington Water District
P.O. Box 432
38 Sandy Hollow Road
Port Washington, NY 11050

Phone #:

Attn:

Proj. # or (Name):

Bill To:

Copies To:

Sample Types	Purpose	Origin	Treatment Types
PW - Potable Water	RO - Routine	D - Distribution	AST - Air Stripper
GW - Groundwater	RE - Resample	RW - Raw Well	GAC - Granular Activated Charcoal
SW - Surface Water	S - Special	TW - Treated Well	N - Nitrate Removal Plant
WW - Waste Water		T - Tank	FE - Iron Removal Plant
AQ - Aqueous		MW - Monitoring Well	O - Other
S - Soil		I - Influent	
		E - Effluent	

Sample Info:

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl_2	Field Readings pH/Temp	Analysis	Lab No.
4/24/23 8:36	GW	Morley 9 N-07552	RW	O	RO			Dioxane, Method 533 w/ Field Blank	

Remarks:

COC PAGE ___ of ___

Sample Container Count

WO# : 70253869

PM: JSA **Due Date: 05/05/23**

CLIENT: PWW

Client: PWW Profile # 5141 [X] Use Point Number Sp

WORK ORDER: 1,4 Dioxane / PFAS Notes

COC Line Item	Matrix	VG9U	VG9C	VG9H	VG9S	DG9T	DG9Y	DG9P	DG9A	DG6T	DG9S	AG4U	AG3U	AG2U	AG1U	AG34	AG3S	AG4E	AG3T	AG2R	AG1T	AG1H	AG1A	CG1U	BP4U	BP3U	BP2U	BP1U	BP3S	BP2S	BP4N	BP3N	BP2N	BP3C	BP3T	BP35	BP3R	BP1Z	BP1N	BP1B	SP5T	R	WG2U	WGFU	WGKU	WGDU	ZPLC	GN	WP	IOC	SOC	BP2H
1																				2																2																		
2																																				1																		
3																																																						
4																																																						
5																																																						
6																																																						
7																																																						
8																																																						
9																																																						
10																																																						
11																																																						
12																																																						

Container Codes

Glass			
VG9U	40mL unpres clear vial	AG4U	125mL unpres amber
VG9C	40mL Ascorbic-HCl	AG3U	250mL unpres amber
VG9H	40mL HCl clear vial	AG2U	500mL unpres amber
VG9S	40mL Sulfuirc clear vial	AG1U	1liter unpres amber
DG9T	40mL Na Thiosulfate vial	AG34	Ammonium Cl 250mL
DG9Y	40mL Citrate-Na	AG3S	250mL H2SO4 amber
DG9P	40mL amber vial - TSP	AG4E	125mL EDA amber
DG9A	Ascorbic/Maleic Acid	AG3T	250mL Na Thio amber
DG6T	Na Thio 60mL Vial	AG2R	Na Sulfite 500mL (blue
DG9S	Ammonium Cl/CuSO4	AG1T	Na Thiosulfate 1L bottle
CG1U	1L Unpres Jar (Con Ed)	AG1H	1L HCl amber glass
		AG1A	1L Ammonium Chloride
WG9O	8oz clear soil jar		
WG4O	4oz clear soil jar		

Plastic	
BP4U	125mL unpreserved
BP3U	250mL unpreserved
BP2U	500mL unpreserved
BP1U	1L unpreserved plastic
BP4N	125mL HNO3 plastic
BP3N	250mL HNO3 plastic
BP2N	500mL HNO3 plastic
BP3S	250mL H2SO4 plastic
BP2S	500mL H2SO4 plastic
BP3C	NaOH 250mL bottle
BP3T	250mL Trizma
BP35	250mL Ammonium
BP3R	250mL NH4SO4-
BP1Z	1L NaOH, Zn Acetate
BP1N	1L HNO3 plastic
BP1B	Na Thiosulfate Amber

Misc.	
SP5T	120mL Coliform Na Thio
R	Terracore Kit
WG2U	2oz Unpreserved Jar
WGFU	4oz Unpreserved Jar
WGKU	8oz Unpreserved Jar
WGDU	16oz Unpreserved Jar
ZPLC	Ziplock Bag
TEDL	Tedlar Bag
BG1H	1L HCL Clear Glass
GN	General
WP	Wipe

IOC		
BP1U	1L unpreserved plastic	
BP3N*	250mL HNO3 plastic	
BP3C	250mL Sodium	
AG2U	500mL unpres amber	

* Can also be a BP4N

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

SOC		
DG9T	40mL Na Thio amber	2
DG9A	40mL Ascorbic acid	2
DG9Y	Citrate/Na Thiosulfate	2
DG6T	Na Thiosulfate 60mL vial	1
AG3U	250mL unpres amber	
AG3T	Na Thiosulfate 250mL	
BP1B	Na Thiosulfate Amber	
AG1T	Na Thiosulfate 1L	2
AG1A	(NH4CL)	2

Additional Comments

Sample Condition Upon Receipt

Pace Analytical®

Client Name: Port Washington W.D.

Proj

WO#: 70253869

PM: JSA **Due Date: 05/05/23**

CLIENT: PWW

Courier: ☐ Fed-Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No Seals intact: ☑ Yes ☐ No ☐ N/A

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☑ None ☐ Other

Type of Ice: Wet Blue None

Thermometer Used: THO: TH148 Correction Factor: -0.3

☑ Samples on ice, cooling process has begun

Cooler Temperature(°C): 3.9 Cooler Temperature Corrected(°C): 3.6

Date/Time 5035A kits placed in freezer ✓

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample)

Date and Initials of person examining contents: 4/21/23 EU

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☐ Yes	☑ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Matrix: SL WT OIL	☑ Yes	☐ No		12.
All containers needing preservation have been checked?	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot #				
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☐ Yes	☐ No	☑ N/A	Sample #
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☐ Yes	☐ No	☑ N/A	14.
KI starch test strips Lot #.				
Residual chlorine strips Lot #				Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide?	☐ Yes	☐ No	☑ N/A	15.
Lead Acetate Strips Lot #				Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☑ N/A	16.
Trip Blank Present:	☐ Yes	☐ No	☑ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS.

ENV-FRM-MELV-0024-01

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:

Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70253871001
Client Sample ID.: N-13510

Federal ID : 2912267
Collected : 04/24/2023 08:05 AM Point N-13510
Received : 04/24/2023 03:19 PM Location Morley Park 11
Collected By CLIENT

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 04/25/2023 11:23

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.21		1	ug/L	1	04/26/2023 5:06 PM	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	103%		1	%REC		04/26/2023 5:06 PM	001 AG2R1/2

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Date Reported: 05/22/2023

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

WorkOrder :
70253871

Laboratory Certifications

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

con-test®
A Pace Analytical® Laboratory

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

May 22, 2023

Jennifer Aracri
Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747

Project Location: 1,4DIOXANE,PFAS 4/24
Client Job Number:
Project Number: 70253871
Laboratory Work Order Number: 23E1028

Enclosed are results of analyses for samples as received by the laboratory on May 6, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 7

23E1028-01 7

23E1028-02 9

Sample Preparation Information 10

QC Data 11

Semivolatile Organic Compounds by - LC/MS-MS 11

B339720 11

B340685 13

Flag/Qualifier Summary 17

Certifications 18

Chain of Custody/Sample Receipt 19

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

Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747
ATTN: Jennifer Aracri

REPORT DATE: 5/22/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 70253871

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23E1028

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: 1,4DIOXANE,PFAS 4/24

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
N-13510	23E1028-01	Drinking Water		EPA 533	
N-13510 FB	23E1028-02	Field Blank		EPA 533	

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

CASE NARRATIVE SUMMARY

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

Qualifications:

PF-18

Duplicate analysis confirmed Extracted Internal Standard failure due to matrix effects.

Analyte & Samples(s) Qualified:

M2-4:2FTS
23E1028-01[N-13510], 23E1028-01RE1[N-13510]

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

M2-4:2FTS
S087798-CCV2

M2-6:2FTS
23E1028-01RE1[N-13510]

M2-8:2FTS
B340685-BSD1

M3HFPO-DA
23E1028-01RE1[N-13510], B340685-BSD1

M4PFHpA
23E1028-01RE1[N-13510], B340685-BSD1

M5PFHxA
23E1028-01RE1[N-13510], B340685-BSD1

M5PFPeA
23E1028-01RE1[N-13510], B340685-BSD1

M6PFDA
23E1028-01RE1[N-13510], B340685-BSD1

M7PFUnA
23E1028-01RE1[N-13510], B340685-BSD1

M8PFOA
23E1028-01RE1[N-13510], B340685-BSD1

M9PFNA
23E1028-01RE1[N-13510], B340685-BSD1

MPFBA
23E1028-01RE1[N-13510], B340685-BSD1

MPFDoA
23E1028-01RE1[N-13510], B340685-BSD1

Z-01

Detection in field reagent blank >1/3 MRL. Detections in associated field samples should be considered suspect.

Analyte & Samples(s) Qualified:

Perfluorobutanoic acid (PFBA)
23E1028-02[N-13510 FB]

Perfluorononanoic acid (PFNA)
23E1028-02[N-13510 FB]

Perfluorooctanesulfonic acid (PFOS)
23E1028-02[N-13510 FB]

Perfluorooctanoic acid (PFOA)
23E1028-02[N-13510 FB]

Z-01a

Sample re-extract exhbited differing detection levels than original. Labels were confirmed to match. Contamination in the field or in the laboratory possible but unable to be confirmed as batch QC exhbited no signs of contamination. Both results reported

Analyte & Samples(s) Qualified:

23E1028-01RE1[N-13510]

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

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Meghan E. Kelley
Reporting Specialist

con-test®
A Pace Analytical® Laboratory

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

Project Location: 1,4DIOXANE,PFAS 4/24 Sample Description: Work Order: 23E1028

Date Received: 5/6/2023

Field Sample #: N-13510 Sampled: 4/24/2023 08:05

Sample ID: 23E1028-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	140	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluorobutanoic acid (PFBA)	3.1	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluoropentanoic acid (PFPeA)	3.2	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluoropentanoic acid (PFPeA)	3.7	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluorohexanoic acid (PFHxA)	2.8	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluorohexanoic acid (PFHxA)	2.9	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
11Cl-PF3OUdS (F53B Major)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
11Cl-PF3OUdS (F53B Major)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluorohexanesulfonic acid (PFHxS)	3.1	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluorohexanesulfonic acid (PFHxS)	3.1	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluoropetanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluoropetanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW

con-test®
A Pace Analytical® Laboratory

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

Project Location: 1,4DIOXANE,PFAS 4/24 Sample Description: Work Order: 23E1028

Date Received: 5/6/2023

Field Sample #: N-13510 Sampled: 4/24/2023 08:05

Sample ID: 23E1028-01

Sample Matrix: Drinking Water

Sample Flags: Z-01a

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluoroheptanoic acid (PFHpA)	2.3	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluoroheptanoic acid (PFHpA)	2.4	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluorooctanoic acid (PFOA)	6.8	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluorooctanoic acid (PFOA)	6.8	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluorooctanesulfonic acid (PFOS)	5.7	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluorooctanesulfonic acid (PFOS)	5.3	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:40	QNW
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	5/19/23	5/20/23 13:18	DRL

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	**47.1**	*	50-200	PF-18	5/17/23 19:40
M2-4:2FTS	**30.8**	*	50-200	PF-18	5/20/23 13:18
M2-8:2FTS	77.7		50-200		5/17/23 19:40
M2-8:2FTS	61.1		50-200		5/20/23 13:18
MPFBA	59.1		50-200		5/17/23 19:40
MPFBA	**45.4**	*	50-200	S-29	5/20/23 13:18
M3HFPO-DA	58.2		50-200		5/17/23 19:40
M3HFPO-DA	**31.6**	*	50-200	S-29	5/20/23 13:18
M6PFDA	58.1		50-200		5/17/23 19:40
M6PFDA	**31.7**	*	50-200	S-29	5/20/23 13:18
M3PFBS	98.0		50-200		5/17/23 19:40
M3PFBS	55.1		50-200		5/20/23 13:18
M7PFUnA	51.8		50-200		5/17/23 19:40
M7PFUnA	**30.9**	*	50-200	S-29	5/20/23 13:18
M2-6:2FTS	72.4		50-200		5/17/23 19:40
M2-6:2FTS	**43.9**	*	50-200	S-29	5/20/23 13:18
M5PFPeA	62.7		50-200		5/17/23 19:40
M5PFPeA	**39.5**	*	50-200	S-29	5/20/23 13:18
M5PFHxA	53.7		50-200		5/17/23 19:40
M5PFHxA	**35.3**	*	50-200	S-29	5/20/23 13:18
M3PFHxS	99.3		50-200		5/17/23 19:40
M3PFHxS	53.6		50-200		5/20/23 13:18
M4PFHpA	58.0		50-200		5/17/23 19:40
M4PFHpA	**32.6**	*	50-200	S-29	5/20/23 13:18
M8PFOA	59.0		50-200		5/17/23 19:40
M8PFOA	**31.5**	*	50-200	S-29	5/20/23 13:18
M8PFOS	90.4		50-200		5/17/23 19:40
M8PFOS	58.9		50-200		5/20/23 13:18
M9PFNA	56.4		50-200		5/17/23 19:40
M9PFNA	**31.0**	*	50-200	S-29	5/20/23 13:18
MPFDoA	56.1		50-200		5/17/23 19:40
MPFDoA	**32.0**	*	50-200	S-29	5/20/23 13:18

con-test®
A Pace Analytical® Laboratory

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

Project Location: 1,4DIOXANE,PFAS 4/24 Sample Description: Work Order: 23E1028

Date Received: 5/6/2023

Field Sample #: N-13510 FB Sampled: 4/24/2023 08:05

Sample ID: 23E1028-02

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.4	1.9		ng/L	1	Z-01	EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluoropentanoic acid (PFPeA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluorohexanoic acid (PFHxA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
11Cl-PF3OUdS (F53B Major)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluoropetanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluorooctanoic acid (PFOA)	2.4	1.9		ng/L	1	Z-01	EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluorooctanesulfonic acid (PFOS)	ND	1.9		ng/L	1	Z-01	EPA 533	5/10/23	5/17/23 19:48	QNW
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1	Z-01	EPA 533	5/10/23	5/17/23 19:48	QNW

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	65.5	50-200		5/17/23 19:48
M2-8:2FTS	120	50-200		5/17/23 19:48
MPFBA	90.1	50-200		5/17/23 19:48
M3HFPO-DA	97.7	50-200		5/17/23 19:48
M6PFDA	91.7	50-200		5/17/23 19:48
M3PFBS	102	50-200		5/17/23 19:48
M7PFUnA	76.7	50-200		5/17/23 19:48
M2-6:2FTS	89.1	50-200		5/17/23 19:48
M5PFPeA	91.6	50-200		5/17/23 19:48
M5PFHxA	85.9	50-200		5/17/23 19:48
M3PFHxS	102	50-200		5/17/23 19:48
M4PFHpA	85.6	50-200		5/17/23 19:48
M8PFOA	91.1	50-200		5/17/23 19:48
M8PFOS	96.7	50-200		5/17/23 19:48
M9PFNA	86.0	50-200		5/17/23 19:48
MPFDoA	85.8	50-200		5/17/23 19:48

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

Sample Extraction Data

Prep Method:EPA 533 **Analytical Method:EPA 533**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23E1028-01 [N-13510]	B339720	257	1.00	05/10/23
23E1028-02 [N-13510 FB]	B339720	264	1.00	05/10/23

Prep Method:EPA 533 **Analytical Method:EPA 533**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23E1028-01RE1 [N-13510]	B340685	264	1.00	05/19/23

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B339720 - EPA 533										
Blank (B339720-BLK1)				Prepared: 05/10/23 Analyzed: 05/17/23						
Perfluorobutanoic acid (PFBA)	ND	2.0	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L							
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	2.0	ng/L							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	2.0	ng/L							
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	2.0	ng/L							
Perfluoropetanesulfonic acid (PFPeS)	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Surrogate: M2-4:2FTS	*33.7*		ng/L	37.0		91.2	50-200			
Surrogate: M2-8:2FTS	*44.2*		ng/L	37.8		117	50-200			
Surrogate: MPFBA	*32.5*		ng/L	39.4		82.3	50-200			
Surrogate: M3HFPO-DA	*30.1*		ng/L	39.4		76.3	50-200			
Surrogate: M6PFDA	*25.2*		ng/L	39.4		63.8	50-200			
Surrogate: M3PFBS	*37.7*		ng/L	36.7		103	50-200			
Surrogate: M7PFUnA	*24.7*		ng/L	39.4		62.7	50-200			
Surrogate: M2-6:2FTS	*34.0*		ng/L	37.5		90.7	50-200			
Surrogate: M5PFPeA	*32.6*		ng/L	39.4		82.6	50-200			
Surrogate: M5PFHxA	*29.3*		ng/L	39.4		74.4	50-200			
Surrogate: M3PFHxS	*38.5*		ng/L	37.4		103	50-200			
Surrogate: M4PFHpA	*29.7*		ng/L	39.4		75.4	50-200			
Surrogate: M8PFOA	*27.9*		ng/L	39.4		70.7	50-200			
Surrogate: M8PFOS	*37.5*		ng/L	37.8		99.3	50-200			
Surrogate: M9PFNA	*25.6*		ng/L	39.4		64.9	50-200			
Surrogate: MPFDoA	*23.1*		ng/L	39.4		58.7	50-200			
LCS (B339720-BS1)				Prepared: 05/10/23 Analyzed: 05/17/23						
Perfluorobutanoic acid (PFBA)	20.0	2.0	ng/L	19.9		100	70-130			
Perfluorobutanesulfonic acid (PFBS)	18.1	2.0	ng/L	17.7		102	70-130			
Perfluoropentanoic acid (PFPeA)	19.7	2.0	ng/L	19.9		98.8	70-130			
Perfluorohexanoic acid (PFHxA)	20.2	2.0	ng/L	19.9		101	70-130			
11Cl-PF3OUdS (F53B Major)	17.6	2.0	ng/L	18.8		93.9	70-130			
9Cl-PF3ONS (F53B Minor)	18.2	2.0	ng/L	18.6		97.9	70-130			

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B339720 - EPA 533										
LCS (B339720-BS1)				Prepared: 05/10/23 Analyzed: 05/17/23						
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	18.4	2.0	ng/L	18.8		97.7	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	14.9	2.0	ng/L	19.9		74.9	70-130			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	17.2	2.0	ng/L	19.1		89.9	70-130			
Perfluorodecanoic acid (PFDA)	23.2	2.0	ng/L	19.9		116	70-130			
Perfluorododecanoic acid (PFDoA)	18.0	2.0	ng/L	19.9		90.4	70-130			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	18.4	2.0	ng/L	17.8		104	70-130			
Perfluoroheptanesulfonic acid (PFHpS)	19.3	2.0	ng/L	19.0		102	70-130			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	17.8	2.0	ng/L	18.7		95.6	70-130			
Perfluorohexanesulfonic acid (PFHxS)	19.6	2.0	ng/L	18.3		107	70-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	20.2	2.0	ng/L	19.9		101	70-130			
Perfluoro-5-oxahexanoic acid (PFMBA)	21.9	2.0	ng/L	19.9		110	70-130			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	18.8	2.0	ng/L	18.9		99.4	70-130			
Perfluoropetanesulfonic acid (PFPeS)	19.3	2.0	ng/L	18.7		103	70-130			
Perfluoroundecanoic acid (PFUnA)	23.6	2.0	ng/L	19.9		118	70-130			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	17.5	2.0	ng/L	19.9		87.8	70-130			
Perfluoroheptanoic acid (PFHpA)	21.2	2.0	ng/L	19.9		106	70-130			
Perfluorooctanoic acid (PFOA)	20.0	2.0	ng/L	19.9		100	70-130			
Perfluorooctanesulfonic acid (PFOS)	21.1	2.0	ng/L	18.5		114	70-130			
Perfluorononanoic acid (PFNA)	17.0	2.0	ng/L	19.9		85.2	70-130			
Surrogate: M2-4:2FTS	*33.3*		ng/L	37.4		88.9	50-200			
Surrogate: M2-8:2FTS	*42.8*		ng/L	38.3		112	50-200			
Surrogate: MPFBA	*28.1*		ng/L	39.9		70.4	50-200			
Surrogate: M3HFPO-DA	*29.8*		ng/L	39.9		74.8	50-200			
Surrogate: M6PFDA	*28.4*		ng/L	39.9		71.1	50-200			
Surrogate: M3PFBS	*34.5*		ng/L	37.2		92.9	50-200			
Surrogate: M7PFUnA	*24.6*		ng/L	39.9		61.6	50-200			
Surrogate: M2-6:2FTS	*35.6*		ng/L	37.9		93.9	50-200			
Surrogate: M5PFPeA	*29.4*		ng/L	39.9		73.8	50-200			
Surrogate: M5PFHxA	*27.7*		ng/L	39.9		69.5	50-200			
Surrogate: M3PFHxS	*35.5*		ng/L	37.8		93.9	50-200			
Surrogate: M4PFHpA	*27.2*		ng/L	39.9		68.2	50-200			
Surrogate: M8PFOA	*28.4*		ng/L	39.9		71.1	50-200			
Surrogate: M8PFOS	*34.0*		ng/L	38.3		88.8	50-200			
Surrogate: M9PFNA	*26.6*		ng/L	39.9		66.7	50-200			
Surrogate: MPFDoA	*27.5*		ng/L	39.9		69.0	50-200			
LCS Dup (B339720-BSD1)				Prepared: 05/10/23 Analyzed: 05/17/23						
Perfluorobutanoic acid (PFBA)	20.3	1.9	ng/L	19.2		106	70-130	1.47	30	
Perfluorobutanesulfonic acid (PFBS)	18.9	1.9	ng/L	17.0		111	70-130	4.68	30	
Perfluoropentanoic acid (PFPeA)	20.1	1.9	ng/L	19.2		104	70-130	2.00	30	
Perfluorohexanoic acid (PFHxA)	20.5	1.9	ng/L	19.2		106	70-130	1.69	30	
11Cl-PF3OUdS (F53B Major)	20.3	1.9	ng/L	18.1		112	70-130	14.0	30	
9Cl-PF3ONS (F53B Minor)	21.2	1.9	ng/L	17.9		118	70-130	15.0	30	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	19.0	1.9	ng/L	18.1		105	70-130	3.69	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	14.2	1.9	ng/L	19.2		73.9	70-130	4.88	30	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	18.4	1.9	ng/L	18.5		99.6	70-130	6.65	30	
Perfluorodecanoic acid (PFDA)	22.9	1.9	ng/L	19.2		119	70-130	1.56	30	
Perfluorododecanoic acid (PFDoA)	20.5	1.9	ng/L	19.2		106	70-130	12.9	30	

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B339720 - EPA 533										
LCS Dup (B339720-BSD1)				Prepared: 05/10/23 Analyzed: 05/17/23						
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	19.3	1.9	ng/L	17.1		112	70-130	4.53	30	
Perfluoroheptanesulfonic acid (PFHpS)	22.1	1.9	ng/L	18.4		120	70-130	13.5	30	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	20.9	1.9	ng/L	18.0		116	70-130	16.0	30	
Perfluorohexanesulfonic acid (PFHxS)	18.6	1.9	ng/L	17.6		106	70-130	4.97	30	
Perfluoro-4-oxapentanoic acid (PFMPA)	21.1	1.9	ng/L	19.2		110	70-130	4.34	30	
Perfluoro-5-oxahexanoic acid (PFMBA)	22.4	1.9	ng/L	19.2		116	70-130	2.35	30	
6:2 Fluorotelomersulfonic acid (6:2FTS A)	18.1	1.9	ng/L	18.3		99.1	70-130	3.90	30	
Perfluoropetanesulfonic acid (PFPeS)	18.3	1.9	ng/L	18.1		101	70-130	5.29	30	
Perfluoroundecanoic acid (PFUnA)	21.5	1.9	ng/L	19.2		112	70-130	9.39	30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	19.1	1.9	ng/L	19.2		99.3	70-130	8.75	30	
Perfluoroheptanoic acid (PFHpA)	20.6	1.9	ng/L	19.2		107	70-130	2.85	30	
Perfluorooctanoic acid (PFOA)	20.6	1.9	ng/L	19.2		107	70-130	3.00	30	
Perfluorooctanesulfonic acid (PFOS)	21.7	1.9	ng/L	17.8		122	70-130	2.67	30	
Perfluorononanoic acid (PFNA)	15.3	1.9	ng/L	19.2		79.5	70-130	10.5	30	
Surrogate: M2-4:2FTS	*23.1*		ng/L	36.1		64.1	50-200			
Surrogate: M2-8:2FTS	*37.7*		ng/L	37.0		102	50-200			
Surrogate: MPFBA	*32.7*		ng/L	38.5		85.0	50-200			
Surrogate: M3HFPO-DA	*35.9*		ng/L	38.5		93.2	50-200			
Surrogate: M6PFDA	*30.2*		ng/L	38.5		78.5	50-200			
Surrogate: M3PFBS	*30.5*		ng/L	35.9		85.1	50-200			
Surrogate: M7PFUnA	*30.6*		ng/L	38.5		79.6	50-200			
Surrogate: M2-6:2FTS	*30.8*		ng/L	36.6		84.2	50-200			
Surrogate: M5PFPeA	*33.8*		ng/L	38.5		87.7	50-200			
Surrogate: M5PFHxA	*31.0*		ng/L	38.5		80.5	50-200			
Surrogate: M3PFHxS	*32.7*		ng/L	36.5		89.7	50-200			
Surrogate: M4PFHpA	*32.4*		ng/L	38.5		84.2	50-200			
Surrogate: M8PFOA	*30.9*		ng/L	38.5		80.4	50-200			
Surrogate: M8PFOS	*28.0*		ng/L	36.9		75.9	50-200			
Surrogate: M9PFNA	*29.6*		ng/L	38.5		76.8	50-200			
Surrogate: MPFDoA	*28.9*		ng/L	38.5		75.0	50-200			
Batch B340685 - EPA 533										
Blank (B340685-BLK1)				Prepared: 05/19/23 Analyzed: 05/20/23						
Perfluorobutanoic acid (PFBA)	ND	1.9	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	1.9	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	1.9	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	1.9	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	1.9	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	ng/L							
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9	ng/L							
Perfluorodecanoic acid (PFDA)	ND	1.9	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	1.9	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	ng/L							
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	ng/L							

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B340685 - EPA 533										
Blank (B340685-BLK1)				Prepared: 05/19/23 Analyzed: 05/20/23						
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	ng/L							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	ng/L							
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9	ng/L							
Perfluoropetanesulfonic acid (PFPeS)	ND	1.9	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	1.9	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	1.9	ng/L							
Perfluorooctanoic acid (PFOA)	ND	1.9	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	ng/L							
Perfluorononanoic acid (PFNA)	ND	1.9	ng/L							
Surrogate: M2-4:2FTS	*34.6*		ng/L	35.0		99.0	50-200			
Surrogate: M2-8:2FTS	*69.6*		ng/L	35.8		195	50-200			
Surrogate: MPFBA	*36.5*		ng/L	37.3		98.0	50-200			
Surrogate: M3HFPO-DA	*37.8*		ng/L	37.3		101	50-200			
Surrogate: M6PFDA	*41.3*		ng/L	37.3		111	50-200			
Surrogate: M3PFBS	*34.8*		ng/L	34.7		100	50-200			
Surrogate: M7PFUnA	*38.5*		ng/L	37.3		103	50-200			
Surrogate: M2-6:2FTS	*38.5*		ng/L	35.4		109	50-200			
Surrogate: M5PFPeA	*36.0*		ng/L	37.3		96.5	50-200			
Surrogate: M5PFHxA	*34.7*		ng/L	37.3		93.1	50-200			
Surrogate: M3PFHxS	*36.3*		ng/L	35.3		103	50-200			
Surrogate: M4PFHpA	*37.1*		ng/L	37.3		99.6	50-200			
Surrogate: M8PFOA	*38.0*		ng/L	37.3		102	50-200			
Surrogate: M8PFOS	*36.7*		ng/L	35.7		103	50-200			
Surrogate: M9PFNA	*38.7*		ng/L	37.3		104	50-200			
Surrogate: MPFDoA	*37.2*		ng/L	37.3		99.8	50-200			
LCS (B340685-BS1)				Prepared: 05/19/23 Analyzed: 05/20/23						
Perfluorobutanoic acid (PFBA)	10.5	1.9	ng/L	9.35		112	70-130			
Perfluorobutanesulfonic acid (PFBS)	9.04	1.9	ng/L	8.27		109	70-130			
Perfluoropentanoic acid (PFPeA)	10.2	1.9	ng/L	9.35		109	70-130			
Perfluorohexanoic acid (PFHxA)	10.1	1.9	ng/L	9.35		108	70-130			
11Cl-PF3OUdS (F53B Major)	9.53	1.9	ng/L	8.80		108	70-130			
9Cl-PF3ONS (F53B Minor)	10.1	1.9	ng/L	8.71		116	70-130			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	10.7	1.9	ng/L	8.80		122	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.49	1.9	ng/L	9.35		90.9	70-130			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	10.6	1.9	ng/L	8.97		118	70-130			
Perfluorodecanoic acid (PFDA)	10.5	1.9	ng/L	9.35		112	70-130			
Perfluorododecanoic acid (PFDoA)	10.3	1.9	ng/L	9.35		110	70-130			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	9.71	1.9	ng/L	8.32		117	70-130			
Perfluoroheptanesulfonic acid (PFHpS)	9.22	1.9	ng/L	8.92		103	70-130			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	9.11	1.9	ng/L	8.74		104	70-130			
Perfluorohexanesulfonic acid (PFHxS)	9.50	1.9	ng/L	8.55		111	70-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	10.5	1.9	ng/L	9.35		112	70-130			
Perfluoro-5-oxahexanoic acid (PFMBA)	11.1	1.9	ng/L	9.35		119	70-130			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.14	1.9	ng/L	8.88		91.7	70-130			
Perfluoropetanesulfonic acid (PFPeS)	9.14	1.9	ng/L	8.78		104	70-130			
Perfluoroundecanoic acid (PFUnA)	10.4	1.9	ng/L	9.35		112	70-130			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	10.5	1.9	ng/L	9.35		112	70-130			

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B340685 - EPA 533											
LCS (B340685-BS1)				Prepared: 05/19/23 Analyzed: 05/20/23							
Perfluoroheptanoic acid (PFHpA)	10.5	1.9	ng/L	9.35		112		70-130			
Perfluorooctanoic acid (PFOA)	10.4	1.9	ng/L	9.35		111		70-130			
Perfluorooctanesulfonic acid (PFOS)	9.25	1.9	ng/L	8.64		107		70-130			
Perfluorononanoic acid (PFNA)	9.06	1.9	ng/L	9.35		96.9		70-130			
Surrogate: M2-4:2FTS	*35.4*		ng/L	35.1		101		50-200			
Surrogate: M2-8:2FTS	*70.1*		ng/L	35.9		195		50-200			
Surrogate: MPFBA	*37.7*		ng/L	37.4		101		50-200			
Surrogate: M3HFPO-DA	*36.3*		ng/L	37.4		97.0		50-200			
Surrogate: M6PFDA	*40.4*		ng/L	37.4		108		50-200			
Surrogate: M3PFBS	*34.7*		ng/L	34.8		99.6		50-200			
Surrogate: M7PFUnA	*37.6*		ng/L	37.4		100		50-200			
Surrogate: M2-6:2FTS	*36.7*		ng/L	35.6		103		50-200			
Surrogate: M5PFPeA	*36.9*		ng/L	37.4		98.8		50-200			
Surrogate: M5PFHxA	*35.4*		ng/L	37.4		94.6		50-200			
Surrogate: M3PFHxS	*35.2*		ng/L	35.4		99.2		50-200			
Surrogate: M4PFHpA	*35.9*		ng/L	37.4		96.1		50-200			
Surrogate: M8PFOA	*37.5*		ng/L	37.4		100		50-200			
Surrogate: M8PFOS	*35.3*		ng/L	35.8		98.5		50-200			
Surrogate: M9PFNA	*36.7*		ng/L	37.4		98.2		50-200			
Surrogate: MPFDoA	*34.7*		ng/L	37.4		92.8		50-200			
LCS Dup (B340685-BSD1)				Prepared: 05/19/23 Analyzed: 05/20/23							
Perfluorobutanoic acid (PFBA)	9.30	1.8	ng/L	9.22		101		70-130	12.1	30	
Perfluorobutanesulfonic acid (PFBS)	8.27	1.8	ng/L	8.16		101		70-130	8.82	30	
Perfluoropentanoic acid (PFPeA)	9.48	1.8	ng/L	9.22		103		70-130	7.22	30	
Perfluorohexanoic acid (PFHxA)	9.03	1.8	ng/L	9.22		98.0		70-130	11.4	30	
11Cl-PF3OUdS (F53B Major)	8.51	1.8	ng/L	8.68		98.0		70-130	11.3	30	
9Cl-PF3ONS (F53B Minor)	9.27	1.8	ng/L	8.59		108		70-130	8.55	30	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.11	1.8	ng/L	8.68		105		70-130	16.4	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.62	1.8	ng/L	9.22		93.6		70-130	1.49	30	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	9.56	1.8	ng/L	8.85		108		70-130	9.96	30	
Perfluorodecanoic acid (PFDA)	8.98	1.8	ng/L	9.22		97.5		70-130	15.6	30	
Perfluorododecanoic acid (PFDoA)	11.1	1.8	ng/L	9.22		120		70-130	7.23	30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	8.83	1.8	ng/L	8.20		108		70-130	9.53	30	
Perfluoroheptanesulfonic acid (PFHpS)	8.47	1.8	ng/L	8.80		96.3		70-130	8.48	30	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	8.12	1.8	ng/L	8.62		94.3		70-130	11.5	30	
Perfluorohexanesulfonic acid (PFHxS)	8.28	1.8	ng/L	8.43		98.2		70-130	13.7	30	
Perfluoro-4-oxapentanoic acid (PFMPA)	8.55	1.8	ng/L	9.22		92.8		70-130	20.3	30	
Perfluoro-5-oxahexanoic acid (PFMBA)	9.22	1.8	ng/L	9.22		100		70-130	18.6	30	
6:2 Fluorotelomersulfonic acid (6:2FTS A)	7.68	1.8	ng/L	8.76		87.8		70-130	5.81	30	
Perfluoropetanesulfonic acid (PFPeS)	8.34	1.8	ng/L	8.66		96.3		70-130	9.12	30	
Perfluoroundecanoic acid (PFUnA)	11.1	1.8	ng/L	9.22		120		70-130	5.89	30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	9.03	1.8	ng/L	9.22		97.9		70-130	14.8	30	
Perfluoroheptanoic acid (PFHpA)	9.45	1.8	ng/L	9.22		103		70-130	10.1	30	
Perfluorooctanoic acid (PFOA)	9.73	1.8	ng/L	9.22		106		70-130	6.16	30	
Perfluorooctanesulfonic acid (PFOS)	8.72	1.8	ng/L	8.52		102		70-130	6.00	30	
Perfluorononanoic acid (PFNA)	8.87	1.8	ng/L	9.22		96.2		70-130	2.15	30	
Surrogate: M2-4:2FTS	*35.7*		ng/L	34.6		103		50-200			
Surrogate: M2-8:2FTS	*84.9*		ng/L	35.4		**240**	*	50-200			S-29
Surrogate: MPFBA	*12.1*		ng/L	36.9		**32.7**	*	50-200			S-29

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B340685 - EPA 533											
LCS Dup (B340685-BSD1)				Prepared: 05/19/23 Analyzed: 05/20/23							
Surrogate: M3HFPO-DA	*10.8*		ng/L	36.9		**29.2**	*	50-200			S-29
Surrogate: M6PFDA	*8.76*		ng/L	36.9		**23.8**	*	50-200			S-29
Surrogate: M3PFBS	*35.8*		ng/L	34.4		104		50-200			
Surrogate: M7PFUnA	*7.09*		ng/L	36.9		**19.2**	*	50-200			S-29
Surrogate: M2-6:2FTS	*40.8*		ng/L	35.1		116		50-200			
Surrogate: M5PFPeA	*11.7*		ng/L	36.9		**31.6**	*	50-200			S-29
Surrogate: M5PFHxA	*11.1*		ng/L	36.9		**30.2**	*	50-200			S-29
Surrogate: M3PFHxS	*36.4*		ng/L	34.9		104		50-200			
Surrogate: M4PFHpA	*11.1*		ng/L	36.9		**30.1**	*	50-200			S-29
Surrogate: M8PFOA	*10.9*		ng/L	36.9		**29.5**	*	50-200			S-29
Surrogate: M8PFOS	*35.2*		ng/L	35.4		99.6		50-200			
Surrogate: M9PFNA	*8.69*		ng/L	36.9		**23.6**	*	50-200			S-29
Surrogate: MPFDoA	*6.61*		ng/L	36.9		**17.9**	*	50-200			S-29

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

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
PF-18	Duplicate analysis confirmed Extracted Internal Standard failure due to matrix effects.
S-29	Extracted Internal Standard is outside of control limits.
Z-01	Detection in field reagent blank >1/3 MRL. Detections in associated field samples should be considered suspect.
Z-01a	Sample re-extract exhbited differing detection levels than original. Labels were confirmed to match. Contamination in the field or in the laboratory possible but unable to be confirmed as batch QC exhbited no signs of contamination. Both results reported

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 533 in Drinking Water	
Perfluorobutanoic acid (PFBA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorobutanesulfonic acid (PFBS)	NH,NY,VT-DW,ME,NJ,PA
Perfluoropentanoic acid (PFPeA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorohexanoic acid (PFHxA)	NH,NY,VT-DW,ME,NJ,PA
11Cl-PF3OUdS (F53B Major)	NH,NY,VT-DW,ME,NJ,PA
9Cl-PF3ONS (F53B Minor)	NH,NY,VT-DW,ME,NJ,PA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH,NY,VT-DW,ME,NJ,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH,NY,VT-DW,ME,NJ,PA
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH,NY,VT-DW,ME,NJ,PA
Perfluorodecanoic acid (PFDA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorododecanoic acid (PFDoA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoroheptanesulfonic acid (PFHpS)	NH,NY,VT-DW,ME,NJ,PA
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH,NY,VT-DW,ME,NJ,PA
Perfluorohexanesulfonic acid (PFHxS)	NH,NY,VT-DW,ME,NJ,PA
Perfluoro-4-oxapentanoic acid (PFMPA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoro-5-oxahexanoic acid (PFMBA)	NH,NY,VT-DW,ME,NJ,PA
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH,NY,VT-DW,ME,NJ,PA
Perfluoropetanesulfonic acid (PFPeS)	NH,NY,VT-DW,ME,NJ,PA
Perfluoroundecanoic acid (PFUnA)	NH,NY,VT-DW,ME,NJ,PA
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH,NY,VT-DW,ME,NJ,PA
Perfluoroheptanoic acid (PFHpA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorooctanoic acid (PFOA)	NH,NY,VT-DW,ME,NJ,PA
Perfluorooctanesulfonic acid (PFOS)	NH,NY,VT-DW,ME,NJ,PA
Perfluorononanoic acid (PFNA)	NH,NY,VT-DW,ME,NJ,PA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2023
ME	State of Maine	MA00100	06/9/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023

23E1028 MF

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

State Of Origin: NY
Cert. Needed: [X] Yes ☐ No

Pace Analytical®
www.pacelabs.com

Workorder: 70253871 **Workorder Name:** 1,4DIOXANE/PFAS 4/24 **Owner Received Date:** 4/24/2023 **Results Requested By:** 5/9/2023

Report To

Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040

Subcontract To

Pace New England
39 Spruce St.
East Longmeadow, MA 01028
Phone (413)525-2332

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	PFAS by 533	LAB USE ONLY
1	N-13510	PS	4/24/2023 08:05	70253871001	Drinking	1	X	
2	N-13510 FB	PS	4/24/2023 08:05	70253871002	Drinking	1	X	
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	5/5/23 1800	[signature]	5/6/23 1120
2				
3				

Comments

25 Compound List

Cooler Temperature on Receipt 3.1 °C **Custody Seal** Y or (N) **Received on Ice** (Y) or N **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

LS2

FedEx® Tracking

DELIVERED

Saturday

5/6/2023 at 11:30 am

Signed for by: L.ARROYO

Obtain Proof of delivery

DELIVERY STATUS

Delivered

TRACKING ID

647678496521

FROM
MELVILLE, NY US

Label Created
5/5/2023 4:32 PM

PACKAGE RECEIVED BY FEDEX
MELVILLE, NY
5/5/2023 5:47 PM

IN TRANSIT
WINDSOR LOCKS, CT
5/6/2023 8:40 AM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
5/6/2023 8:40 AM

DELIVERED
EAST LONGMEADOW, MA US

Delivered
5/6/2023 at 11:30 AM

View travel history

Want updates on this shipment? Enter your email and we will do the rest!

YOUR EMAIL

SUBMIT

MORE OPTIONS

Manage Delivery

Shipment facts

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F:413-525-6405
www.pacelabs.com

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Pace
PEOPLE ADVANCING SCIENCE

Client: Pace
Project: 1,4 Dioxane / PFA 424
MCP/RCP Required: N/A
Deliverable Package Req.: N/A
Location: 1,4 Dioxane / PFAS 424
PWSID# (When Applicable): N/A
Arrival Method:
Courier ☐ Fed Ex ☑ Walk In ☐ Other ☐
Received By / Date / Time: LA 5/6/23 1130
Back-Sheet By / Date / Time: LA 5/6/23 1333
Temperature Method: Gun #5
Temp ☑ < 6° C Actual Temperature: 3.7
Rush Samples: Yes / (No) Notify
Short Hold: Yes / (No) Notify

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

Notes regarding Samples/COC outside of SOP:

COC Included: (Check all included)

Client ☑ Analysis ☑ Sampler Name ☐
Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: (N/A) ☐ ☐

Container (Circle when applicable)	UnP	HCl	HNO3	H2SO4	NaOH	Trizma	NaS2O3	Other Preservative
1L Amber Plastic								
500 mL Amber Plastic								
250 mL Amber Plastic								3 Ammonium Acetate
Other Amber Clear Plastic								
16oz Amber Clear								
8oz Amber Clear								
4oz Amber Clear								
2oz Amber Clear								
Col/Bacteria								
Flashpoint								
Plastic Bag								
SOC Kit								
Perchlorate								
Encore								
Frozen								

	Proper Headspace	UnP	HCl	MeOH	Bisulfate	DI	Thiosulfate	Sulfuric	Other
Vials									

WO#: 70253871

70253871

Sample Request Form
PUBLIC WATER SUPPLIER

Del. by: [signature] 15:19 4/24/23

Date: 4/24/23

Collected By: Andrew P.

Accepted By: [signature] 13:19 4/24/23

Cooler Temp: 3.9 °C

☐ WELL OFF LINE

☑ WELL RUN TO SYSTEM

☐ YES ☐ NO VOC'S PRESERVED WITH HCl

Client Info:

Name or Code: Italo J. Vacchio, Superintendent

Address: Port Washington Water District
P.O. Box 432
38 Sandy Hollow Road
Port Washington, NY 11050

Phone #:

Attn:

Proj. # or (Name):

Bill To:

Copies To:

Sample Types	Purpose	Origin	Treatment Types
PW - Potable Water	RO - Routine	D - Distribution	AST - Air Stripper
GW - Groundwater	RE - Resample	RW - Raw Well	GAC - Granular Activated Charcoal
SW - Surface Water	S - Special	TW - Treated Well	N - Nitrate Removal Plant
WW - Waste Water		T - Tank	FE - Iron Removal Plant
AQ - Aqueous		MW - Monitoring Well	O - Other
S - Soil		I - Influent	
		E - Effluent	

Sample Info:

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl_2	Field Readings pH/Temp	Analysis	Lab No.
4/24/23 8:05	GW	Morley II N-13510	RW	O	RO			Dioxane, Method 533 w/ Field Blank	

Remarks:

COC PAGE ___ of ___

Sample Container Count

WO#: 70253871

PM: JSA **Due Date: 05/05/23**

CLIENT: PWW

Client: PWW Profile # 5141 [X] Use Point Number Spreadsheet

WORK ORDER: 1,4 Dioxane / PFAS Notes

COC Line Item	Matrix	VG9U	VG9C	VG9H	VG9S	DG9T	DG9Y	DG9P	DG9A	DG6T	DG9S	AG4U	AG3U	AG2U	AG1U	AG34	AG3S	AG4E	AG3T	AG2R	AG1T	AG1H	AG1A	CG1U	BP4U	BP3U	BP2U	BP1U	BP3S	BP2S	BP4N	BP3N	BP2N	BP3C	BP3T	BP35	BP3R	BP1Z	BP1N	BP1B	SP5T	R	WG2U	WGFU	WGKU	WGDU	ZPLC	GN	WP	IOC	SOC	BP2H
1																				2																2																		
2																																				1																		
3																																																						
4																																																						
5																																																						
6																																																						
7																																																						
8																																																						
9																																																						
10																																																						
11																																																						
12																																																						

Container Codes

Glass			
VG9U	40mL unpres clear vial	AG4U	125mL unpres amber
VG9C	40mL Ascorbic-HCl	AG3U	250mL unpres amber
VG9H	40mL HCl clear vial	AG2U	500mL unpres amber
VG9S	40mL Sulfuirc clear vial	AG1U	1liter unpres amber
DG9T	40mL Na Thiosulfate vial	AG34	Ammonium Cl 250mL
DG9Y	40mL Citrate-Na	AG3S	250mL H2SO4 amber
DG9P	40mL amber vial - TSP	AG4E	125mL EDA amber
DG9A	Ascorbic/Maleic Acid	AG3T	250mL Na Thio amber
DG6T	Na Thio 60mL Vial	AG2R	Na Sulfite 500mL (blue
DG9S	Ammonium Cl/CuSO4	AG1T	Na Thiosulfate 1L bottle
CG1U	1L Unpres Jar (Con Ed)	AG1H	1L HCl amber glass
		AG1A	1L Ammonium Chloride
WG9O	8oz clear soil jar		
WG4O	4oz clear soil jar		

Plastic	
BP4U	125mL unpreserved
BP3U	250mL unpreserved
BP2U	500mL unpreserved
BP1U	1L unpreserved plastic
BP4N	125mL HNO3 plastic
BP3N	250mL HNO3 plastic
BP2N	500mL HNO3 plastic
BP3S	250mL H2SO4 plastic
BP2S	500mL H2SO4 plastic
BP3C	NaOH 250mL bottle
BP3T	250mL Trizma
BP35	250mL Ammonium
BP3R	250mL NH4SO4-
BP1Z	1L NaOH, Zn Acetate
BP1N	1L HNO3 plastic
BP1B	Na Thiosulfate Amber

Misc.	
SP5T	120mL Coliform Na Thio
R	Terracore Kit
WG2U	2oz Unpreserved Jar
WGFU	4oz Unpreserved Jar
WGKU	8oz Unpreserved Jar
WGDU	16oz Unpreserved Jar
ZPLC	Ziplock Bag
TEDL	Tedlar Bag
BG1H	1L HCL Clear Glass
GN	General
WP	Wipe

IOC		
BP1U	1L unpreserved plastic	
BP3N*	250mL HNO3 plastic	
BP3C	250mL Sodium	
AG2U	500mL unpres amber	

* Can also be a BP4N

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

SOC		
DG9T	40mL Na Thio amber	2
DG9A	40mL Ascorbic acid	2
DG9Y	Citrate/Na Thiosulfate	2
DG6T	Na Thiosulfate 60mL vial	1
AG3U	250mL unpres amber	
AG3T	Na Thiosulfate 250mL	
BP1B	Na Thiosulfate Amber	
AG1T	Na Thiosultate 1L	2
AG1A	(NH4CL)	2

Additional Comments

Pace Analytical®

Sample Condition Upon Receipt

WO#: 70253871
PM: JSA **Due Date: 05/05/23**
CLIENT: PWW

Client Name: Port Washington W.D.

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No Seals intact: ☑ Yes ☐ No ☐ N/A

Temperature Blank Present: ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☑ None ☐ Other

Type of Ice: ☑ Wet Blue None

Thermometer Used: THO: TH148 Correction Factor: -0.3

☑ Samples on ice, cooling process has begun

Cooler Temperature(°C): 3.9 Cooler Temperature Corrected(°C): 3.6

Date/Time 5035A kits placed in freezer ✓

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample)

Date and Initials of person examining contents: 4/21/23 EU

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☐ Yes	☑ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Matrix: SC WW OIL	☑ Yes	☐ No		12.
All containers needing preservation have been checked?	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot #				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☐ Yes	☐ No	☑ N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination: KI starch test strips Lot #. Residual chlorine strips Lot #	☐ Yes	☐ No	☑ N/A	14. Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide? Lead Acetate Strips Lot #	☐ Yes	☐ No	☑ N/A	15. Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☑ N/A	16.
Trip Blank Present:	☐ Yes	☐ No	☑ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS.

ENV-FRM-MELV-0024-01-[illegible]

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70257180001
Client Sample ID.: N-07552

Federal ID : 2912267
Collected : 05/22/2023 10:05 AM Point N-07552
Received : 05/22/2023 03:30 PM Location Morely Pk 9
Collected By CLIENT No Hls

Analytical Method:EPA 180.1

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Turbidity	<1.0		1	NTU	5	05/22/2023 10:21	001 BP1U1/1

Analytical Method:EPA 200.7

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Ca Hardness as CaCO3 (SM 2340B	26.2		1	mg/L		05/30/2023 4:00 PM	001 BP4N1/1
Calcium	10.5		1	mg/L		05/30/2023 4:00 PM	001 BP4N1/1
Iron	0.022		1	mg/L	0.3	05/30/2023 4:00 PM	001 BP4N1/1
Magnesium	6.6		1	mg/L		05/30/2023 4:00 PM	001 BP4N1/1
Manganese	<0.010		1	mg/L	0.3	05/30/2023 4:00 PM	001 BP4N1/1
Sodium	14.3		1	mg/L		05/30/2023 4:00 PM	001 BP4N1/1
Tot Hardness asCaCO3 (SM 2340B	53.4	N3	1	mg/L		05/30/2023 4:00 PM	001 BP4N1/1
Zinc	<0.020		1	mg/L	5	05/30/2023 4:00 PM	001 BP4N1/1

Analytical Method:EPA 200.8

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Antimony	<0.40		1	ug/L	6	05/24/2023 4:20 PM	001 BP4N1/1
Arsenic	<1.0		1	ug/L	10	05/24/2023 4:20 PM	001 BP4N1/1
Barium	0.018		1	mg/L	2	05/24/2023 4:20 PM	001 BP4N1/1
Beryllium	<0.30		1	ug/L	4	05/24/2023 4:20 PM	001 BP4N1/1
Cadmium	<1.0		1	ug/L	5	05/24/2023 4:20 PM	001 BP4N1/1
Chromium	<0.0070		1	mg/L	0.1	05/24/2023 4:20 PM	001 BP4N1/1
Copper	0.0027		1	mg/L	1.3	05/24/2023 4:20 PM	001 BP4N1/1
Lead	<1.0		1	ug/L	15	05/24/2023 4:20 PM	001 BP4N1/1
Mercury	<0.20		1	ug/L	2	05/24/2023 4:20 PM	001 BP4N1/1
Nickel	0.0011		1	mg/L		05/24/2023 4:20 PM	001 BP4N1/1
Selenium	2.7		1	ug/L	50	05/24/2023 4:20 PM	001 BP4N1/1
Silver	<0.0010		1	mg/L	0.1	05/24/2023 4:20 PM	001 BP4N1/1
Thallium	<0.30		1	ug/L	2	05/24/2023 4:20 PM	001 BP4N1/1

Analytical Method:EPA 300.0

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Chloride	29.0		1	mg/L	250	06/05/2023 10:07	001 BP1U1/1
Fluoride	<0.10		1	mg/L	2.2	06/05/2023 10:07	001 BP1U1/1
Sulfate	19.2		1	mg/L	250	06/05/2023 10:07	001 BP1U1/1

Analytical Method:EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrate as N	3.9		5	mg/L	10	05/22/2023 10:26	001 BP1U1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70257180001
Client Sample ID.: N-07552

Federal ID : 2912267
Collected : 05/22/2023 10:05 AM Point N-07552
Received : 05/22/2023 03:30 PM Location Morely Pk 9
Collected By CLIENT No Hls

Nitrate-Nitrite (as N)	3.9	5	mg/L		05/22/2023 10:26	001 BP1U1/1

Analytical Method: EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrite as N	<0.050		1	mg/L	1	05/22/2023 8:59 PM	001 BP1U1/1

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 05/24/2023 1:13 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	**10.8***		5	ug/L	1	05/26/2023 8:26 PM	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	108%		5	%REC		05/26/2023 8:26 PM	001 AG2R1/2

Analytical Method: EPA 524.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,1,1-Trichloroethane	1.9		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,1,2,2-Tetrachloroethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,1,2-Trichloroethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,1,2-Trichlorotrifluoroethane	<0.50	N3,L1	1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,1-Dichloroethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,1-Dichloroethene	**10.1***		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,1-Dichloropropene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,2,3-Trichlorobenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,2,3-Trichloropropane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,2,4-Trichlorobenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,2,4-Trimethylbenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,2-Dichlorobenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,2-Dichloroethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,2-Dichloropropane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,3,5-Trimethylbenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,3-Dichlorobenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,3-Dichloropropane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
1,4-Dichlorobenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
2,2-Dichloropropane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
2-Chlorotoluene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
4-Chlorotoluene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Benzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Bromobenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Bromochloromethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Bromodichloromethane	<0.50		1	ug/L		05/23/2023 5:36 PM	001 VG9C1/2
Bromoform	<0.50		1	ug/L		05/23/2023 5:36 PM	001 VG9C1/2
Bromomethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Carbon tetrachloride	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70257180001
Client Sample ID.: N-07552

Federal ID : 2912267
Collected : 05/22/2023 10:05 AM Point N-07552
Received : 05/22/2023 03:30 PM Location Morely Pk 9
Collected By CLIENT No Hls

Chlorobenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Chlorodifluoromethane	<0.50	N3	1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Chloroethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Chloroform	1.4		1	ug/L		05/23/2023 5:36 PM	001 VG9C1/2
Chloromethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Dibromochloromethane	<0.50		1	ug/L		05/23/2023 5:36 PM	001 VG9C1/2
Dibromomethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Dichlorodifluoromethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Ethylbenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Hexachloro-1,3-butadiene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Isopropylbenzene (Cumene)	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Methyl-tert-butyl ether	<0.50		1	ug/L	10	05/23/2023 5:36 PM	001 VG9C1/2
Methylene Chloride	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Styrene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Tetrachloroethene	**8.7***		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Toluene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Total Trihalomethanes (Calc.)	1.4		1	ug/L	80	05/23/2023 5:36 PM	001 VG9C1/2
Trichloroethene	**7.0***		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Trichlorofluoromethane	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Vinyl chloride	<0.50		1	ug/L	2	05/23/2023 5:36 PM	001 VG9C1/2
cis-1,2-Dichloroethene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
cis-1,3-Dichloropropene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
m&p-Xylene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
n-Butylbenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
n-Propylbenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
o-Xylene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
p-Isopropyltoluene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
sec-Butylbenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
tert-Butylbenzene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
trans-1,2-Dichloroethene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
trans-1,3-Dichloropropene	<0.50		1	ug/L	5	05/23/2023 5:36 PM	001 VG9C1/2
Surr: 1,2-Dichlorobenzene-d4 (S)	97%		1	%REC		05/23/2023 5:36 PM	001 VG9C1/2
Surr: 4-Bromofluorobenzene (S)	102%		1	%REC		05/23/2023 5:36 PM	001 VG9C1/2

Analytical Method: Field Method

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Field Temperature	15.8	N3	1	deg C		05/22/2023 10:05	001 BP3C1/1
Field pH	6.4	N3	1	Std. Units		05/22/2023 10:05	001 BP3C1/1

Analytical Method: SM22 2120B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Apparent Color	<5.0		1	units		05/23/2023 3:35 PM	001 BP1U1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70257180001
Client Sample ID.: N-07552

Federal ID : 2912267
Collected : 05/22/2023 10:05 AM Point N-07552
Received : 05/22/2023 03:30 PM Location Morely Pk 9
Collected By CLIENT No Hls

pH	6.2		1	Std. Units		05/23/2023 3:35 PM	001 BP1U1/1

Analytical Method: SM22 2150B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Odor @ 60 Degrees C	No odor observed		1		3	05/22/2023 10:15	001 BP1U1/1

Analytical Method: SM22 2320B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Alkalinity, Total as CaCO3	26.5		1	mg/L		05/28/2023 8:10 PM	001 BP1U1/1

Analytical Method: SM22 2330 LSI

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Corrosivity	-2.75		1			06/01/2023 9:32 AM	001 BP1U1/1

Analytical Method: SM22 2540C

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Total Dissolved Solids	134		1	mg/L		05/25/2023 4:54 PM	001 BP1U1/1

Analytical Method: SM22 4500 NH3 H

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrogen, Ammonia	<0.10		1	mg/L		05/24/2023 12:21	001 BP1U1/1

Analytical Method: SM22 5540C Prep Method: SM22 5540C Prep Date: 05/23/2023 2:12 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
LAS Molecular Weight, g/mol	320		1			05/23/2023 2:35 PM	001 AG2U1/1
MBAS, Calculated as LAS	<0.080		1	mg/L		05/23/2023 2:35 PM	001 AG2U1/1

Analytical Method: SM22 9223B Colilert Prep Method: SM22 9223B Colilert Prep Date: 05/22/2023 5:15 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
E.coli	Absent		1		Absent	05/23/2023 11:15	001 SP5T1/1
Total Coliforms	Absent		1		Absent	05/23/2023 11:15	001 SP5T1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

WorkOrder :
70257180

Laboratory Certifications

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

WorkOrder :
70257180

Additional Qualifiers

L1 - Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
N3 - Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

Rel: [illegible] 5-22-23 1530

WO#: 70257180

70257180

Sample Request Form
PUBLIC WATER SUPPLIER

Date: 5/22/23

Collected By: J. Skiba

Accepted By: [illegible] 5-22-23 1205

Cooler Temp: 1.2 °C

☐ WELL OFF LINE _____

☐ WELL RUN TO SYSTEM _____

☐ YES ☐ NO VOC'S PRESERVED WITH HCl

Client Info:

Name or Code: Paul Prignano, Superintendent

Address: Port Washington Water District
38 Sandy Hollow Road
P.O. Box 432
Port Washington, NY 11050

Phone #:

Attn:

Proj. # or (Name):

Bill To:

Copies To:

Sample Types	Purpose	Origin	Treatment Types
PW - Potable Water	RO - Routine	D - Distribution	AST - Air Stripper
GW - Groundwater	RE - Resample	RW - Raw Well	GAC - Granular Activated Charcoal
SW - Surface Water	S - Special	TW - Treated Well	N - Nitrate Removal Plant
WW - Waste Water		T - Tank	FE - Iron Removal Plant
AQ - Aqueous		MW - Monitoring Well	O - Other
S - Soil		I - Influent	
		E - Effluent	

Sample Info:

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl_2	Field Readings pH/Temp	Analysis with field blank	Lab No.
5/22/23 10:25AM	GW	Morley Park 9 N-07552	RW	O	RO		6.4/58.4°F	BAC, POC, PFAS 533, Dioxane DOC/NO3, Perchlorates	001, 002

Remarks: Perchlorates have been field filtered

Pace Analytical®

Client Name: PWW

WO#: 70257180
PM: JSA **Due Date: 06/05/23**
CLIENT: PWW

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No Seals intact: ☑ Yes ☐ No ☐ N/A

Type of Ice: ☑ Wet Blue None

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☑ None ☐ Other

☐ Samples on ice, cooling process has begun

Thermometer Used: THO: TH148 Correction Factor: -3

Date/Time 5035A kits placed in freezer

Cooler Temperature(°C): 1.2 Cooler Temperature Corrected(°C): 0.9

Temp should be above freezing to 6.0°C

Date and Initials of person examining contents: TH 5/22/23 1530

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source (including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☑ Yes	☐ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for M/S)	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample labels match COC: -Includes date/time/ID/Matrix: SL WW OIL	☑ Yes	☐ No		12.
All containers needing preservation have been checked? pH paper Lot # HC293085	☑ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☑ Yes	☐ No	☐ N/A	Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination: KI starch test strips Lot #: Residual chlorine strips Lot #	☐ Yes	☐ No	☑ N/A	14. Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide? Lead Acetate Strips Lot #	☐ Yes	☐ No	☑ N/A	15. Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☐ Yes	☑ No	☐ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if applicable):				

Field Data Required? Y / N

Client Notification/ Resolution: Date/Time:

Person Contacted:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS.

ENV-FRM-MELV-0024-01

con-test®
A Pace Analytical® Laboratory

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

June 7, 2023

Jennifer Aracri
Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747

Project Location: BAC/POC/IOC/PERC/PFAS 5/22
Client Job Number:
Project Number: 70257180
Laboratory Work Order Number: 23E3225

Enclosed are results of analyses for samples as received by the laboratory on May 24, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 6

23E3225-01 6

23E3225-02 7

Sample Preparation Information 8

QC Data 9

Semivolatile Organic Compounds by - LC/MS-MS 9

B341408 9

B341754 11

Flag/Qualifier Summary 15

Certifications 16

Chain of Custody/Sample Receipt 17

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

Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747
ATTN: Jennifer Aracri

REPORT DATE: 6/7/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 70257180

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23E3225

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: BAC/POC/IOC/PERC/PFAS 5/22

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
N-07552	23E3225-01	Drinking Water		EPA 533	
N-07552 FB	23E3225-02	Drinking Water		EPA 533	

con-test® A Pace Analytical® Laboratory

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

CASE NARRATIVE SUMMARY

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

EPA 533

Qualifications:

L-06

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

Analyte & Samples(s) Qualified:

6:2 Fluorotelomersulfonic acid (6:2FTS A)
23E3225-02[N-07552 FB], B341408-BLK1, B341408-BS1, B341408-BSD1

L-07

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

Analyte & Samples(s) Qualified:

Perfluorooctanoic acid (PFOA)
23E3225-01RE1[N-07552], B341754-BS1

L-07A

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

6:2 Fluorotelomersulfonic acid (6:2FTS A)
B341754-BS1

Perfluorooctanesulfonic acid (PFOS)
23E3225-01RE1[N-07552], B341754-BS1

PF-17

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

Analyte & Samples(s) Qualified:

M2-8:2FTS
23E3225-01RE1[N-07552]

PF-17B

Extracted internal standard is outside of control limits. Insufficient sample volume for re-extraction.

Analyte & Samples(s) Qualified:

M2-8:2FTS
23E3225-02[N-07552 FB]

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:

6:2 Fluorotelomersulfonic acid (6:2FTS A)
23E3225-02[N-07552 FB], B341408-BLK1, B341408-BS1, B341408-BSD1, B341754-BSD1

Perfluorooctanesulfonic acid (PFOS)
23E3225-01RE1[N-07552], B341754-BSD1

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

M7PFUnA
B341754-BS1

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

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Meghan E. Kelley
Reporting Specialist

con-test® A Pace Analytical® Laboratory

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

Project Location: BAC/POC/IOC/PERC/PFAS 5/22 Sample Description: Work Order: 23E3225

Date Received: 5/24/2023

Field Sample #: N-07552 Sampled: 5/22/2023 10:05

Sample ID: 23E3225-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluoropentanoic acid (PFPeA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluorohexanoic acid (PFHxA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
11Cl-PF3OUdS (F53B Major)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
9Cl-PF3ONS (F53B Minor)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluorodecanoic acid (PFDA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluorododecanoic acid (PFDoA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluorohexanesulfonic acid (PFHxS)	4.2	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluoropentanesulfonic acid (PFPeS)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluoroundecanoic acid (PFUnA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluoroheptanoic acid (PFHpA)	ND	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluorooctanoic acid (PFOA)	5.1	2.1		ng/L	1	L-07	EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluorooctanesulfonic acid (PFOS)	7.4	2.1		ng/L	1	L-07A, R-05	EPA 533	6/1/23	6/2/23 12:27	QNW
Perfluorononanoic acid (PFNA)	15	2.1		ng/L	1		EPA 533	6/1/23	6/2/23 12:27	QNW

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	62.5		50-200		6/2/23 12:27
M2-8:2FTS	**274**	*	50-200	PF-17	6/2/23 12:27
MPFBA	79.9		50-200		6/2/23 12:27
M3HFPO-DA	68.4		50-200		6/2/23 12:27
M6PFDA	69.0		50-200		6/2/23 12:27
M3PFBS	88.6		50-200		6/2/23 12:27
M7PFUnA	61.6		50-200		6/2/23 12:27
M2-6:2FTS	91.7		50-200		6/2/23 12:27
M5PFPeA	71.7		50-200		6/2/23 12:27
M5PFHxA	65.1		50-200		6/2/23 12:27
M3PFHxS	85.6		50-200		6/2/23 12:27
M4PFHpA	64.0		50-200		6/2/23 12:27
M8PFOA	64.4		50-200		6/2/23 12:27
M8PFOS	91.8		50-200		6/2/23 12:27
M9PFNA	66.3		50-200		6/2/23 12:27
MPFDoA	63.7		50-200		6/2/23 12:27

con-test® A Pace Analytical® Laboratory

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

Project Location: BAC/POC/IOC/PERC/PFAS 5/22 Sample Description: Work Order: 23E3225

Date Received: 5/24/2023

Field Sample #: N-07552 FB Sampled: 5/22/2023 10:05

Sample ID: 23E3225-02

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluoropentanoic acid (PFPeA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	160	1.8		ng/L	1	L-06, R-05	EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	5/25/23	5/30/23 15:13	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	86.0		50-200		5/30/23 15:13
M2-8:2FTS	**291**	*	50-200	PF-17B	5/30/23 15:13
MPFBA	94.6		50-200		5/30/23 15:13
M3HFPO-DA	94.5		50-200		5/30/23 15:13
M6PFDA	91.4		50-200		5/30/23 15:13
M3PFBS	98.8		50-200		5/30/23 15:13
M7PFUnA	83.7		50-200		5/30/23 15:13
M2-6:2FTS	137		50-200		5/30/23 15:13
M5PFPeA	90.4		50-200		5/30/23 15:13
M5PFHxA	82.1		50-200		5/30/23 15:13
M3PFHxS	95.1		50-200		5/30/23 15:13
M4PFHpA	82.7		50-200		5/30/23 15:13
M8PFOA	91.6		50-200		5/30/23 15:13
M8PFOS	90.6		50-200		5/30/23 15:13
M9PFNA	88.6		50-200		5/30/23 15:13
MPFDoA	81.1		50-200		5/30/23 15:13

con-test® A Pace Analytical® Laboratory

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

Sample Extraction Data

Prep Method:EPA 533 **Analytical Method:EPA 533**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23E3225-02 [N-07552 FB]	B341408	284	1.00	05/25/23

Prep Method:EPA 533 **Analytical Method:EPA 533**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23E3225-01RE1 [N-07552]	B341754	240	1.00	06/01/23

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B341408 - EPA 533										
Blank (B341408-BLK1)				Prepared: 05/25/23 Analyzed: 05/30/23						
Perfluorobutanoic acid (PFBA)	ND	1.9	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	1.9	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	1.9	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	1.9	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	1.9	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	ng/L							
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9	ng/L							
Perfluorodecanoic acid (PFDA)	ND	1.9	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	1.9	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	ng/L							
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	ng/L							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	ng/L							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	ng/L							
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9	ng/L							L-06, R-05
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	1.9	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	1.9	ng/L							
Perfluorooctanoic acid (PFOA)	ND	1.9	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	ng/L							
Perfluorononanoic acid (PFNA)	ND	1.9	ng/L							
Surrogate: M2-4:2FTS	*30.4*		ng/L	36.6		83.1	50-200			
Surrogate: M2-8:2FTS	*66.9*		ng/L	37.4		179	50-200			
Surrogate: MPFBA	*35.3*		ng/L	39.0		90.5	50-200			
Surrogate: M3HFPO-DA	*36.7*		ng/L	39.0		94.1	50-200			
Surrogate: M6PFDA	*32.8*		ng/L	39.0		84.0	50-200			
Surrogate: M3PFBS	*35.2*		ng/L	36.3		97.0	50-200			
Surrogate: M7PFUnA	*30.6*		ng/L	39.0		78.5	50-200			
Surrogate: M2-6:2FTS	*39.8*		ng/L	37.1		107	50-200			
Surrogate: M5PFPeA	*34.1*		ng/L	39.0		87.5	50-200			
Surrogate: M5PFHxA	*32.0*		ng/L	39.0		82.1	50-200			
Surrogate: M3PFHxS	*33.4*		ng/L	37.0		90.3	50-200			
Surrogate: M4PFHpA	*32.7*		ng/L	39.0		83.8	50-200			
Surrogate: M8PFOA	*34.3*		ng/L	39.0		87.8	50-200			
Surrogate: M8PFOS	*31.9*		ng/L	37.4		85.3	50-200			
Surrogate: M9PFNA	*33.4*		ng/L	39.0		85.6	50-200			
Surrogate: MPFDoA	*29.1*		ng/L	39.0		74.5	50-200			
LCS (B341408-BS1)				Prepared: 05/25/23 Analyzed: 05/30/23						
Perfluorobutanoic acid (PFBA)	20.5	1.9	ng/L	19.0		108	70-130			
Perfluorobutanesulfonic acid (PFBS)	17.2	1.9	ng/L	16.8		102	70-130			
Perfluoropentanoic acid (PFPeA)	20.2	1.9	ng/L	19.0		107	70-130			
Perfluorohexanoic acid (PFHxA)	20.3	1.9	ng/L	19.0		107	70-130			
11Cl-PF3OUdS (F53B Major)	18.1	1.9	ng/L	17.9		101	70-130			
9Cl-PF3ONS (F53B Minor)	20.1	1.9	ng/L	17.7		114	70-130			

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B341408 - EPA 533											
LCS (B341408-BS1)				Prepared: 05/25/23 Analyzed: 05/30/23							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	19.2	1.9	ng/L	17.9		108		70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	15.8	1.9	ng/L	19.0		83.4		70-130			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	19.1	1.9	ng/L	18.2		105		70-130			
Perfluorodecanoic acid (PFDA)	18.5	1.9	ng/L	19.0		97.5		70-130			
Perfluorododecanoic acid (PFDoA)	20.4	1.9	ng/L	19.0		108		70-130			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	17.5	1.9	ng/L	16.9		104		70-130			
Perfluoroheptanesulfonic acid (PFHpS)	18.1	1.9	ng/L	18.1		99.8		70-130			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	17.4	1.9	ng/L	17.7		97.9		70-130			
Perfluorohexanesulfonic acid (PFHxS)	17.5	1.9	ng/L	17.4		101		70-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	18.9	1.9	ng/L	19.0		99.6		70-130			
Perfluoro-5-oxahexanoic acid (PFMBA)	19.5	1.9	ng/L	19.0		103		70-130			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	25.6	1.9	ng/L	18.0		**142**	*	70-130			L-06, R-05
Perfluoropentanesulfonic acid (PFPeS)	18.0	1.9	ng/L	17.8		101		70-130			
Perfluoroundecanoic acid (PFUnA)	20.0	1.9	ng/L	19.0		106		70-130			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	20.1	1.9	ng/L	19.0		106		70-130			
Perfluoroheptanoic acid (PFHpA)	20.1	1.9	ng/L	19.0		106		70-130			
Perfluorooctanoic acid (PFOA)	20.6	1.9	ng/L	19.0		108		70-130			
Perfluorooctanesulfonic acid (PFOS)	18.6	1.9	ng/L	17.5		106		70-130			
Perfluorononanoic acid (PFNA)	18.1	1.9	ng/L	19.0		95.7		70-130			
Surrogate: M2-4:2FTS	*32.9*		ng/L	35.6		92.6		50-200			
Surrogate: M2-8:2FTS	*62.8*		ng/L	36.4		172		50-200			
Surrogate: MPFBA	*36.6*		ng/L	37.9		96.5		50-200			
Surrogate: M3HFPO-DA	*38.8*		ng/L	37.9		102		50-200			
Surrogate: M6PFDA	*35.0*		ng/L	37.9		92.3		50-200			
Surrogate: M3PFBS	*37.1*		ng/L	35.4		105		50-200			
Surrogate: M7PFUnA	*32.2*		ng/L	37.9		84.9		50-200			
Surrogate: M2-6:2FTS	*41.2*		ng/L	36.1		114		50-200			
Surrogate: M5PFPeA	*35.6*		ng/L	37.9		93.9		50-200			
Surrogate: M5PFHxA	*33.7*		ng/L	37.9		88.8		50-200			
Surrogate: M3PFHxS	*36.4*		ng/L	36.0		101		50-200			
Surrogate: M4PFHpA	*34.2*		ng/L	37.9		90.1		50-200			
Surrogate: M8PFOA	*35.1*		ng/L	37.9		92.6		50-200			
Surrogate: M8PFOS	*33.6*		ng/L	36.4		92.3		50-200			
Surrogate: M9PFNA	*34.7*		ng/L	37.9		91.4		50-200			
Surrogate: MPFDoA	*30.5*		ng/L	37.9		80.3		50-200			
LCS Dup (B341408-BSD1)				Prepared: 05/25/23 Analyzed: 05/30/23							
Perfluorobutanoic acid (PFBA)	19.5	1.9	ng/L	18.6		104		70-130	5.16	30	
Perfluorobutanesulfonic acid (PFBS)	16.6	1.9	ng/L	16.5		100		70-130	3.50	30	
Perfluoropentanoic acid (PFPeA)	19.1	1.9	ng/L	18.6		103		70-130	5.58	30	
Perfluorohexanoic acid (PFHxA)	19.2	1.9	ng/L	18.6		103		70-130	5.54	30	
11Cl-PF3OUdS (F53B Major)	20.2	1.9	ng/L	17.6		115		70-130	11.1	30	
9Cl-PF3ONS (F53B Minor)	20.4	1.9	ng/L	17.4		117		70-130	1.44	30	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	18.3	1.9	ng/L	17.6		104		70-130	5.21	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	15.0	1.9	ng/L	18.6		80.3		70-130	5.54	30	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	18.1	1.9	ng/L	17.9		101		70-130	5.47	30	
Perfluorodecanoic acid (PFDA)	18.8	1.9	ng/L	18.6		101		70-130	1.89	30	
Perfluorododecanoic acid (PFDoA)	19.7	1.9	ng/L	18.6		106		70-130	3.77	30	

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B341408 - EPA 533												
LCS Dup (B341408-BSD1)				Prepared: 05/25/23 Analyzed: 05/30/23								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	16.7	1.9	ng/L	16.6		100		70-130	5.14		30	
Perfluoroheptanesulfonic acid (PFHpS)	19.5	1.9	ng/L	17.8		110		70-130	7.73		30	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	16.1	1.9	ng/L	17.4		92.6		70-130	7.35		30	
Perfluorohexanesulfonic acid (PFHxS)	17.3	1.9	ng/L	17.1		101		70-130	1.35		30	
Perfluoro-4-oxapentanoic acid (PFMPA)	18.0	1.9	ng/L	18.6		96.3		70-130	5.10		30	
Perfluoro-5-oxahexanoic acid (PFMBA)	18.1	1.9	ng/L	18.6		96.9		70-130	7.78		30	
6:2 Fluorotelomersulfonic acid (6:2FTS A)	40.2	1.9	ng/L	17.7		**227**	*	70-130	**44.4**	*	30	L-06, R-05
Perfluoropentanesulfonic acid (PFPeS)	17.6	1.9	ng/L	17.5		101		70-130	2.34		30	
Perfluoroundecanoic acid (PFUnA)	19.7	1.9	ng/L	18.6		106		70-130	1.89		30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	18.9	1.9	ng/L	18.6		101		70-130	6.12		30	
Perfluoroheptanoic acid (PFHpA)	18.7	1.9	ng/L	18.6		100		70-130	7.39		30	
Perfluorooctanoic acid (PFOA)	18.8	1.9	ng/L	18.6		101		70-130	8.95		30	
Perfluorooctanesulfonic acid (PFOS)	18.9	1.9	ng/L	17.2		110		70-130	1.95		30	
Perfluorononanoic acid (PFNA)	15.8	1.9	ng/L	18.6		84.6		70-130	14.1		30	
Surrogate: M2-4:2FTS	*35.0*		ng/L	35.0		100		50-200				
Surrogate: M2-8:2FTS	*67.2*		ng/L	35.8		188		50-200				
Surrogate: MPFBA	*35.5*		ng/L	37.3		95.3		50-200				
Surrogate: M3HFPO-DA	*35.1*		ng/L	37.3		94.2		50-200				
Surrogate: M6PFDA	*33.0*		ng/L	37.3		88.6		50-200				
Surrogate: M3PFBS	*37.7*		ng/L	34.7		108		50-200				
Surrogate: M7PFUnA	*32.4*		ng/L	37.3		86.9		50-200				
Surrogate: M2-6:2FTS	*47.2*		ng/L	35.4		133		50-200				
Surrogate: M5PFPeA	*35.0*		ng/L	37.3		93.9		50-200				
Surrogate: M5PFHxA	*31.9*		ng/L	37.3		85.5		50-200				
Surrogate: M3PFHxS	*36.2*		ng/L	35.3		103		50-200				
Surrogate: M4PFHpA	*31.9*		ng/L	37.3		85.7		50-200				
Surrogate: M8PFOA	*34.6*		ng/L	37.3		92.9		50-200				
Surrogate: M8PFOS	*32.3*		ng/L	35.7		90.4		50-200				
Surrogate: M9PFNA	*35.1*		ng/L	37.3		94.3		50-200				
Surrogate: MPFDoA	*29.5*		ng/L	37.3		79.2		50-200				
Batch B341754 - EPA 533												
Blank (B341754-BLK1)				Prepared: 06/01/23 Analyzed: 06/02/23								
Perfluorobutanoic acid (PFBA)	ND	1.9	ng/L									
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	ng/L									
Perfluoropentanoic acid (PFPeA)	ND	1.9	ng/L									
Perfluorohexanoic acid (PFHxA)	ND	1.9	ng/L									
11Cl-PF3OUdS (F53B Major)	ND	1.9	ng/L									
9Cl-PF3ONS (F53B Minor)	ND	1.9	ng/L									
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	ng/L									
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	ng/L									
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9	ng/L									
Perfluorodecanoic acid (PFDA)	ND	1.9	ng/L									
Perfluorododecanoic acid (PFDoA)	ND	1.9	ng/L									
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L									
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	ng/L									
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9	ng/L									
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	ng/L									

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B341754 - EPA 533											
Blank (B341754-BLK1)				Prepared: 06/01/23 Analyzed: 06/02/23							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	ng/L								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	ng/L								
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9	ng/L								
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9	ng/L								
Perfluoroundecanoic acid (PFUnA)	ND	1.9	ng/L								
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L								
Perfluoroheptanoic acid (PFHpA)	ND	1.9	ng/L								
Perfluorooctanoic acid (PFOA)	ND	1.9	ng/L								
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	ng/L								
Perfluorononanoic acid (PFNA)	ND	1.9	ng/L								
Surrogate: M2-4:2FTS	*42.5*		ng/L	35.7		119		50-200			
Surrogate: M2-8:2FTS	*61.6*		ng/L	36.6		169		50-200			
Surrogate: MPFBA	*38.8*		ng/L	38.1		102		50-200			
Surrogate: M3HFPO-DA	*37.6*		ng/L	38.1		98.7		50-200			
Surrogate: M6PFDA	*34.7*		ng/L	38.1		91.1		50-200			
Surrogate: M3PFBS	*39.5*		ng/L	35.5		111		50-200			
Surrogate: M7PFUnA	*32.1*		ng/L	38.1		84.3		50-200			
Surrogate: M2-6:2FTS	*56.7*		ng/L	36.2		157		50-200			
Surrogate: M5PFPeA	*37.5*		ng/L	38.1		98.5		50-200			
Surrogate: M5PFHxA	*35.5*		ng/L	38.1		93.2		50-200			
Surrogate: M3PFHxS	*37.0*		ng/L	36.1		102		50-200			
Surrogate: M4PFHpA	*35.6*		ng/L	38.1		93.4		50-200			
Surrogate: M8PFOA	*37.3*		ng/L	38.1		98.1		50-200			
Surrogate: M8PFOS	*38.6*		ng/L	36.5		106		50-200			
Surrogate: M9PFNA	*39.4*		ng/L	38.1		103		50-200			
Surrogate: MPFDoA	*31.5*		ng/L	38.1		82.8		50-200			
LCS (B341754-BS1)				Prepared: 06/01/23 Analyzed: 06/02/23							
Perfluorobutanoic acid (PFBA)	1.89	1.9	ng/L	1.94		97.4		50-150			
Perfluorobutanesulfonic acid (PFBS)	1.46	1.9	ng/L	1.72		84.9		50-150			
Perfluoropentanoic acid (PFPeA)	1.89	1.9	ng/L	1.94		97.2		50-150			
Perfluorohexanoic acid (PFHxA)	2.15	1.9	ng/L	1.94		111		50-150			
11Cl-PF3OUdS (F53B Major)	1.41	1.9	ng/L	1.83		77.2		50-150			
9Cl-PF3ONS (F53B Minor)	1.66	1.9	ng/L	1.81		91.6		50-150			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.09	1.9	ng/L	1.83		114		50-150			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.45	1.9	ng/L	1.94		74.5		50-150			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	1.42	1.9	ng/L	1.86		76.3		50-150			
Perfluorodecanoic acid (PFDA)	1.51	1.9	ng/L	1.94		77.9		50-150			
Perfluorododecanoic acid (PFDoA)	2.20	1.9	ng/L	1.94		114		50-150			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.48	1.9	ng/L	1.73		85.8		50-150			
Perfluoroheptanesulfonic acid (PFHpS)	1.38	1.9	ng/L	1.85		74.3		50-150			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	1.45	1.9	ng/L	1.81		79.9		50-150			
Perfluorohexanesulfonic acid (PFHxS)	1.85	1.9	ng/L	1.77		104		50-150			
Perfluoro-4-oxapentanoic acid (PFMPA)	1.44	1.9	ng/L	1.94		74.5		50-150			
Perfluoro-5-oxahexanoic acid (PFMBA)	1.50	1.9	ng/L	1.94		77.3		50-150			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	44.0	1.9	ng/L	1.84		**2390**	*	50-150			L-07A
Perfluoropentanesulfonic acid (PFPeS)	1.50	1.9	ng/L	1.82		82.4		50-150			
Perfluoroundecanoic acid (PFUnA)	2.81	1.9	ng/L	1.94		145		50-150			

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B341754 - EPA 533											
LCS (B341754-BS1)				Prepared: 06/01/23 Analyzed: 06/02/23							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.57	1.9	ng/L	1.94		81.1		50-150			
Perfluoroheptanoic acid (PFHpA)	1.70	1.9	ng/L	1.94		87.6		50-150			
Perfluorooctanoic acid (PFOA)	2.93	1.9	ng/L	1.94		**151**	*	50-150			L-07
Perfluorooctanesulfonic acid (PFOS)	9.38	1.9	ng/L	1.79		**523**	*	50-150			L-07A
Perfluorononanoic acid (PFNA)	1.46	1.9	ng/L	1.94		75.2		50-150			
Surrogate: M2-4:2FTS	*30.9*		ng/L	36.4		85.0		50-200			
Surrogate: M2-8:2FTS	*68.1*		ng/L	37.2		183		50-200			
Surrogate: MPFBA	*35.6*		ng/L	38.8		91.7		50-200			
Surrogate: M3HFPO-DA	*32.5*		ng/L	38.8		83.9		50-200			
Surrogate: M6PFDA	*22.2*		ng/L	38.8		57.2		50-200			
Surrogate: M3PFBS	*34.1*		ng/L	36.2		94.3		50-200			
Surrogate: M7PFUnA	*19.3*		ng/L	38.8		**49.9**	*	50-200			S-29
Surrogate: M2-6:2FTS	*45.4*		ng/L	36.9		123		50-200			
Surrogate: M5PFPeA	*32.8*		ng/L	38.8		84.6		50-200			
Surrogate: M5PFHxA	*29.4*		ng/L	38.8		75.9		50-200			
Surrogate: M3PFHxS	*33.4*		ng/L	36.8		90.8		50-200			
Surrogate: M4PFHpA	*29.2*		ng/L	38.8		75.3		50-200			
Surrogate: M8PFOA	*28.8*		ng/L	38.8		74.3		50-200			
Surrogate: M8PFOS	*33.7*		ng/L	37.2		90.7		50-200			
Surrogate: M9PFNA	*24.5*		ng/L	38.8		63.2		50-200			
Surrogate: MPFDoA	*20.1*		ng/L	38.8		51.9		50-200			
LCS Dup (B341754-BSD1)				Prepared: 06/01/23 Analyzed: 06/02/23							
Perfluorobutanoic acid (PFBA)	1.82	1.9	ng/L	1.90		95.7		50-150	3.85	50	
Perfluorobutanesulfonic acid (PFBS)	1.46	1.9	ng/L	1.68		86.9		50-150	0.141	50	
Perfluoropentanoic acid (PFPeA)	1.71	1.9	ng/L	1.90		90.0		50-150	9.82	50	
Perfluorohexanoic acid (PFHxA)	1.67	1.9	ng/L	1.90		87.9		50-150	25.3	50	
11Cl-PF3OUdS (F53B Major)	1.72	1.9	ng/L	1.79		96.0		50-150	19.7	50	
9Cl-PF3ONS (F53B Minor)	1.54	1.9	ng/L	1.77		86.7		50-150	7.57	50	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.51	1.9	ng/L	1.79		84.5		50-150	31.9	50	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.14	1.9	ng/L	1.90		60.2		50-150	23.4	50	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	1.28	1.9	ng/L	1.82		70.3		50-150	10.3	50	
Perfluorodecanoic acid (PFDA)	1.67	1.9	ng/L	1.90		88.1		50-150	10.2	50	
Perfluorododecanoic acid (PFDoA)	1.80	1.9	ng/L	1.90		94.7		50-150	20.2	50	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.54	1.9	ng/L	1.69		91.2		50-150	4.00	50	
Perfluoroheptanesulfonic acid (PFHpS)	1.41	1.9	ng/L	1.81		77.6		50-150	2.25	50	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	1.42	1.9	ng/L	1.78		79.8		50-150	2.28	50	
Perfluorohexanesulfonic acid (PFHxS)	1.70	1.9	ng/L	1.74		97.6		50-150	8.47	50	
Perfluoro-4-oxapentanoic acid (PFMPA)	1.55	1.9	ng/L	1.90		81.5		50-150	6.91	50	
Perfluoro-5-oxahexanoic acid (PFMBA)	1.63	1.9	ng/L	1.90		85.7		50-150	8.19	50	
6:2 Fluorotelomersulfonic acid (6:2FTS A)	1.67	1.9	ng/L	1.80		92.3		50-150	**185**	* 50	R-05
Perfluoropentanesulfonic acid (PFPeS)	1.69	1.9	ng/L	1.79		94.6		50-150	11.7	50	
Perfluoroundecanoic acid (PFUnA)	2.02	1.9	ng/L	1.90		106		50-150	32.7	50	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.52	1.9	ng/L	1.90		80.0		50-150	3.52	50	
Perfluoroheptanoic acid (PFHpA)	1.59	1.9	ng/L	1.90		83.6		50-150	6.78	50	
Perfluorooctanoic acid (PFOA)	1.95	1.9	ng/L	1.90		103		50-150	40.2	50	
Perfluorooctanesulfonic acid (PFOS)	1.49	1.9	ng/L	1.76		84.6		50-150	**145**	* 50	R-05
Perfluorononanoic acid (PFNA)	1.53	1.9	ng/L	1.90		80.4		50-150	4.57	50	
Surrogate: M2-4:2FTS	*43.0*		ng/L	35.6		121		50-200			

con-test® A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B341754 - EPA 533										
LCS Dup (B341754-BSD1)				Prepared: 06/01/23 Analyzed: 06/02/23						
Surrogate: M2-8:2FTS	*57.2*		ng/L	36.5		157	50-200			
Surrogate: MPFBA	*35.9*		ng/L	38.0		94.5	50-200			
Surrogate: M3HFPO-DA	*30.6*		ng/L	38.0		80.6	50-200			
Surrogate: M6PFDA	*33.4*		ng/L	38.0		87.8	50-200			
Surrogate: M3PFBS	*38.9*		ng/L	35.4		110	50-200			
Surrogate: M7PFUnA	*32.1*		ng/L	38.0		84.5	50-200			
Surrogate: M2-6:2FTS	*50.4*		ng/L	36.1		140	50-200			
Surrogate: M5PFPeA	*35.1*		ng/L	38.0		92.4	50-200			
Surrogate: M5PFHxA	*31.5*		ng/L	38.0		83.0	50-200			
Surrogate: M3PFHxS	*35.9*		ng/L	36.0		99.6	50-200			
Surrogate: M4PFHpA	*33.3*		ng/L	38.0		87.6	50-200			
Surrogate: M8PFOA	*34.6*		ng/L	38.0		91.0	50-200			
Surrogate: M8PFOS	*38.8*		ng/L	36.4		106	50-200			
Surrogate: M9PFNA	*36.2*		ng/L	38.0		95.4	50-200			
Surrogate: MPFDoA	*30.7*		ng/L	38.0		80.8	50-200			

con-test® A Pace Analytical® Laboratory

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

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

L-06	Laboratory fortified blank/laboratory control sample recovery and/or duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the high side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
PF-17	Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
PF-17B	Extracted internal standard is outside of control limits. Insufficient sample volume for re-extraction.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
S-29	Extracted Internal Standard is outside of control limits.

con-test® A Pace Analytical® Laboratory

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 533 in Drinking Water	
Perfluorobutanoic acid (PFBA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorobutanesulfonic acid (PFBS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanoic acid (PFPeA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanoic acid (PFHxA)	NH,NY,VT-DW,ME,NJ,PA,CT
11Cl-PF3OUdS (F53B Major)	NH,NY,VT-DW,ME,NJ,PA,CT
9Cl-PF3ONS (F53B Minor)	NH,NY,VT-DW,ME,NJ,PA,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH,NY,VT-DW,ME,NJ,PA,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH,NY,VT-DW,ME,NJ,PA,CT
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorodecanoic acid (PFDA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorododecanoic acid (PFDoA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH,NY,VT-DW,ME,NJ,PA,CT
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanesulfonic acid (PFHxS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-4-oxapentanoic acid (PFMPA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-5-oxahexanoic acid (PFMBA)	NH,NY,VT-DW,ME,NJ,PA,CT
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanesulfonic acid (PFPeS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroundecanoic acid (PFUnA)	NH,NY,VT-DW,ME,NJ,PA,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanoic acid (PFHpA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorooctanoic acid (PFOA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorooctanesulfonic acid (PFOS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorononanoic acid (PFNA)	NH,NY,VT-DW,ME,NJ,PA,CT

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2023
ME	State of Maine	MA00100	06/9/2025
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023

Internal Transfer Chain of Custody

23E3225 HF

☐ Samples Pre-Logged into eCOC.

State Of Origin: NY
Cert. Needed: [X] Yes ☐ No

Pace Analytical®
www.pacelabs.com

Workorder: 70257180 **Workorder Name:** BAC/POC/IOC//PERC/PFAS 5/22
Owner Received Date: 5/22/2023 **Results Requested By:** 6/7/2023

Report To

Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040

Subcontract To

Pace New England
39 Spruce St.
East Longmeadow, MA 01028
Phone (413)525-2332

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	PFAS by 533	LAB USE ONLY
1	N-07552	PS	5/22/2023 10:05	70257180001	Drinking	1	X	
2	N-07552 FB	PS	5/22/2023 10:05	70257180002	Drinking	1	X	
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	STJ Pace LI	5/22/23	MSMW	5/23 1758
2	MSMW	5/23 2000		5/23 2100
3		5/24/23 0115		5/24/23 0115

Comments

25 Compound List

Cooler Temperature on Receipt ____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

5/24/23 0430 Eric Woods AAL 5/24/23 300
Eric Woods AAL 5/24/23 930
2.2°C 5-24-23 0937

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F:413-525-6405
www.pacelabs.com

ENV-FRM-ELON-0001 V05__Sample Receiving Checklist

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Pace
PEOPLE ADVANCING SCIENCE

Client Pace - Long Island

Project PFAS 533 - JA

MCP/RCP Required N/A

Deliverable Package Requirement N/A

Location BA C/POC/IOC/PERC/PFAS 5122

PWSID# (When Applicable) N/A

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time AAM / 5-24-23 / 0837

~~Back-Sheet By / Date / Time~~ AAM / 5-24-23 / 1131

Temperature Method Temp. Gun # 5

Temp ☑ < 6° C Actual Temperature 2.2°C

Rush Samples: Yes / (No) Notify

Short Hold: Yes / (No) Notify

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
~~Is there enough Volume~~	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client	☑	Analysis	☑	Sampler Name	☐
Project	☑	IDs	☑	Collection Date/Time	☑

All Samples Proper pH: (N/A) ☐ ☐

Notes regarding Samples/COC outside of SOP:

Additional Container Notes

Sample	Soils Jars (Circle Amb/Clear)				Ambers							Plastics										VOA Vials					Other / Fill in					
					1 Liter			250mL			100mL	1 Liter		500mL		250mL																
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric	NaOH	NaOH/Zinc	Unpreserved	HCl	MeOH	D.I. Water	BiSulfate	Col/Bact	Ammonium acetate 250mL				
1																																
2																												2				
3																												1				
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																
13																																
14																																
15																																
16																																
17																																
18																																
19																																
20																																

Table of Contents

301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **Pace Analytical Services, Inc.-NY**

Project 70257180
Workorder 3304704
Report ID 248285 on 6/2/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 24, 2023.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Sarah Leung (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Tara Bernier - Pace Analytical Services, Inc.-NY
Reporting - Pace Analytical Services, Inc.-NY

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sarah Leung

Sarah Leung *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3304704001	N-07552	NY Potable Water	05/22/2023 10:05	05/24/2023 08:39	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.

Detected Results Summary

Not applicable for this WO.

Results

Client Sample ID	N-07552	Collected	05/22/2023 10:05
Lab Sample ID	3304704001	Lab Receipt	05/24/2023 08:39

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Perchlorate	ND	ND	ug/L	4.0	0.20	EPA 314.0	1	05/31/2023 21:16	DMG	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3304704001	N-07552	EPA 314.0	N/A	

QUALITY CONTROL SAMPLES

WET CHEMISTRY

QC Batch

QC Batch	1007837	Prep Method	N/A
Date	N/A	Analysis Method	EPA 314.0
Tech.			

Associated Samples

3304704001

Matrix Spike 3676660 (MS) 3304421001 (non-Project Sample) For QC Batch 1007837

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3676661 (MSD) 3304421001 (non-Project Sample) For QC Batch 1007837

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Perchlorate	14797-73-0	MS	29.50	3.60	25	104	80 - 120		
Perchlorate	14797-73-0	MSD	29	3.60	25	102	80 - 120	RPD 1.53 (Max-15)	

Method Blank 3676658 (MB) Created on 05/31/2023 12:33 For QC Batch 1007837

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Perchlorate	14797-73-0	BLK	ND	ug/L	4.0	ND

Lab Control Standard 3676659 (LCS) Created on 05/31/2023 12:33 For QC Batch 1007837

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Perchlorate	14797-73-0	LCS	26.10		25	104	85 - 115		

Method Blank 3676662 (MB) Created on 05/31/2023 12:33 For QC Batch 1007837

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Perchlorate	14797-73-0	BLK	ND	ug/L	4.0	ND

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3304704001	N-07552	N/A	N/A	N/A		EPA 314.0	1007837

Chain of Custody

PASI New York Laboratory

3304704
Logged By: KSB
PM: SSL

Pace Analytical®
www.pacelabs.com

Workorder: 70257180 **Workorder Name:** BAC/POC/IOC//PERC/PFAS 5/22 **Results Requested By:** 6/7/2023

Report / Invoice To

Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040
Email: jennifer.aracri@pacelabs.com

Subcontract To

ALS -Middletown
301 Fulling Mill Road
Middletown, PA 17057

P.O. 70257180 JSA

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved						3140 Perchlorate by IC	
1	N-07552	5/22/2023 10:05	70257180001	Drinking							X	
2												
3												
4												
5												

Requested Analysis

Temp By: DAG | WO Temp (°C): 4 | Therm ID: 585

Receipt Info Completed By: DAG

Cooler Custody Seal Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Cooler & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
CR6 Samples Filtered	Y	N	NA
OP Samples Filtered	Y	N	NA
VOA Headspace Present	Y	N	NA
Voa Trip Blank	Y	N	NA
NJ≤ 4 Days?	Y	N	
Rad Screen (uCi)	—		
Courier/Tracking #:	6476 7850 2601		
SDWA Compliance	Y	N	
PWSID			
WV Containers 0-6°C	Y	N	NA

LAB USE ONLY

Transfers	Released By	Date/Time	Received By	Date/Time
1	JTJ Pace LI	5/24/23 2:3	FedEx	
2	Fedex	5/24/23 839	[illegible]	5/24/23 8:30
3				

Please report in ug/L.

Cooler Temperature on Receipt ____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:

Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70258532001
Client Sample ID.: N-09809

Federal ID : 2912267
Collected : 06/05/2023 09:54 AM Point N-09809
Received : 06/05/2023 12:00 PM Location Stoneytown 10
Collected By CLIENT Flwr Hl

Sample Comments:

Samples were received on the same day of collection on ice and are above 6 degrees Celcius. Samples were placed on ice by the lab and the cooling process has begun.

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 06/07/2023 10:40

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.57		1	ug/L	1	06/08/2023 7:10 PM	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	93%		1	%REC		06/08/2023 7:10 PM	001 AG2R1/2

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Date Reported: 06/20/2023

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Treated Well
Routine

Treatment
GAC

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70258532003
Client Sample ID.: GAC-09809

Federal ID : 2912267
Collected : 06/05/2023 09:42 AM Point GAC-09809
Received : 06/05/2023 12:00 PM Location Stoneytown 10
Collected By CLIENT GAC

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 06/07/2023 10:40

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.61		1	ug/L	1	06/08/2023 7:28 PM	003 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	100%		1	%REC		06/08/2023 7:28 PM	003 AG2R1/2

Analytical Method: EPA 524.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,1,1-Trichloroethane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,1,2,2-Tetrachloroethane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,1,2-Trichloroethane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,1,2-Trichlorotrifluoroethane	<0.50	N3,v3	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,1-Dichloroethane	0.74		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,1-Dichloroethene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,1-Dichloropropene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,2,3-Trichlorobenzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,2,3-Trichloropropane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,2,4-Trichlorobenzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,2,4-Trimethylbenzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,2-Dichlorobenzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,2-Dichloroethane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,2-Dichloropropane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,3,5-Trimethylbenzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,3-Dichlorobenzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,3-Dichloropropane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
1,4-Dichlorobenzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
2,2-Dichloropropane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
2-Chlorotoluene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
4-Chlorotoluene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Benzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Bromobenzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Bromochloromethane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Bromodichloromethane	<0.50		1	ug/L		06/08/2023 7:05 PM	003 VG9C1/2
Bromoform	<0.50		1	ug/L		06/08/2023 7:05 PM	003 VG9C1/2
Bromomethane	<0.50	L1	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Carbon tetrachloride	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Chlorobenzene	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Chlorodifluoromethane	<0.50	N3	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Chloroethane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Chloroform	<0.50		1	ug/L		06/08/2023 7:05 PM	003 VG9C1/2
Chloromethane	<0.50		1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:

Type: Drinking Water
Origin: Treated Well
Routine

Treatment
GAC

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70258532003
Client Sample ID.: GAC-09809

Federal ID : 2912267
Collected : 06/05/2023 09:42 AM Point GAC-09809
Received : 06/05/2023 12:00 PM Location Stoneytown 10
Collected By CLIENT GAC

Dibromochloromethane	<0.50	1	ug/L		06/08/2023 7:05 PM	003 VG9C1/2
Dibromomethane	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Dichlorodifluoromethane	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Ethylbenzene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Hexachloro-1,3-butadiene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Isopropylbenzene (Cumene)	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Methyl-tert-butyl ether	<0.50	1	ug/L	10	06/08/2023 7:05 PM	003 VG9C1/2
Methylene Chloride	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Styrene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Tetrachloroethene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Toluene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Total Trihalomethanes (Calc.)	<0.50	1	ug/L	80	06/08/2023 7:05 PM	003 VG9C1/2
Trichloroethene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Trichlorofluoromethane	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Vinyl chloride	<0.50	1	ug/L	2	06/08/2023 7:05 PM	003 VG9C1/2
cis-1,2-Dichloroethene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
cis-1,3-Dichloropropene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
m&p-Xylene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
n-Butylbenzene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
n-Propylbenzene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
o-Xylene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
p-Isopropyltoluene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
sec-Butylbenzene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
tert-Butylbenzene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
trans-1,2-Dichloroethene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
trans-1,3-Dichloropropene	<0.50	1	ug/L	5	06/08/2023 7:05 PM	003 VG9C1/2
Surr: 1,2-Dichlorobenzene-d4 (S)	77%	1	%REC		06/08/2023 7:05 PM	003 VG9C1/2
Surr: 4-Bromofluorobenzene (S)	99%	1	%REC		06/08/2023 7:05 PM	003 VG9C1/2

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

WorkOrder :
70258532

Laboratory Certifications

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

WorkOrder :
70258532

Additional Qualifiers

L1 - Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
N3 - Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
v3 - The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

con-test®
A Pace Analytical® Laboratory

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

June 19, 2023

Jennifer Aracri
Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747

Project Location: POC/1,4 DIOXANE/PFAS 6/5
Client Job Number:
Project Number: 70258532
Laboratory Work Order Number: 23F0925

Enclosed are results of analyses for samples as received by the laboratory on June 8, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 5

23F0925-01 5

23F0925-02 6

23F0925-03 7

23F0925-04 8

Sample Preparation Information 9

QC Data 10

Semivolatile Organic Compounds by - LC/MS-MS 10

B343015 10

Flag/Qualifier Summary 12

Certifications 13

Chain of Custody/Sample Receipt 14

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

Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747
ATTN: Jennifer Aracri

REPORT DATE: 6/19/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 70258532

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F0925

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: POC/1,4 DIOXANE/PFAS 6/5

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
N-09809	23F0925-01	Drinking Water		EPA 533	
N-09809 FB	23F0925-02	Field Blank		EPA 533	
GAC-09809	23F0925-03	Drinking Water		EPA 533	
GAC-09809 FB	23F0925-04	Field Blank		EPA 533	

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

CASE NARRATIVE SUMMARY

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

EPA 533

Qualifications:

PF-17

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

Analyte & Samples(s) Qualified:

M2-8:2FTS

23F0925-01[N-09809], 23F0925-02[N-09809 FB], 23F0925-03[GAC-09809], 23F0925-04[GAC-09809 FB], B343015-BLK1

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

M2-8:2FTS

B343015-BS1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Meghan E. Kelley
Reporting Specialist

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

Project Location: POC/1,4 DIOXANE/PFAS 6/5 Sample Description: Work Order: 23F0925

Date Received: 6/8/2023

Field Sample #: N-09809 Sampled: 6/5/2023 09:54

Sample ID: 23F0925-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	3.0	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluoropentanoic acid (PFPeA)	3.8	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluorohexanoic acid (PFHxA)	3.7	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluorohexanesulfonic acid (PFHxS)	3.0	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluoroheptanoic acid (PFHpA)	2.0	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluorooctanoic acid (PFOA)	6.0	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:34	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	73.0		50-200		6/14/23 12:34
M2-8:2FTS	**301**	*	50-200	PF-17	6/14/23 12:34
MPFBA	104		50-200		6/14/23 12:34
M3HFPO-DA	90.4		50-200		6/14/23 12:34
M6PFDA	82.6		50-200		6/14/23 12:34
M3PFBS	107		50-200		6/14/23 12:34
M7PFUnA	80.3		50-200		6/14/23 12:34
M2-6:2FTS	111		50-200		6/14/23 12:34
M5PFPeA	97.3		50-200		6/14/23 12:34
M5PFHxA	83.1		50-200		6/14/23 12:34
M3PFHxS	105		50-200		6/14/23 12:34
M4PFHpA	82.0		50-200		6/14/23 12:34
M8PFOA	89.3		50-200		6/14/23 12:34
M8PFOS	103		50-200		6/14/23 12:34
M9PFNA	89.1		50-200		6/14/23 12:34
MPFDoA	77.2		50-200		6/14/23 12:34

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

Project Location: POC/1,4 DIOXANE/PFAS 6/5 Sample Description: Work Order: 23F0925

Date Received: 6/8/2023

Field Sample #: N-09809 FB Sampled: 6/5/2023 09:54

Sample ID: 23F0925-02

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluoropentanoic acid (PFPeA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:41	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	78.6		50-200		6/14/23 12:41
M2-8:2FTS	**514**	*	50-200	PF-17	6/14/23 12:41
MPFBA	118		50-200		6/14/23 12:41
M3HFPO-DA	101		50-200		6/14/23 12:41
M6PFDA	113		50-200		6/14/23 12:41
M3PFBS	109		50-200		6/14/23 12:41
M7PFUnA	108		50-200		6/14/23 12:41
M2-6:2FTS	132		50-200		6/14/23 12:41
M5PFPeA	109		50-200		6/14/23 12:41
M5PFHxA	96.8		50-200		6/14/23 12:41
M3PFHxS	110		50-200		6/14/23 12:41
M4PFHpA	104		50-200		6/14/23 12:41
M8PFOA	111		50-200		6/14/23 12:41
M8PFOS	105		50-200		6/14/23 12:41
M9PFNA	110		50-200		6/14/23 12:41
MPFDoA	108		50-200		6/14/23 12:41

con-test®
A Pace Analytical® Laboratory

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

Project Location: POC/1,4 DIOXANE/PFAS 6/5 Sample Description: Work Order: 23F0925

Date Received: 6/8/2023

Field Sample #: GAC-09809 Sampled: 6/5/2023 09:42

Sample ID: 23F0925-03

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	3.0	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluoropentanoic acid (PFPeA)	4.1	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluorohexanoic acid (PFHxA)	3.8	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluorohexanesulfonic acid (PFHxS)	1.8	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluoroheptanoic acid (PFHpA)	1.8	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluorooctanoic acid (PFOA)	4.7	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/14/23 12:49	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	75.0		50-200		6/14/23 12:49
M2-8:2FTS	**434**	*	50-200	PF-17	6/14/23 12:49
MPFBA	103		50-200		6/14/23 12:49
M3HFPO-DA	79.2		50-200		6/14/23 12:49
M6PFDA	86.8		50-200		6/14/23 12:49
M3PFBS	110		50-200		6/14/23 12:49
M7PFUnA	80.9		50-200		6/14/23 12:49
M2-6:2FTS	129		50-200		6/14/23 12:49
M5PFPeA	92.8		50-200		6/14/23 12:49
M5PFHxA	76.8		50-200		6/14/23 12:49
M3PFHxS	103		50-200		6/14/23 12:49
M4PFHpA	79.1		50-200		6/14/23 12:49
M8PFOA	83.6		50-200		6/14/23 12:49
M8PFOS	107		50-200		6/14/23 12:49
M9PFNA	85.3		50-200		6/14/23 12:49
MPFDoA	81.2		50-200		6/14/23 12:49

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

Project Location: POC/1,4 DIOXANE/PFAS 6/5 Sample Description: Work Order: 23F0925

Date Received: 6/8/2023

Field Sample #: GAC-09809 FB Sampled: 6/5/2023 09:42

Sample ID: 23F0925-04

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluoropentanoic acid (PFPeA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluorooctanoic acid (PFOA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/14/23 12:56	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	85.0		50-200		6/14/23 12:56
M2-8:2FTS	**524**	*	50-200	PF-17	6/14/23 12:56
MPFBA	117		50-200		6/14/23 12:56
M3HFPO-DA	103		50-200		6/14/23 12:56
M6PFDA	112		50-200		6/14/23 12:56
M3PFBS	113		50-200		6/14/23 12:56
M7PFUnA	106		50-200		6/14/23 12:56
M2-6:2FTS	145		50-200		6/14/23 12:56
M5PFPeA	110		50-200		6/14/23 12:56
M5PFHxA	96.5		50-200		6/14/23 12:56
M3PFHxS	110		50-200		6/14/23 12:56
M4PFHpA	104		50-200		6/14/23 12:56
M8PFOA	111		50-200		6/14/23 12:56
M8PFOS	110		50-200		6/14/23 12:56
M9PFNA	116		50-200		6/14/23 12:56
MPFDoA	101		50-200		6/14/23 12:56

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

Sample Extraction Data

Prep Method:EPA 533 **Analytical Method:EPA 533**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0925-01 [N-09809]	B343015	283	1.00	06/13/23
23F0925-02 [N-09809 FB]	B343015	283	1.00	06/13/23
23F0925-03 [GAC-09809]	B343015	275	1.00	06/13/23
23F0925-04 [GAC-09809 FB]	B343015	263	1.00	06/13/23

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B343015 - EPA 533											
Blank (B343015-BLK1)				Prepared: 06/13/23 Analyzed: 06/14/23							
Perfluorobutanoic acid (PFBA)	ND	2.0	ng/L								
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L								
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L								
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L								
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L								
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L								
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L								
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	2.0	ng/L								
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L								
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L								
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L								
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	2.0	ng/L								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	2.0	ng/L								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	2.0	ng/L								
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	2.0	ng/L								
Perfluoropentanesulfonic acid (PFPeS)	ND	2.0	ng/L								
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L								
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L								
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L								
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L								
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L								
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L								
Surrogate: M2-4:2FTS	*32.1*		ng/L	37.4		85.9		50-200			
Surrogate: M2-8:2FTS	*137*		ng/L	38.3		**358**	*	50-200			PF-17
Surrogate: MPFBA	*41.5*		ng/L	39.9		104		50-200			
Surrogate: M3HFPO-DA	*34.0*		ng/L	39.9		85.3		50-200			
Surrogate: M6PFDA	*37.6*		ng/L	39.9		94.4		50-200			
Surrogate: M3PFBS	*38.5*		ng/L	37.1		104		50-200			
Surrogate: M7PFUnA	*33.8*		ng/L	39.9		84.8		50-200			
Surrogate: M2-6:2FTS	*48.7*		ng/L	37.9		129		50-200			
Surrogate: M5PFPeA	*40.8*		ng/L	39.9		102		50-200			
Surrogate: M5PFHxA	*33.7*		ng/L	39.9		84.5		50-200			
Surrogate: M3PFHxS	*37.4*		ng/L	37.8		99.0		50-200			
Surrogate: M4PFHpA	*34.7*		ng/L	39.9		87.2		50-200			
Surrogate: M8PFOA	*37.0*		ng/L	39.9		92.7		50-200			
Surrogate: M8PFOS	*36.9*		ng/L	38.2		96.5		50-200			
Surrogate: M9PFNA	*39.2*		ng/L	39.9		98.3		50-200			
Surrogate: MPFDoA	*33.8*		ng/L	39.9		84.9		50-200			
LCS (B343015-BS1)				Prepared: 06/13/23 Analyzed: 06/14/23							
Perfluorobutanoic acid (PFBA)	11.8	2.0	ng/L	9.86		120		70-130			
Perfluorobutanesulfonic acid (PFBS)	10.0	2.0	ng/L	8.72		115		70-130			
Perfluoropentanoic acid (PFPeA)	11.5	2.0	ng/L	9.86		117		70-130			
Perfluorohexanoic acid (PFHxA)	11.3	2.0	ng/L	9.86		115		70-130			
11Cl-PF3OUdS (F53B Major)	10.5	2.0	ng/L	9.29		113		70-130			
9Cl-PF3ONS (F53B Minor)	10.9	2.0	ng/L	9.19		119		70-130			

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B343015 - EPA 533											
LCS (B343015-BS1)				Prepared: 06/13/23 Analyzed: 06/14/23							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	10.2	2.0	ng/L	9.29		109		70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	10.8	2.0	ng/L	9.86		109		70-130			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	10.8	2.0	ng/L	9.46		115		70-130			
Perfluorodecanoic acid (PFDA)	11.6	2.0	ng/L	9.86		118		70-130			
Perfluorododecanoic acid (PFDoA)	11.8	2.0	ng/L	9.86		120		70-130			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	10.0	2.0	ng/L	8.77		114		70-130			
Perfluoroheptanesulfonic acid (PFHpS)	9.46	2.0	ng/L	9.41		101		70-130			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	9.35	2.0	ng/L	9.22		101		70-130			
Perfluorohexanesulfonic acid (PFHxS)	10.5	2.0	ng/L	9.02		116		70-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	10.4	2.0	ng/L	9.86		106		70-130			
Perfluoro-5-oxahexanoic acid (PFMBA)	10.1	2.0	ng/L	9.86		102		70-130			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.83	2.0	ng/L	9.36		94.3		70-130			
Perfluoropentanesulfonic acid (PFPeS)	10.9	2.0	ng/L	9.27		118		70-130			
Perfluoroundecanoic acid (PFUnA)	11.1	2.0	ng/L	9.86		113		70-130			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	9.89	2.0	ng/L	9.86		100		70-130			
Perfluoroheptanoic acid (PFHpA)	11.0	2.0	ng/L	9.86		111		70-130			
Perfluorooctanoic acid (PFOA)	11.8	2.0	ng/L	9.86		120		70-130			
Perfluorooctanesulfonic acid (PFOS)	9.97	2.0	ng/L	9.12		109		70-130			
Perfluorononanoic acid (PFNA)	9.47	2.0	ng/L	9.86		96.1		70-130			
Surrogate: M2-4:2FTS	*33.4*		ng/L	37.0		90.2		50-200			
Surrogate: M2-8:2FTS	*258*		ng/L	37.9		**681**	*	50-200			S-29
Surrogate: MPFBA	*43.3*		ng/L	39.4		110		50-200			
Surrogate: M3HFPO-DA	*35.3*		ng/L	39.4		89.4		50-200			
Surrogate: M6PFDA	*43.6*		ng/L	39.4		111		50-200			
Surrogate: M3PFBS	*39.0*		ng/L	36.7		106		50-200			
Surrogate: M7PFUnA	*40.6*		ng/L	39.4		103		50-200			
Surrogate: M2-6:2FTS	*50.6*		ng/L	37.5		135		50-200			
Surrogate: M5PFPeA	*43.8*		ng/L	39.4		111		50-200			
Surrogate: M5PFHxA	*35.9*		ng/L	39.4		91.0		50-200			
Surrogate: M3PFHxS	*36.1*		ng/L	37.4		96.6		50-200			
Surrogate: M4PFHpA	*37.8*		ng/L	39.4		95.8		50-200			
Surrogate: M8PFOA	*39.4*		ng/L	39.4		100		50-200			
Surrogate: M8PFOS	*39.1*		ng/L	37.8		104		50-200			
Surrogate: M9PFNA	*52.6*		ng/L	39.4		133		50-200			
Surrogate: MPFDoA	*37.3*		ng/L	39.4		94.7		50-200			

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

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
PF-17	Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
S-29	Extracted Internal Standard is outside of control limits.

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 533 in Drinking Water	
Perfluorobutanoic acid (PFBA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorobutanesulfonic acid (PFBS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanoic acid (PFPeA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanoic acid (PFHxA)	NH,NY,VT-DW,ME,NJ,PA,CT
11Cl-PF3OUdS (F53B Major)	NH,NY,VT-DW,ME,NJ,PA,CT
9Cl-PF3ONS (F53B Minor)	NH,NY,VT-DW,ME,NJ,PA,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH,NY,VT-DW,ME,NJ,PA,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH,NY,VT-DW,ME,NJ,PA,CT
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorodecanoic acid (PFDA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorododecanoic acid (PFDoA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH,NY,VT-DW,ME,NJ,PA,CT
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanesulfonic acid (PFHxS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-4-oxapentanoic acid (PFMPA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-5-oxahexanoic acid (PFMBA)	NH,NY,VT-DW,ME,NJ,PA,CT
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanesulfonic acid (PFPeS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroundecanoic acid (PFUnA)	NH,NY,VT-DW,ME,NJ,PA,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanoic acid (PFHpA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorooctanoic acid (PFOA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorooctanesulfonic acid (PFOS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorononanoic acid (PFNA)	NH,NY,VT-DW,ME,NJ,PA,CT

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2024
ME	State of Maine	MA00100	06/9/2025
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024

23 F0925
KAF

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

Pace Analytical®
www.pacelabs.com

State Of Origin: NY
Cert. Needed: [X] Yes ☐ No

Workorder: 70258532 **Workorder Name:** POC/1,4 DIOXANE/PFAS 6/5 **Owner Received Date:** 6/5/2023 **Results Requested By:** 6/19/2023

Report To

Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040

Subcontract To

Pace New England
39 Spruce St.
East Longmeadow, MA 01028
Phone (413)525-2332

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other						PFAS by 533												LAB USE ONLY
1	N-09809	PS	6/5/2023 09:54	70258532001	Drinking	1						X												
2	N-09809 FB	PS	6/5/2023 09:54	70258532002	Drinking	1						X												
3	GAC-09809	PS	6/5/2023 09:42	70258532003	Drinking	1						X												
4	GAC-09809 FB	PS	6/5/2023 09:42	70258532004	Drinking	1						X												
5																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	MSMa (pace)	6/7/23 1800	MSMa (pace)	6/7 1910
2	MSMa (pace)	6/7 2000	[illegible]	6/7 2100
3	[illegible]	6/7/23 2340	[illegible]	6/7/23 2340

Comments

25 Compound List

Cooler Temperature on Receipt ____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

[illegible] 6/8/23 0305 Eric Woods PAL 6-8-23 800
Eric Woods PAL 6/8/23 935 [illegible] 2.1°C 6-8-23 0940

JH

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.pacelabs.com

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Pace
PEOPLE ADVANCING SCIENCE

Client Pace - Long Island

Project PFAS533 - JA

MCP/RCP Required N/A

Deliverable Package Requirement N/A

Location POC/1,4 DIOXANE/PFAS 6/5

PWSID# (When Applicable) N/A

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time AAM/6-8-23/0940

~~Back-Sheet By / Date / Time~~ AAM/6-8-23/1008

Temperature Method Temp. Gun # 4

Temp ☑ < 6° C Actual Temperature 2.1°C

Rush Samples: Yes / No Notify

Short Hold: Yes / No Notify

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
~~Is there enough Volume~~	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client	☑	Analysis	☑	Sampler Name	☐
Project	☑	IDs	☑	Collection Date/Time	☑

All Samples Proper pH: N/A ☐ ☐

Notes regarding Samples/COC outside of SOP:

Additional Container Notes

Sample	Soils Jars (Circle Amb/Clear)				Ambers							Plastics										VOA Vials					Other / Fill in					
					1 Liter			250mL			100mL	1 Liter		500mL		250mL																
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric	NaOH	NaOH/Zinc	Unpreserved	HCl	MeOH	D.I. Water	BiSulfate	Col/Bact	250mL Plastic Ammonium acetate				
1																																
2																												2				
3																												1				
4																												2				
5																												1				
6																																
7																																
8																																
9																																
10																																
11																																
12																																
13																																
14																																
15																																
16																																
17																																
18																																
19																																
20																																

Relinquished 6-5-23

WO#: 70258532

70258532

Sample Request Form
PUBLIC WATER SUPPLIER

Date: 6/5/23

Collected By: Richard Zimbardi

Accepted By: [illegible] 6-5-23 1200

Cooler Temp: 6.2 °C

☐ WELL OFF LINE

☑ WELL RUN TO SYSTEM

☐ YES ☐ NO VOC'S PRESERVED WITH HCl

Client Info:

Name or Code: Italo J. Vacchio, Superintendent

Address: Port Washington Water District
P.O. Box 432
38 Sandy Hollow Road
Port Washington, NY 11050

Phone #:

Attn:

Proj. # or (Name):

Bill To:

Copies To:

Sample Types	Purpose	Origin	Treatment Types
PW - Potable Water	RO - Routine	D - Distribution	AST - Air Stripper
GW - Groundwater	RE - Resample	RW - Raw Well	GAC - Granular Activated Charcoal
SW - Surface Water	S - Special	TW - Treated Well	N - Nitrate Removal Plant
WW - Waste Water		T - Tank	FE - Iron Removal Plant
AQ - Aqueous		MW - Monitoring Well	O - Other
S - Soil		I - Influent	
		E - Effluent	

Sample Info:

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl_2	Field Readings pH/Temp	Analysis	Lab No.
6/5/23 9:54	GW	Stonytown 10 N-09809	RW	O	RO			Method 533 w/Field Blank Dioxane	
9:42	GW	Stonytown 10 GAC-09809	TW	GAC	RO			Method 533 w/Field Blank POC, Dioxane	

Remarks:

WO#: 70258532
Due Date: 06/19/23
PM: JSA
CLIENT: PWW

Client Name: Pww Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☐ Yes ☐ No Trip Blank Present: ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☐ None ☐ Other Type of Ice: Wet Blue None

Thermometer Used: TH143 Correction Factor: -0.3 ☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 6.2 Cooler Temperature Corrected(°C): 5.9 Date/Time 5035A kits placed in freezer: N/A 6-5-23 1435

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples orignate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: AD 6/5/23

				COMMENTS:
Chain of Custody Present:	☑Yes	☐No		1.
Chain of Custody Filled Out:	☑Yes	☐No		2.
Chain of Custody Relinquished:	☑Yes	☐No		3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No		6.
Rush Turn Around Time Requested	☐Yes	☑No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☑Yes	☐No		8.
Correct Containers Used:	☑Yes	☐No		9.
-Pace Containers Used:	☑Yes	☐No		
Containers Intact:	☑Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11. Note: if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: SL WT OIL OTHER	☑Yes	☑No		12.

Date and Initials of person checking preservation:

All containers needing preservation have been pH paper Lot # All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☐Yes	☐No	☑N/A ☐Yes ☐No ☑N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl Sample # Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination: KI starch test strips Lot # Residual chlorine strips Lot #	☐Yes	☐No	☑N/A	14. Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sul Lead Acetate Strips Lot #	☐Yes	☐No	☑N/A	15. Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	16.
Trip Blank Present: Trip Blank Custody Seals Present	☐Yes ☐Yes	☐No ☐No	☑N/A ☑N/A	17.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

Sample Information:

Type: Drinking Water
Origin: Raw Well
Routine

Port Washington W.D.
P.O. BOX 432
Port Washington, NY 11050
Attn To : Supt.Paul Prignano

Lab No. : 70260250001
Client Sample ID.: N-07552

Federal ID : 2912267
Collected : 06/19/2023 09:05 AM Point N-07552
Received : 06/19/2023 04:00 PM Location Morely Pk 9
Collected By CLIENT No Hls

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 06/21/2023 11:35

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	**10.8***		5	ug/L	1	06/22/2023 1:19 PM	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	107%		5	%REC		06/22/2023 1:19 PM	001 AG2R1/2

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Date Reported: 06/27/2023

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
www.pacelabs.com

WorkOrder :
70260250

Laboratory Certifications

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

WO#: 70260250

70260250

(631) 694-3040 Fax: (631) 420-8436

Rcl. [redacted] 6/19/23 1600

Sample Request Form
PUBLIC WATER SUPPLIER

Date: 6/19/23

Collected By: Richard Zimbardi

Accepted By: [redacted] 6/19/23 1315

Cooler Temp: 2.8 °C

☑ WELL OFF LINE _____

☐ WELL RUN TO SYSTEM _____

☐ YES ☐ NO VOC'S PRESERVED WITH HCl

Client Info:

Name or Code: Italo J. Vacchio, Superintendent

Address: Port Washington Water District
P.O. Box 432
38 Sandy Hollow Road
Port Washington, NY 11050

Phone #:

Attn:

Proj. # or (Name):

Bill To:

Copies To:

Sample Types	Purpose	Origin	Treatment Types
PW - Potable Water	RO - Routine	D - Distribution	AST - Air Stripper
GW - Groundwater	RE - Resample	RW - Raw Well	GAC - Granular Activated Charcoal
SW - Surface Water	S - Special	TW - Treated Well	N - Nitrate Removal Plant
WW - Waste Water		T - Tank	FE - Iron Removal Plant
AQ - Aqueous		MW - Monitoring Well	O - Other
S - Soil		I - Influent	
		E - Effluent	

Sample Info:

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl_2	Field Readings pH/Temp	Analysis	Lab No.
6/19/23 9:05	GW	Morley 9 N-07557	RW	O	RO			Method 533 w/Field Blank 1,4 DIOXANE JSR 6/20/23	
	~~GW~~								

Remarks:

DC#_Title: ENV-FRM-MELV-0024 v4_SCUR
Effective Date: 5/23/2023

WO#: 70260250
PM: JSA **Due Date: 06/30/23**
CLIENT: PWW

Client Name: PWWD Project:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No Seals intact: ☑ Yes ☐ No Temperature Blank Present: ☐ Yes ☑ No I.I 6/14/23 1600

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☑ None ☐ Other Type of Ice: (Wet) Blue None

Thermometer Used: Th148 Correction Factor: -0.3 ☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 2.8 Cooler Temperature Corrected(°C): 2.5 Date/Time 5035A kits placed in freezer _____

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples orignate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: JH 6/14/23

				COMMENTS:
Chain of Custody Present:	☑Yes	☐No		1.
Chain of Custody Filled Out:	☑Yes	☐No		2.
Chain of Custody Relinquished:	☑Yes	☐No		3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No		6.
Rush Turn Around Time Requested	☐Yes	☑No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☑Yes	☐No		8.
Correct Containers Used:	☑Yes	☐No		9.
-Pace Containers Used:.	☑Yes	☐No		
Containers Intact:	☑Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11. Note: if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: SL WT OIL OTHER	JH 6/14/23 ☑Yes	☑No		12. DIOXANE GIVEN NOT ON COC

Date and Initials of person checking preservation:

All containers needing preservation have been pH paper Lot # All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☐Yes	☐No	☑N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl Sample # Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination: KI starch test strips Lot # Residual chlorine strips Lot #	☐Yes	☐No	☑N/A	14. Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sul Lead Acetate Strips Lot #	☐Yes	☐No	☑N/A	15. Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	16.
Trip Blank Present: Trip Blank Custody Seals Present	☐Yes ☐Yes	☐No ☐No	☑N/A ☑N/A	17.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: RICHARD ZIMBARDI Date/Time: 6/20/23 11:25

Comments/ Resolution:

PER RICHARD PLEASE ADD 1,4 DIOXANE + ANALYZE

* PM (Project Manager) review is documented electronically in LIMS.

con-test®
A Pace Analytical® Laboratory

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

June 27, 2023

Jennifer Aracri
Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747

Project Location: PFAS/1,4 DIOXANE 6/19
Client Job Number:
Project Number: 70260250
Laboratory Work Order Number: 23F2721

Enclosed are results of analyses for samples as received by the laboratory on June 21, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 5

23F2721-01 5

23F2721-02 6

Sample Preparation Information 7

QC Data 8

Semivolatile Organic Compounds by - LC/MS-MS 8

B343976 8

Flag/Qualifier Summary 11

Certifications 12

Chain of Custody/Sample Receipt 13

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

Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747
ATTN: Jennifer Aracri

REPORT DATE: 6/27/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 70260250

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F2721

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: PFAS/1,4 DIOXANE 6/19

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
N-07552	23F2721-01	Drinking Water		EPA 533	
N-07552 FB	23F2721-02	Field Blank		EPA 533	

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

CASE NARRATIVE SUMMARY

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

EPA 533

Qualifications:

L-07

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

Analyte & Samples(s) Qualified:

6:2 Fluorotelomersulfonic acid (6:2FTS A)
B343976-BSD1

PF-17

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

Analyte & Samples(s) Qualified:

M2-8:2FTS
23F2721-01[N-07552], 23F2721-02[N-07552 FB], B343976-BLK1

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

M2-8:2FTS
B343976-BSD1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test®
A Pace Analytical® Laboratory

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

Project Location: PFAS/1,4 DIOXANE 6/19 Sample Description: Work Order: 23F2721

Date Received: 6/21/2023

Field Sample #: N-07552 Sampled: 6/19/2023 09:05

Sample ID: 23F2721-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluoropentanoic acid (PFPeA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluorohexanesulfonic acid (PFHxS)	4.3	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluorooctanoic acid (PFOA)	5.6	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluorooctanesulfonic acid (PFOS)	7.5	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2
Perfluorononanoic acid (PFNA)	18	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:30	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	80.3		50-200		6/26/23 19:30
M2-8:2FTS	**222**	*	50-200	PF-17	6/26/23 19:30
MPFBA	65.8		50-200		6/26/23 19:30
M3HFPO-DA	62.0		50-200		6/26/23 19:30
M6PFDA	65.3		50-200		6/26/23 19:30
M3PFBS	80.5		50-200		6/26/23 19:30
M7PFUnA	65.6		50-200		6/26/23 19:30
M2-6:2FTS	96.6		50-200		6/26/23 19:30
M5PFPeA	65.9		50-200		6/26/23 19:30
M5PFHxA	62.6		50-200		6/26/23 19:30
M3PFHxS	82.2		50-200		6/26/23 19:30
M4PFHpA	61.8		50-200		6/26/23 19:30
M8PFOA	65.4		50-200		6/26/23 19:30
M8PFOS	79.0		50-200		6/26/23 19:30
M9PFNA	59.2		50-200		6/26/23 19:30
MPFDoA	65.3		50-200		6/26/23 19:30

con-test®
A Pace Analytical® Laboratory

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

Project Location: PFAS/1,4 DIOXANE 6/19 Sample Description: Work Order: 23F2721

Date Received: 6/21/2023

Field Sample #: N-07552 FB Sampled: 6/19/2023 09:05

Sample ID: 23F2721-02

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluoropentanoic acid (PFPeA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/23/23	6/26/23 19:37	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
M2-4:2FTS	92.9		50-200		6/26/23 19:37
M2-8:2FTS	**317**	*	50-200	PF-17	6/26/23 19:37
MPFBA	95.6		50-200		6/26/23 19:37
M3HFPO-DA	83.2		50-200		6/26/23 19:37
M6PFDA	92.5		50-200		6/26/23 19:37
M3PFBS	91.4		50-200		6/26/23 19:37
M7PFUnA	90.0		50-200		6/26/23 19:37
M2-6:2FTS	112		50-200		6/26/23 19:37
M5PFPeA	93.1		50-200		6/26/23 19:37
M5PFHxA	86.3		50-200		6/26/23 19:37
M3PFHxS	89.3		50-200		6/26/23 19:37
M4PFHpA	88.0		50-200		6/26/23 19:37
M8PFOA	91.3		50-200		6/26/23 19:37
M8PFOS	89.4		50-200		6/26/23 19:37
M9PFNA	84.0		50-200		6/26/23 19:37
MPFDoA	87.2		50-200		6/26/23 19:37

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

Sample Extraction Data

Prep Method:EPA 533 **Analytical Method:EPA 533**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F2721-01 [N-07552]	B343976	272	1.00	06/23/23
23F2721-02 [N-07552 FB]	B343976	277	1.00	06/23/23

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B343976 - EPA 533											
Blank (B343976-BLK1)				Prepared: 06/23/23 Analyzed: 06/26/23							
Perfluorobutanoic acid (PFBA)	ND	1.9	ng/L								
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	ng/L								
Perfluoropentanoic acid (PFPeA)	ND	1.9	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	1.9	ng/L								
11Cl-PF3OUdS (F53B Major)	ND	1.9	ng/L								
9Cl-PF3ONS (F53B Minor)	ND	1.9	ng/L								
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	ng/L								
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	ng/L								
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9	ng/L								
Perfluorodecanoic acid (PFDA)	ND	1.9	ng/L								
Perfluorododecanoic acid (PFDoA)	ND	1.9	ng/L								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L								
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9	ng/L								
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9	ng/L								
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	ng/L								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9	ng/L								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9	ng/L								
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9	ng/L								
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9	ng/L								
Perfluoroundecanoic acid (PFUnA)	ND	1.9	ng/L								
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L								
Perfluoroheptanoic acid (PFHpA)	ND	1.9	ng/L								
Perfluorooctanoic acid (PFOA)	ND	1.9	ng/L								
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	ng/L								
Perfluorononanoic acid (PFNA)	ND	1.9	ng/L								
Surrogate: M2-4:2FTS	*33.3*		ng/L	36.0		92.5		50-200			
Surrogate: M2-8:2FTS	*81.6*		ng/L	36.8		**221**	*	50-200			PF-17
Surrogate: MPFBA	*31.4*		ng/L	38.4		81.9		50-200			
Surrogate: M3HFPO-DA	*32.9*		ng/L	38.4		85.6		50-200			
Surrogate: M6PFDA	*32.0*		ng/L	38.4		83.4		50-200			
Surrogate: M3PFBS	*30.3*		ng/L	35.8		84.7		50-200			
Surrogate: M7PFUnA	*33.2*		ng/L	38.4		86.5		50-200			
Surrogate: M2-6:2FTS	*34.2*		ng/L	36.5		93.8		50-200			
Surrogate: M5PFPeA	*29.8*		ng/L	38.4		77.6		50-200			
Surrogate: M5PFHxA	*30.6*		ng/L	38.4		79.8		50-200			
Surrogate: M3PFHxS	*30.8*		ng/L	36.4		84.7		50-200			
Surrogate: M4PFHpA	*30.5*		ng/L	38.4		79.6		50-200			
Surrogate: M8PFOA	*30.6*		ng/L	38.4		79.6		50-200			
Surrogate: M8PFOS	*29.7*		ng/L	36.8		80.6		50-200			
Surrogate: M9PFNA	*29.4*		ng/L	38.4		76.6		50-200			
Surrogate: MPFDoA	*31.1*		ng/L	38.4		81.1		50-200			
LCS (B343976-BS1)				Prepared: 06/23/23 Analyzed: 06/26/23							
Perfluorobutanoic acid (PFBA)	21.7	1.9	ng/L	19.0		114		70-130			
Perfluorobutanesulfonic acid (PFBS)	19.9	1.9	ng/L	16.8		119		70-130			
Perfluoropentanoic acid (PFPeA)	21.3	1.9	ng/L	19.0		112		70-130			
Perfluorohexanoic acid (PFHxA)	21.8	1.9	ng/L	19.0		115		70-130			
11Cl-PF3OUdS (F53B Major)	20.0	1.9	ng/L	17.9		111		70-130			
9Cl-PF3ONS (F53B Minor)	19.1	1.9	ng/L	17.7		108		70-130			

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B343976 - EPA 533										
LCS (B343976-BS1)				Prepared: 06/23/23 Analyzed: 06/26/23						
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	19.2	1.9	ng/L	17.9		107	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	20.3	1.9	ng/L	19.0		107	70-130			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	22.1	1.9	ng/L	18.2		121	70-130			
Perfluorodecanoic acid (PFDA)	24.0	1.9	ng/L	19.0		127	70-130			
Perfluorododecanoic acid (PFDoA)	24.3	1.9	ng/L	19.0		128	70-130			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	20.3	1.9	ng/L	16.9		120	70-130			
Perfluoroheptanesulfonic acid (PFHpS)	21.0	1.9	ng/L	18.1		116	70-130			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	22.0	1.9	ng/L	17.8		124	70-130			
Perfluorohexanesulfonic acid (PFHxS)	22.1	1.9	ng/L	17.4		127	70-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	23.1	1.9	ng/L	19.0		121	70-130			
Perfluoro-5-oxahexanoic acid (PFMBA)	22.9	1.9	ng/L	19.0		121	70-130			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	23.2	1.9	ng/L	18.1		128	70-130			
Perfluoropentanesulfonic acid (PFPeS)	22.2	1.9	ng/L	17.9		125	70-130			
Perfluoroundecanoic acid (PFUnA)	23.0	1.9	ng/L	19.0		121	70-130			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	24.3	1.9	ng/L	19.0		128	70-130			
Perfluoroheptanoic acid (PFHpA)	22.8	1.9	ng/L	19.0		120	70-130			
Perfluorooctanoic acid (PFOA)	23.4	1.9	ng/L	19.0		123	70-130			
Perfluorooctanesulfonic acid (PFOS)	19.1	1.9	ng/L	17.6		109	70-130			
Perfluorononanoic acid (PFNA)	24.0	1.9	ng/L	19.0		126	70-130			
Surrogate: M2-4:2FTS	*30.2*		ng/L	35.6		84.7	50-200			
Surrogate: M2-8:2FTS	*69.9*		ng/L	36.5		192	50-200			
Surrogate: MPFBA	*30.8*		ng/L	38.0		80.9	50-200			
Surrogate: M3HFPO-DA	*30.7*		ng/L	38.0		80.7	50-200			
Surrogate: M6PFDA	*28.7*		ng/L	38.0		75.6	50-200			
Surrogate: M3PFBS	*30.5*		ng/L	35.4		86.0	50-200			
Surrogate: M7PFUnA	*28.6*		ng/L	38.0		75.2	50-200			
Surrogate: M2-6:2FTS	*34.0*		ng/L	36.1		94.1	50-200			
Surrogate: M5PFPeA	*29.6*		ng/L	38.0		77.8	50-200			
Surrogate: M5PFHxA	*29.6*		ng/L	38.0		77.8	50-200			
Surrogate: M3PFHxS	*28.7*		ng/L	36.0		79.7	50-200			
Surrogate: M4PFHpA	*29.5*		ng/L	38.0		77.6	50-200			
Surrogate: M8PFOA	*29.5*		ng/L	38.0		77.6	50-200			
Surrogate: M8PFOS	*30.0*		ng/L	36.4		82.4	50-200			
Surrogate: M9PFNA	*26.9*		ng/L	38.0		70.7	50-200			
Surrogate: MPFDoA	*26.2*		ng/L	38.0		68.9	50-200			
LCS Dup (B343976-BSD1)				Prepared: 06/23/23 Analyzed: 06/26/23						
Perfluorobutanoic acid (PFBA)	21.3	1.9	ng/L	19.0		112	70-130	2.05	30	
Perfluorobutanesulfonic acid (PFBS)	19.3	1.9	ng/L	16.8		115	70-130	3.53	30	
Perfluoropentanoic acid (PFPeA)	20.9	1.9	ng/L	19.0		110	70-130	2.09	30	
Perfluorohexanoic acid (PFHxA)	21.6	1.9	ng/L	19.0		114	70-130	1.32	30	
11Cl-PF3OUdS (F53B Major)	19.4	1.9	ng/L	17.9		108	70-130	2.85	30	
9Cl-PF3ONS (F53B Minor)	18.8	1.9	ng/L	17.7		106	70-130	1.43	30	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	19.2	1.9	ng/L	17.9		108	70-130	0.0147	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	20.5	1.9	ng/L	19.0		108	70-130	0.992	30	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	20.8	1.9	ng/L	18.2		114	70-130	6.34	30	
Perfluorodecanoic acid (PFDA)	22.6	1.9	ng/L	19.0		119	70-130	6.20	30	
Perfluorododecanoic acid (PFDoA)	22.9	1.9	ng/L	19.0		120	70-130	6.03	30	

con-test®
A Pace Analytical® Laboratory

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

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B343976 - EPA 533											
LCS Dup (B343976-BSD1)				Prepared: 06/23/23 Analyzed: 06/26/23							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	20.7	1.9	ng/L	16.9		122		70-130	1.72	30	
Perfluoroheptanesulfonic acid (PFHpS)	20.8	1.9	ng/L	18.1		115		70-130	1.15	30	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	19.7	1.9	ng/L	17.8		111		70-130	10.6	30	
Perfluorohexanesulfonic acid (PFHxS)	20.4	1.9	ng/L	17.4		117		70-130	8.06	30	
Perfluoro-4-oxapentanoic acid (PFMPA)	22.8	1.9	ng/L	19.0		120		70-130	1.23	30	
Perfluoro-5-oxahexanoic acid (PFMBA)	22.7	1.9	ng/L	19.0		120		70-130	0.864	30	
6:2 Fluorotelomersulfonic acid (6:2FTS A)	25.6	1.9	ng/L	18.0		**142**	*	70-130	9.95	30	L-07
Perfluoropentanesulfonic acid (PFPeS)	20.5	1.9	ng/L	17.9		115		70-130	8.35	30	
Perfluoroundecanoic acid (PFUnA)	21.5	1.9	ng/L	19.0		113		70-130	6.90	30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	23.3	1.9	ng/L	19.0		123		70-130	4.06	30	
Perfluoroheptanoic acid (PFHpA)	22.3	1.9	ng/L	19.0		117		70-130	2.57	30	
Perfluorooctanoic acid (PFOA)	23.6	1.9	ng/L	19.0		124		70-130	0.827	30	
Perfluorooctanesulfonic acid (PFOS)	18.4	1.9	ng/L	17.6		105		70-130	3.84	30	
Perfluorononanoic acid (PFNA)	21.0	1.9	ng/L	19.0		110		70-130	13.4	30	
Surrogate: M2-4:2FTS	*35.1*		ng/L	35.6		98.6		50-200			
Surrogate: M2-8:2FTS	*76.3*		ng/L	36.5		**209**	*	50-200			S-29
Surrogate: MPFBA	*33.4*		ng/L	38.0		87.9		50-200			
Surrogate: M3HFPO-DA	*33.1*		ng/L	38.0		87.1		50-200			
Surrogate: M6PFDA	*33.3*		ng/L	38.0		87.6		50-200			
Surrogate: M3PFBS	*31.3*		ng/L	35.4		88.5		50-200			
Surrogate: M7PFUnA	*31.9*		ng/L	38.0		84.0		50-200			
Surrogate: M2-6:2FTS	*37.1*		ng/L	36.1		103		50-200			
Surrogate: M5PFPeA	*31.9*		ng/L	38.0		84.1		50-200			
Surrogate: M5PFHxA	*33.1*		ng/L	38.0		87.1		50-200			
Surrogate: M3PFHxS	*31.1*		ng/L	36.0		86.4		50-200			
Surrogate: M4PFHpA	*33.2*		ng/L	38.0		87.3		50-200			
Surrogate: M8PFOA	*31.7*		ng/L	38.0		83.4		50-200			
Surrogate: M8PFOS	*31.2*		ng/L	36.4		85.8		50-200			
Surrogate: M9PFNA	*33.3*		ng/L	38.0		87.8		50-200			
Surrogate: MPFDoA	*30.9*		ng/L	38.0		81.3		50-200			

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

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
PF-17	Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
S-29	Extracted Internal Standard is outside of control limits.

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 533 in Drinking Water	
Perfluorobutanoic acid (PFBA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorobutanesulfonic acid (PFBS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanoic acid (PFPeA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanoic acid (PFHxA)	NH,NY,VT-DW,ME,NJ,PA,CT
11Cl-PF3OUdS (F53B Major)	NH,NY,VT-DW,ME,NJ,PA,CT
9Cl-PF3ONS (F53B Minor)	NH,NY,VT-DW,ME,NJ,PA,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH,NY,VT-DW,ME,NJ,PA,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH,NY,VT-DW,ME,NJ,PA,CT
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorodecanoic acid (PFDA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorododecanoic acid (PFDoA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH,NY,VT-DW,ME,NJ,PA,CT
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanesulfonic acid (PFHxS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-4-oxapentanoic acid (PFMPA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-5-oxahexanoic acid (PFMBA)	NH,NY,VT-DW,ME,NJ,PA,CT
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanesulfonic acid (PFPeS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroundecanoic acid (PFUnA)	NH,NY,VT-DW,ME,NJ,PA,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanoic acid (PFHpA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorooctanoic acid (PFOA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorooctanesulfonic acid (PFOS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorononanoic acid (PFNA)	NH,NY,VT-DW,ME,NJ,PA,CT

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2024
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2024
ME	State of Maine	MA00100	06/9/2025
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024

23F2721
KAF

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

Pace Analytical®
www.pacelabs.com

State Of Origin: NY
Cert. Needed: [X] Yes ☐ No
Workorder: 70260250 **Workorder Name:** PFAS/1,4 DIOXANE 6/19
Owner Received Date: 6/19/2023 **Results Requested By:** 7/5/2023

Report To

Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040

Subcontract To

Pace New England
39 Spruce St.
East Longmeadow, MA 01028
Phone (413)525-2332

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	PFAS by 533	LAB USE ONLY
1	N-07552	PS	6/19/2023 09:05	70260250001	Drinking	1	X	
2	N-07552 FB	PS	6/19/2023 09:05	70260250002	Drinking	1	X	
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	Pace LI	6/20/23	MSMa	6/20 1757
2	MSMa	6/20 2000		6/20 2100
3		6/21 0100		6/21 0100

Comments

25 Compound List

Cooler Temperature on Receipt ____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

6/21/23 0430 AAL 06/21/23 07:15

AAL 6/21/23 0850 6-21-23 0856 2.8°C

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F:413-525-6405
www.pacelabs.com

ENV-FRM-ELON-0001 V05__Sample Receiving Checklist

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Pace
PEOPLE ADVANCING SCIENCE

Client Pace- Long Island
Project PFAS 533 - JA
MCP/RCP Required N/A
Deliverable Package Requirement N/A
Location PFAS/1,4 DIOXANE 6/14
PWSID# (When Applicable) N/A
Arrival Method:
Courier ☐ Fed Ex ☑ Walk In ☐ Other ☐
Received By / Date / Time AAM/6-21-23/0850
Back-Sheet By / Date / Time AAM/6-21-23/0955
Temperature Method Temp. Gun# 4
Temp ☑ 6° C Actual Temperature 2.8°C
Rush Samples: Yes / (No) Notify
Short Hold: Yes / (No) Notify

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client	☑	Analysis	☑	Sampler Name	☐
Project	☑	IDs	☑	Collection Date/Time	☑

All Samples Proper pH: (N/A) ☐ ☐

Notes regarding Samples/COC outside of SOP:

Additional Container Notes

Sample	Soils Jars (Circle Amb/Clear)				Ambers							Plastics										VOA Vials					Other / Fill in					
					1 Liter			250mL			100mL	1 Liter		500mL		250mL																
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric	NaOH	NaOH/Zinc	Unpreserved	HCl	MeOH	D.I. Water	BiSulfate	Col/Bact					
1																																
2																												2	250mL Plastic Ammonium acetate			
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																
13																																
14																																
15																																
16																																
17																																
18																																
19																																
20																																