Water Authority
of Western Nassau County

March 28, 2023

New York State Department of Health
Empire State Plaza
Corning Tower
Albany, New York 12237

Re: Deferral Update PFOA, PFOS, 1,4 – dioxane

Dear Sirs:

This letter with attachment represents the first quarter 2023 Capital Project updates for wells which received deferral from MCL violations regarding PFOA, PFOS, and 1,4-dioxane. The Water Authority of Western Nassau County ("Water Authority") continues to aggressively install new wellhead treatment systems to bring all wells into compliance with the regulation that became effective on August 26, 2020.

Sincerely,

Michael J. Tierney
Superintendent

1580 Union Turnpike, New Hyde Park, NY 11040-1762
(516) 327-4100 • Fax (516) 327-4132
www.wawnc.org

Water Authority of Western Nassau County

Station 20, Well 20
Evergreen Avenue, New Hyde Park, N.Y.

Update: March 28, 2023	
Status:	In Service May 14, 2021
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results: (Samples Collected on March 1, 2023)	1,4 – dioxane (.380 part per billion) PFOS (14.0 parts per trillion) PFOA (18.0 parts per trillion)
Most Recent Treated Water Test Results: (Samples Collected on March 1, 2023	PFOS (ND parts per trillion) PFOA (ND parts per trillion)

Construction Project for the Installation of Granular Activated Carbon ("GAC") vessels to remove PFOS/PFOA.

Phase 1 Construction Project Chronological Progress:

May 2020 Pilot Study Performed

August 2020 Pilot Study Report Sent to NYS Department of Health ("NYSDOH")

October 2020 Full Site Engineering Report Complete and Sent to NYSDOH

November 2020 Project Plans and Specifications Complete and sent to NYSDOH

December 2020 Construction Start Date with Estimated Completion Date of April 2021

March 15, 2021 GAC Vessels Arrived

May 2021 Well Startup and Completed Works Approval

Regulatory Approvals Dates	Pilot Study Report April 2021 Full Engineering Report April 2021 Approval of Overall Project May 13, 2021 TOWN DPW Drainage Approval April 29, 2021

County DPW Drainage Approval March 29, 2021

Phase 1 Current Status

All water assets are now installed and in-service effective May 14, 2021. On July 3, 2021 the booster motor failed and the well is temporarily out of service. Emergency protocol was taken to replace the motor. The motor has been replaced and Station is back in service.

Phase 2 Construction Project Permanent Building and Site Work Chronological Progress:

January 2021 Design of Permanent GAC Building

March 2021 Bid Date

July 1, 2021 Construction Start Date. On June 28th the contractor submitted substantial completion letter.

Phase 3 Construction Project Installation of AOP Treatment, Replacement of Elevated Storage Tank and Site Rehabilitation

Estimated Date of Engineering Report June 2023

Project Start Date May 2024

Estimated Completion Date December 2026

Station 28, Well 28
Miriam Parkway, Elmont, N.Y.

Update: March 28, 2023	
Status:	May 20, 2022 In Service
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results: (Samples collected on Dec. 13, 2022) (Quarterly 1, 4 – dioxane collected March 1, 2023	1,4 – dioxane (ND parts per billion) PFOS (8.2 parts per trillion) PFOA (27.0 parts per trillion)
Most Recent Treated Water Test Results: (Samples collected on March 1, 2023)	PFOS (<ND parts per trillion) PFOA (<2.1 parts per trillion)

Construction Project for the Installation of Granular Activated Carbon ("GAC") vessels to remove PFOS/PFOA.

Phase 1 Construction Project Chronological Progress:

November 2019 Full Site Engineering Report Complete and Sent to NYSDOH

November 2019 Project Plans and Specifications Complete and sent to NYSDOH

December 2019 Construction Start Date with Estimated Completion Date of May 2020

June 2020 Well Startup and Completed Works Approval

Regulatory Approvals Dates	Full Engineering Report March 2020 Approval of Overall Project June 2020

Phase 2 Construction Project Temporary Fabric Enclosures:

January 2021 Enclosure Installation Started

February 2021 Enclosure Installation Complete

Phase 3 Construction of Permanent Building around GAC Vessels

Permanent building installation to take place beginning June 2024

**** Well 28 running to system through new treatment. Water quality is in compliance with all NYSDOH Standards.

Station 35, Well 35A
Cisney Avenue, Floral Park, N.Y.

Update: March 28, 2023	
Status:	June 2021 In Service
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results: (Samples collected March 1, 2023)	1,4 – dioxane (.710 parts per billion) PFOS (9.1 parts per trillion) PFOA (15.0 parts per trillion)
Most Recent Treated Water Test Results: (Samples collected March 1, 2023)	1,4 – dioxane (<.020 parts per billion) PFOS (ND parts per trillion) PFOA (ND parts per trillion)

Construction Project for the Installation of Granular Activated Carbon ("GAC") vessels to remove PFOS/PFOA and installation of Ultraviolet Advanced Oxidation Process ("AOP") to remove 1,4 – dioxane.

Phase 1 Construction Project Chronological Progress:

April 2020 Pilot Study Performed

August 2020 Pilot Study Report Sent to NYS Department of Health ("NYSDOH")

October 2020 Full Site Engineering Report Complete and Sent to NYSDOH

December 2020 Project Plans and Specifications Complete and sent to NYSDOH

January 2021 Construction Start Date with Estimated Completion Date of August 2021

GAC Vessels Arrived April 26, 2021

AOP Enclosure Arrived March 4, 2021

AOP Reactor Arrived April 13, 2021

Completed Works Approval January 20, 2022

Well Startup March 2, 2022

Regulatory Approvals Dates	Pilot Study Report March 2021 Full Engineering Report NCDOH April 2021

NYSDOH Approval of Overall Project August 30, 2021

Phase 1 Current Status

Phase 1 is complete and all wellhead treatment systems are operating according to design

Phase 2 Construction Project Permanent GAC Building and Site Work Chronological Progress:

April 2021 Design of Permanent GAC Building

April 26, 2021 Was Bid Opening for Permanent GAC Building

Project is complete.

Phase 3 Construction Project Demolition of Existing Well House to Raise Wells and Site Rehabilitation Work:

Project will start in 2024 following the installation of all Water Authority wellhead treatment for emerging contaminants for all Water Authority impacted wells.

Note: Well 35 at this site is out of service due to high levels of iron.

Station 40, Wells 40 & 40A (Headquarters Site)
Union Turnpike, New Hyde Park, N.Y.

March 28, 2023	
Status:	June 2021 In Service
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results:	
Well 40 (Samples collected March 1, 2023)	1,4 – dioxane (.590 parts per billion) PFOS (6.7 parts per trillion) PFOA (14.0 parts per trillion)
Well 40A (Samples collected Dec. 15, 2022) Blended 40 / 40A	1,4 – dioxane (1.20 parts per billion) PFOS (9.3 parts per trillion) PFOA (17.0 parts per trillion) 1,4 dioxane (.730 parts per billion PFOS (8.4 parts per trillion) PFOA (17.0 parts per trillion)

Construction Project for the Installation of Granular Activated Carbon ("GAC") vessels to remove PFOS/PFOA and installation of Ultraviolet Advanced Oxidation Process ("AOP") to remove 1,4 – dioxane.

Phase 1 Construction Project Chronological Progress:

April 2020 Pilot Study Performed

August 2020 Pilot Study Report Sent to NYS Department of Health ("NYSDOH")

Regulatory Approvals Dates	Pilot Study Report March 2021 Full Engineering Report NCDOH April 2021 (Awaiting comments from NYSDOH) Approval of Overall Project December 2021 Blending Application Sent to NYSDOH and NCDOH on April 20, 2021. Approval of

Blending application has been received on Sept. 29, 2021.

*Water Authority is awaiting NYSDOH comments on Pilot Study.

Available space for wellhead treatment at this site is an obstacle to preparing the full engineering report and to prepare project design and specifications. This site serves as the Water Authority headquarters location.

As of June 2022 the Water Authority had acquired both residential properties adjacent to Station 40 which are now vacant. Both buildings have now been demolished and preliminary site preparation has taken place. Bid Design for installation of new GAC and AOP systems is well underway (approximately 80% complete) with multiple meetings between staff and H2M.

The Water Authority has instructed the engineering firm of H2M Group to prepare a request for blending proposal of the two wells located at Station 40. This report was sent on April 20, 2021 and approval received from the NCDOH on Sept. 29, 2021. The Engineering Report is expected to be complete by January 2022 using the assumption that the adjacent property is acquired. DOH approval is expected several months following submission. Water currently produced is blended. Potential delays could occur toward the procurement of necessary treatment system assets. It is expected to take 3-4 months to obtain GAC vessels and 6-7 months to obtain an AOP reactor. Contractor labor issues continue to slow down all emerging contaminant projects as a result of many projects underway throughout the water industry.

Station 44, Wells 44, 44A, 44B, 44C
Chelsea Street, Elmont, N.Y.

Update: March 28, 2023	
Status:	June 2021 In Service
	1,4 – dioxane (1 part per billion)
NYS Allowable levels:	PFOS (10 parts per trillion)
	PFOA (10 parts per trillion)
Most Recent Raw Water Test Results:	
Well 44	
(PFOS/PFOA Samples collected March 1, 2023)	1,4 – dioxane (ND parts per billion)
	PFOS (8.9 parts per trillion)
Quarterly 1, 4 – dioxane samples collected March 1, 2023	PFOA (16.0 parts per trillion)
Well 44A	
(PFOS/PFOA Samples collected March 1, 2023)	1,4 – dioxane (ND parts per billion)
	PFOS (19.0 parts per trillion)
Quarterly 1, 4 – dioxane samples collected March 1, 2023	PFOA (7.0 parts per trillion)
Well 44B	
(PFOS/PFOA Samples collected March 1, 2023)	1,4 – dioxane (ND parts per billion)
	PFOS (12.0 parts per trillion)
Quarterly 1, 4 – dioxane samples collected March 1, 2023	PFOA (24.0 parts per trillion)
Well 44C	
(PFOS/PFOA Samples collected March 1, 2023)	1,4 – dioxane (ND parts per billion)
	PFOS (9.4 parts per trillion)
Quarterly 1, 4 – dioxane samples collected March 1, 2023	PFOA (19.0 parts per trillion)
Most Recent Treated Water Test Results:	
Well 44 / 44A	
(Samples collected March 1, 2023)	PFOS (ND parts per trillion)

	PFOA (4.6 parts per trillion)
Well 44B / 44C (Samples collected March 1, 2023)	PFOS (ND parts per trillion) PFOA (3.3 parts per trillion)

Construction Project for the Installation of Granular Activated Carbon ("GAC") vessels to remove PFOS/PFOA.

Phase 1 Construction Project Chronological Progress:

September 2019 Full Engineering report complete and sent to NYSDOH

November 2019 Project design and specifications complete and sent to NYSDOH

December 2019 Project Construction begins

January 2020 Calgon Carbon column testing performed

Actual Regulatory Approval Dates	Full Engineering Report March 2020 Design Approval April 2020 Approval of Overall Project in Service June 2020

Phase 2 Construction Project Temporary Fabric Vessel Enclosures:

December 2020 Construction of Fabric tent enclosures around 2 sets of vessels

January 2021 Tent Enclosures are Complete

Phase 3 Construction Project Permanent Treatment Buildings, Raising Wells and full site Rehabilitation including Emergency Generators:

Design and Specifications for Public Bidding is 100% complete and under review by Water Authority staff. Corrections have been incorporated and second review is complete and changes are being incorporated.

September 2023 Construction starts

Project length is estimated at 2 years

****Wells 44, 44A, 44B and 44C running to system through new treatment. Water quality is in compliance with all NYSDOH Standards.

Station 57, Wells 57, 57A
South 6th Street, New Hyde Park, N.Y.

Update: March 28, 2023	
Status:	**Remains Out of Service** since October 15, 2020
NYS Allowable levels:	1,4 – dioxane (1 part per billion) PFOS (10 parts per trillion) PFOA (10 parts per trillion)
Most Recent Raw Water Test Results:	
Well 57 (Samples collected Jan. 18, 2023 for 1,4 – dioxane and Jan. 11, 2023 for PFOS/PFOA)	1,4 – dioxane (4.3 parts per billion) PFOS (30.8 parts per trillion) PFOA (76.3 parts per trillion)
Well 57A (Samples collected June 10, 2022)	1,4 – dioxane (25.1 parts per billion) PFOS (11.6 parts per trillion) PFOA (95.3 parts per trillion)

Construction Project for the Installation of Granular Activated Carbon ("GAC") vessels to remove PFOS/PFOA and installation of Ultraviolet Advanced Oxidation Process ("AOP) to remove 1,4 – dioxane.

Most Recent Treated Water Test Results:	
Well 57 (Samples collected Jan. 18, 2023 for 1, 4 dioxane and Jan. 11, 2023 for PFOS/PFOA)	1,4 – dioxane (.120 parts per billion) PFOS (<2.0parts per trillion) PFOA (<2.0 parts per trillion)
Well 57A (Samples collected March 3, 2023 for 1,4 – dioxane and June 10, 2022 for PFOS/PFOA)	1,4 – dioxane (.029 parts per billion) PFOS (11.6 parts per trillion) PFOA (95.3 parts per trillion)

Phase 1 Construction Project Chronological Progress of Full Site Rehabilitation:

December 2016 Acquired property adjacent to this site

September 2018 Pilot Study Performed

March 2019 Pilot Study Report Sent to NYS Department of Health ("NYSDOH")

June 2019 Full Engineering report complete and sent to NYSDOH

January 2020 Project design and specifications complete and sent to NYSDOH

October 2020 Project Construction begins with Estimated Completion Date of November 2022 for Well 57. Well 57A will require additional performance testing.

Estimated Regulatory Approval Dates	Pilot Study Report July 2019
	Full Engineering Report May 2020
	Approval of Overall Project October 2022

This project includes a full site rehabilitation including demolition of all existing buildings, raising wells, new air stripper tower, new emergency generator, replacement of all water assets and appurtenances and new wellhead treatment for the removal of emerging contaminants.

Current Status

Following operating Well 57 to waste for 4 consecutive months, with weekly laboratory sampling, the aldehyde levels resulted in non-detect. Based on these results, and non-detect levels for 1,4 dioxane and PFAs the DOH gave approval for Well 57 to go to system. This is expected to take place on April 3, 2023. The same approach will now be taken with regards to Well 57A.

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

Pace

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70247972004
Client Sample ID.: N-00017

Federal ID : 2902830
Collected : 03/01/2023 10:28 AM Point N-00017
Received : 03/01/2023 01:22 PM Location Well #20
Collected By Client No NHP

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 9:40 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.38		1	ug/L	1	03/03/2023 4:25 PM	004 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	103%		1	%REC		03/03/2023 4:25 PM	004 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: 03/13/2023

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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

Project Location: NY
Sample Description:
Work Order: 23C0523

Date Received: 3/3/2023
Field Sample #: N-00017 20 RAW
Sampled: 3/1/2023 10:28
Sample ID: 23C0523-04
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
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:56	JR2
Perfluorohexanesulfonic acid (PFHxS)	5.0	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:56	JR2
Perfluoroheptanoic acid (PFHpA)	4.2	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:56	JR2
Perfluorooctanoic acid (PFOA)	18	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:56	JR2
Perfluorooctanesulfonic acid (PFOS)	14	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:56	JR2
Perfluorononanoic acid (PFNA)	8.4	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:56	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	101	70-130		3/8/23 14:56
M3HFPO-DA	95.8	70-130		3/8/23 14:56
13C-PFDA	106	70-130		3/8/23 14:56
D5-NEtFOSAA	112	70-130		3/8/23 14:56

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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: 23C0523

Date Received: 3/3/2023
Field Sample #: AS/GAC-00017 20 TREATED
Sampled: 3/1/2023 10:30
Sample ID: 23C0523-05
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
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:03	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:03	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:03	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:03	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:03	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:03	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	104	70-130		3/8/23 15:03
M3HFPO-DA	96.5	70-130		3/8/23 15:03
13C-PFDA	101	70-130		3/8/23 15:03
D5-NEtFOSAA	107	70-130		3/8/23 15:03

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

Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728004
Client Sample ID.: N-02414

Federal ID : 2902830
Collected : 01/10/2023 10:54 AM Point N-02414
Received : 01/10/2023 03:30 PM Location Well #28
Collected By PACE Elmont

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/11/2023 3:00 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.022		1	ug/L	1	01/12/2023 4:32 PM	004 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	81%		1	%REC		01/12/2023 4:32 PM	004 AG2R1/2

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	4.5		1	ng/L		01/13/2023 10:34	004 BP3T1/2
Perfluoroheptanoic acid	3.9		1	ng/L		01/13/2023 10:34	004 BP3T1/2
Perfluorohexanesulfonic acid	3.3		1	ng/L		01/13/2023 10:34	004 BP3T1/2
Perfluorononanoic acid	3.7		1	ng/L		01/13/2023 10:34	004 BP3T1/2
Perfluorooctanesulfonic acid	4.9		1	ng/L	10	01/13/2023 10:34	004 BP3T1/2
Perfluorooctanoic acid	**14.3***		1	ng/L	10	01/13/2023 10:34	004 BP3T1/2
Surr: 13C2-PFDA (S)	89%		1	%REC		01/13/2023 10:34	004 BP3T1/2
Surr: 13C2-PFHxA (S)	84%		1	%REC		01/13/2023 10:34	004 BP3T1/2
Surr: HFPO-DAS (S)	79%		1	%REC		01/13/2023 10:34	004 BP3T1/2

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: 01/16/2023

Jennifer Aracri
Test results meet the requirements of NELAC unless otherwise noted.

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Pace
575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

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

Treatment
GAC

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728005
Client Sample ID.: GAC-02414

Federal ID : 2902830
Collected : 01/10/2023 11:01 AM Point GAC-02414
Received : 01/10/2023 03:30 PM Location Well #28
Collected By PACE

Analytical Method: EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	<1.8		1	ng/L		01/13/2023 10:50	005 BP3T1/2
Perfluoroheptanoic acid	<1.8		1	ng/L		01/13/2023 10:50	005 BP3T1/2
Perfluorohexanesulfonic acid	<1.8		1	ng/L		01/13/2023 10:50	005 BP3T1/2
Perfluorononanoic acid	<1.8		1	ng/L		01/13/2023 10:50	005 BP3T1/2
Perfluorooctanesulfonic acid	<1.8		1	ng/L	10	01/13/2023 10:50	005 BP3T1/2
Perfluorooctanoic acid	<1.8		1	ng/L	10	01/13/2023 10:50	005 BP3T1/2
Surr: 13C2-PFDA (S)	94%		1	%REC		01/13/2023 10:50	005 BP3T1/2
Surr: 13C2-PFHxA (S)	90%		1	%REC		01/13/2023 10:50	005 BP3T1/2
Surr: HFPO-DAS (S)	88%		1	%REC		01/13/2023 10:50	005 BP3T1/2

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: 01/16/2023

Jennifer Aracri

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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

Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728006
Client Sample ID.: N-10211

Federal ID : 2902830
Collected : 01/10/2023 10:48 AM Point N-10211
Received : 01/10/2023 03:30 PM Location Well #28B
Collected By PACE Elmont

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/11/2023 3:00 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.17		1	ug/L	1	01/12/2023 4:47 PM	006 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	90%		1	%REC		01/12/2023 4:47 PM	006 AG2R1/2

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	<1.8		1	ng/L		01/13/2023 11:06	006 BP3T1/2
Perfluoroheptanoic acid	<1.8		1	ng/L		01/13/2023 11:06	006 BP3T1/2
Perfluorohexanesulfonic acid	<1.8		1	ng/L		01/13/2023 11:06	006 BP3T1/2
Perfluorononanoic acid	<1.8		1	ng/L		01/13/2023 11:06	006 BP3T1/2
Perfluorooctanesulfonic acid	<1.8		1	ng/L	10	01/13/2023 11:06	006 BP3T1/2
Perfluorooctanoic acid	<1.8		1	ng/L	10	01/13/2023 11:06	006 BP3T1/2
Surr: 13C2-PFDA (S)	78%		1	%REC		01/13/2023 11:06	006 BP3T1/2
Surr: 13C2-PFHxA (S)	88%		1	%REC		01/13/2023 11:06	006 BP3T1/2
Surr: HFPO-DAS (S)	85%		1	%REC		01/13/2023 11:06	006 BP3T1/2

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: 01/16/2023

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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

Project Location: NY
Sample Description:
Work Order: 23C0523

Date Received: 3/3/2023
Field Sample #: N-02414 28 Raw
Sampled: 3/1/2023 12:40
Sample ID: 23C0523-08
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
Perfluorobutanesulfonic acid (PFBS)	7.1	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:25	JR2
Perfluorohexanesulfonic acid (PFHxS)	6.0	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:25	JR2
Perfluoroheptanoic acid (PFHpA)	6.7	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:25	JR2
Perfluorooctanoic acid (PFOA)	27	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:25	JR2
Perfluorooctanesulfonic acid (PFOS)	8.2	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:25	JR2
Perfluorononanoic acid (PFNA)	6.2	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:25	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	125	70-130		3/8/23 15:25
M3HFPO-DA	119	70-130		3/8/23 15:25
13C-PFDA	126	70-130		3/8/23 15:25
D5-NEtFOSAA	115	70-130		3/8/23 15:25

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

Project Location: PFAS/1,4 DIOXANE 3/1 Sample Description: Work Order: 23C0624

Date Received: 3/4/2023

Field Sample #: GAC-02414 28 TREATED Sampled: 3/1/2023 12:38

Sample ID: 23C0624-01

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
Perfluorobutanesulfonic acid (PFBS)	2.3	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 15:55	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 15:55	AMS
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 15:55	AMS
Perfluorooctanoic acid (PFOA)	2.1	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 15:55	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 15:55	AMS
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 15:55	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	94.5	70-130		3/8/23 15:55
M3HFPO-DA	97.4	70-130		3/8/23 15:55
13C-PFDA	94.4	70-130		3/8/23 15:55
D5-NEtFOSAA	100	70-130		3/8/23 15:55

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

Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728007
Client Sample ID.: N-03720

Federal ID : 2902830
Collected : 01/10/2023 10:20 AM Point N-03720
Received : 01/10/2023 03:30 PM Location Well #30
Collected By PACE

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/11/2023 3:00 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.056		1	ug/L	1	01/12/2023 5:03 PM	007 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	80%		1	%REC		01/12/2023 5:03 PM	007 AG2R1/2

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	<1.8		1	ng/L		01/13/2023 11:22	007 BP3T1/2
Perfluoroheptanoic acid	<1.8		1	ng/L		01/13/2023 11:22	007 BP3T1/2
Perfluorohexanesulfonic acid	<1.8		1	ng/L		01/13/2023 11:22	007 BP3T1/2
Perfluorononanoic acid	<1.8		1	ng/L		01/13/2023 11:22	007 BP3T1/2
Perfluorooctanesulfonic acid	<1.8		1	ng/L	10	01/13/2023 11:22	007 BP3T1/2
Perfluorooctanoic acid	<1.8		1	ng/L	10	01/13/2023 11:22	007 BP3T1/2
Surr: 13C2-PFDA (S)	89%		1	%REC		01/13/2023 11:22	007 BP3T1/2
Surr: 13C2-PFHxA (S)	87%		1	%REC		01/13/2023 11:22	007 BP3T1/2
Surr: HFPO-DAS (S)	82%		1	%REC		01/13/2023 11:22	007 BP3T1/2

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: 01/16/2023

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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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

Pace

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70247972006
Client Sample ID.: N-04298

Federal ID : 2902830
Collected : 03/01/2023 11:25 AM Point N-04298
Received : 03/01/2023 01:22 PM Location Well #35A
Collected By Client Ft Pk

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 9:40 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.71		1	ug/L	1	03/03/2023 5:00 PM	006 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	104%		1	%REC		03/03/2023 5:00 PM	006 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: 03/13/2023

Jennifer Aracri

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Laboratory Results

Results for the samples and analytes requested

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Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
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Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70247972007
Client Sample ID.: AOP-35/35A

Federal ID : 2902830
Collected : 03/01/2023 11:15 AM Point AOP-35/35A
Received : 03/01/2023 01:22 PM Location Well 35,35A
Collected By Client

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 9:40 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	<0.020		1	ug/L	1	03/03/2023 5:18 PM	007 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	106%		1	%REC		03/03/2023 5:18 PM	007 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: 03/13/2023

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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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

Pace

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
Air Stripper

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70247972008
Client Sample ID.: AOP-35/35A

Federal ID : 2902830
Collected : 03/01/2023 11:25 AM Point AOP-35/35A
Received : 03/01/2023 01:22 PM Location Well 35,35A
Collected By Client

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 9:40 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	<0.020		1	ug/L	1	03/03/2023 5:36 PM	008 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	101%		1	%REC		03/03/2023 5:36 PM	008 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: 03/13/2023

Jennifer Aracri

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

Project Location: NY
Sample Description:
Work Order: 23C0523

Date Received: 3/3/2023
Field Sample #: N-04298 35A RAW
Sampled: 3/1/2023 11:25
Sample ID: 23C0523-06
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
Perfluorobutanesulfonic acid (PFBS)	4.1	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:10	JR2
Perfluorohexanesulfonic acid (PFHxS)	7.0	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:10	JR2
Perfluoroheptanoic acid (PFHpA)	5.7	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:10	JR2
Perfluorooctanoic acid (PFOA)	15	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:10	JR2
Perfluorooctanesulfonic acid (PFOS)	9.1	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:10	JR2
Perfluorononanoic acid (PFNA)	7.2	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:10	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	119	70-130		3/8/23 15:10
M3HFPO-DA	107	70-130		3/8/23 15:10
13C-PFDA	119	70-130		3/8/23 15:10
D5-NEtFOSAA	127	70-130		3/8/23 15:10

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

Project Location: NY
Sample Description:
Work Order: 23C0523

Date Received: 3/3/2023
Field Sample #: AOP-35/35A 35A TREATED
Sampled: 3/1/2023 11:25
Sample ID: 23C0523-07
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
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:18	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:18	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:18	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:18	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:18	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 15:18	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	92.1	70-130		3/8/23 15:18
M3HFPO-DA	87.6	70-130		3/8/23 15:18
13C-PFDA	116	70-130		3/8/23 15:18
D5-NEtFOSAA	114	70-130		3/8/23 15:18

Laboratory Results

Results for the samples and analytes requested

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Pace

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70247972001
Client Sample ID.: N-04390

Federal ID : 2902830
Collected : 03/01/2023 09:47 AM Point N-04390
Received : 03/01/2023 01:22 PM Location Well #40
Collected By Client No NHP

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 9:40 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.59		1	ug/L	1	03/03/2023 3:32 PM	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	103%		1	%REC		03/03/2023 3:32 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.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported: 03/13/2023

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

Pace

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70247972002
Client Sample ID.: N-07445

Federal ID : 2902830
Collected : 03/01/2023 09:47 AM Point N-07445
Received : 03/01/2023 01:22 PM Location Well #40A
Collected By Client No NHP

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 9:40 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	1.2*		1	ug/L	1	03/03/2023 3:50 PM	002 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	103%		1	%REC		03/03/2023 3:50 PM	002 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: 03/13/2023

Jennifer Aracri

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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

Pace

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
Air Stripper

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70247972003
Client Sample ID.: AS-07445

Federal ID : 2902830
Collected : 03/01/2023 09:55 AM Point AS-07445
Received : 03/01/2023 01:22 PM Location Well 40,40A
Collected By Client

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 9:40 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.73		1	ug/L	1	03/03/2023 4:08 PM	003 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	103%		1	%REC		03/03/2023 4:08 PM	003 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: 03/13/2023

Jennifer Aracri

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

Project Location: NY
Sample Description:
Work Order: 23C0523

Date Received: 3/3/2023
Field Sample #: N-04390 40 RAW
Sampled: 3/1/2023 09:47
Sample ID: 23C0523-01
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
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:35	JR2
Perfluorohexanesulfonic acid (PFHxS)	5.8	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:35	JR2
Perfluoroheptanoic acid (PFHpA)	4.3	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:35	JR2
Perfluorooctanoic acid (PFOA)	14	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:35	JR2
Perfluorooctanesulfonic acid (PFOS)	6.7	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:35	JR2
Perfluorononanoic acid (PFNA)	2.3	1.8		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:35	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	88.1	70-130		3/8/23 14:35
M3HFPO-DA	77.5	70-130		3/8/23 14:35
13C-PFDA	106	70-130		3/8/23 14:35
D5-NEtFOSAA	112	70-130		3/8/23 14:35

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

Project Location: NY
Sample Description:
Work Order: 23C0523

Date Received: 3/3/2023
Field Sample #: N-07445 40A RAW
Sampled: 3/1/2023 09:47
Sample ID: 23C0523-02
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
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:42	JR2
Perfluorohexanesulfonic acid (PFHxS)	3.2	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:42	JR2
Perfluoroheptanoic acid (PFHpA)	3.1	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:42	JR2
Perfluorooctanoic acid (PFOA)	17	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:42	JR2
Perfluorooctanesulfonic acid (PFOS)	9.3	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:42	JR2
Perfluorononanoic acid (PFNA)	4.8	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:42	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	103	70-130		3/8/23 14:42
M3HFPO-DA	98.6	70-130		3/8/23 14:42
13C-PFDA	102	70-130		3/8/23 14:42
D5-NEtFOSAA	88.6	70-130		3/8/23 14:42

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: 23C0523

Date Received: 3/3/2023
Field Sample #: AS-07445 40/40A TREATED
Sampled: 3/1/2023 09:55
Sample ID: 23C0523-03
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
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:49	JR2
Perfluorohexanesulfonic acid (PFHxS)	6.0	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:49	JR2
Perfluoroheptanoic acid (PFHpA)	4.6	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:49	JR2
Perfluorooctanoic acid (PFOA)	17	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:49	JR2
Perfluorooctanesulfonic acid (PFOS)	8.4	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:49	JR2
Perfluorononanoic acid (PFNA)	3.3	1.9		ng/L	1		EPA 537.1	3/6/23	3/8/23 14:49	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	105	70-130		3/8/23 14:49
M3HFPO-DA	98.7	70-130		3/8/23 14:49
13C-PFDA	110	70-130		3/8/23 14:49
D5-NEtFOSAA	110	70-130		3/8/23 14:49

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

Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728008
Client Sample ID.: N-05155

Federal ID : 2902830
Collected : 01/10/2023 01:08 PM Point N-05155
Received : 01/10/2023 03:30 PM Location Well #44
Collected By PACE Elmont

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/11/2023 3:00 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.045		1	ug/L	1	01/12/2023 5:19 PM	008 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	86%		1	%REC		01/12/2023 5:19 PM	008 AG2R1/2

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	5.3		1	ng/L		01/13/2023 11:54	008 BP3T1/2
Perfluoroheptanoic acid	4.5		1	ng/L		01/13/2023 11:54	008 BP3T1/2
Perfluorohexanesulfonic acid	3.9		1	ng/L		01/13/2023 11:54	008 BP3T1/2
Perfluorononanoic acid	<1.8		1	ng/L		01/13/2023 11:54	008 BP3T1/2
Perfluorooctanesulfonic acid	7.9		1	ng/L	10	01/13/2023 11:54	008 BP3T1/2
Perfluorooctanoic acid	**13.4***		1	ng/L	10	01/13/2023 11:54	008 BP3T1/2
Surr: 13C2-PFDA (S)	92%		1	%REC		01/13/2023 11:54	008 BP3T1/2
Surr: 13C2-PFHxA (S)	88%		1	%REC		01/13/2023 11:54	008 BP3T1/2
Surr: HFPO-DAS (S)	82%		1	%REC		01/13/2023 11:54	008 BP3T1/2

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: 01/16/2023

Jennifer Aracri

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Laboratory Results

Results for the samples and analytes requested

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Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728009
Client Sample ID.: N-05156

Federal ID : 2902830
Collected : 01/10/2023 01:12 PM Point N-05156
Received : 01/10/2023 03:30 PM Location Well #44A
Collected By PACE Elmont

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/11/2023 3:00 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.14		1	ug/L	1	01/13/2023 12:07	009 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	83%		1	%REC		01/13/2023 12:07	009 AG2R1/2

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	<1.8		1	ng/L		01/14/2023 12:10	009 BP3T1/2
Perfluoroheptanoic acid	2.5		1	ng/L		01/14/2023 12:10	009 BP3T1/2
Perfluorohexanesulfonic acid	4.1		1	ng/L		01/14/2023 12:10	009 BP3T1/2
Perfluorononanoic acid	5.4		1	ng/L		01/14/2023 12:10	009 BP3T1/2
Perfluorooctanesulfonic acid	**13.3***		1	ng/L	10	01/14/2023 12:10	009 BP3T1/2
Perfluorooctanoic acid	5.6		1	ng/L	10	01/14/2023 12:10	009 BP3T1/2
Surr: 13C2-PFDA (S)	95%		1	%REC		01/14/2023 12:10	009 BP3T1/2
Surr: 13C2-PFHxA (S)	90%		1	%REC		01/14/2023 12:10	009 BP3T1/2
Surr: HFPO-DAS (S)	84%		1	%REC		01/14/2023 12:10	009 BP3T1/2

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.

Jennifer Aracri

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Date Reported: 01/16/2023

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

Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Treatment
Air Stripper/GAC

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728010
Client Sample ID.: AS/GAC-44/44A

Federal ID : 2902830
Collected : 01/10/2023 12:51 PM Point AS/GAC-44/44A
Received : 01/10/2023 03:30 PM Location Well 44,44A
Collected By PACE

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	2.2		1	ng/L		01/14/2023 12:26	010 BP3T1/2
Perfluoroheptanoic acid	<1.8		1	ng/L		01/14/2023 12:26	010 BP3T1/2
Perfluorohexanesulfonic acid	<1.8		1	ng/L		01/14/2023 12:26	010 BP3T1/2
Perfluorononanoic acid	<1.8		1	ng/L		01/14/2023 12:26	010 BP3T1/2
Perfluorooctanesulfonic acid	<1.8		1	ng/L	10	01/14/2023 12:26	010 BP3T1/2
Perfluorooctanoic acid	<1.8		1	ng/L	10	01/14/2023 12:26	010 BP3T1/2
Surr: 13C2-PFDA (S)	94%		1	%REC		01/14/2023 12:26	010 BP3T1/2
Surr: 13C2-PFHxA (S)	89%		1	%REC		01/14/2023 12:26	010 BP3T1/2
Surr: HFPO-DAS (S)	84%		1	%REC		01/14/2023 12:26	010 BP3T1/2

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

Date Reported: 01/16/2023

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Laboratory Results

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Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728011
Client Sample ID.: N-06744

Federal ID : 2902830
Collected : 01/10/2023 01:40 PM Point N-06744
Received : 01/10/2023 03:30 PM Location Well #44B
Collected By PACE Elmont

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/11/2023 3:00 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.044		1	ug/L	1	01/12/2023 5:51 PM	011 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	84%		1	%REC		01/12/2023 5:51 PM	011 AG2R1/2

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	6.3		1	ng/L		01/14/2023 12:42	011 BP3T1/2
Perfluoroheptanoic acid	6.5		1	ng/L		01/14/2023 12:42	011 BP3T1/2
Perfluorohexanesulfonic acid	5.1		1	ng/L		01/14/2023 12:42	011 BP3T1/2
Perfluorononanoic acid	<1.8		1	ng/L		01/14/2023 12:42	011 BP3T1/2
Perfluorooctanesulfonic acid	9.9		1	ng/L	10	01/14/2023 12:42	011 BP3T1/2
Perfluorooctanoic acid	**18.6***		1	ng/L	10	01/14/2023 12:42	011 BP3T1/2
Surr: 13C2-PFDA (S)	90%		1	%REC		01/14/2023 12:42	011 BP3T1/2
Surr: 13C2-PFHxA (S)	84%		1	%REC		01/14/2023 12:42	011 BP3T1/2
Surr: HFPO-DAS (S)	77%		1	%REC		01/14/2023 12:42	011 BP3T1/2

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.
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Date Reported: 01/16/2023

Laboratory Results

Results for the samples and analytes requested

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Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 · FAX: (631) 420-8436
www.pacelabs.com

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

Treatment
Air Stripper/GAC

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728012
Client Sample ID.: AS/GAC-44B/44C

Federal ID : 2902830
Collected : 01/10/2023 01:16 PM Point AS/GAC-44B/44C
Received : 01/10/2023 03:30 PM Location Well 44B,44C
Collected By PACE

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	2.4	P4	1	ng/L		01/14/2023 12:58	012 BP3T1/2
Perfluoroheptanoic acid	<1.8	P4	1	ng/L		01/14/2023 12:58	012 BP3T1/2
Perfluorohexanesulfonic acid	<1.8	P4	1	ng/L		01/14/2023 12:58	012 BP3T1/2
Perfluorononanoic acid	<1.8	P4	1	ng/L		01/14/2023 12:58	012 BP3T1/2
Perfluorooctanesulfonic acid	<1.8	P4	1	ng/L	10	01/14/2023 12:58	012 BP3T1/2
Perfluorooctanoic acid	<1.8	P4	1	ng/L	10	01/14/2023 12:58	012 BP3T1/2
Surr: 13C2-PFDA (S)	91%		1	%REC		01/14/2023 12:58	012 BP3T1/2
Surr: 13C2-PFHxA (S)	87%		1	%REC		01/14/2023 12:58	012 BP3T1/2
Surr: HFPO-DAS (S)	85%		1	%REC		01/14/2023 12:58	012 BP3T1/2

Qualifiers:
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Date Reported: 01/16/2023

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Laboratory Results

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TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242728013
Client Sample ID.: N-06745

Federal ID : 2902830
Collected : 01/10/2023 01:32 PM Point N-06745
Received : 01/10/2023 03:30 PM Location Well #44C
Collected By PACE Elmont

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/11/2023 3:00 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.053		1	ug/L	1	01/12/2023 6:07 PM	013 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	76%		1	%REC		01/12/2023 6:07 PM	013 AG2R1/2

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 01/12/2023 11:45

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	5.5		1	ng/L		01/14/2023 1:14 AM	013 BP3T1/2
Perfluoroheptanoic acid	5.3		1	ng/L		01/14/2023 1:14 AM	013 BP3T1/2
Perfluorohexanesulfonic acid	4.0		1	ng/L		01/14/2023 1:14 AM	013 BP3T1/2
Perfluorononanoic acid	<1.8		1	ng/L		01/14/2023 1:14 AM	013 BP3T1/2
Perfluorooctanesulfonic acid	7.7		1	ng/L	10	01/14/2023 1:14 AM	013 BP3T1/2
Perfluorooctanoic acid	14.7*		1	ng/L	10	01/14/2023 1:14 AM	013 BP3T1/2
Surr: 13C2-PFDA (S)	92%		1	%REC		01/14/2023 1:14 AM	013 BP3T1/2
Surr: 13C2-PFHxA (S)	88%		1	%REC		01/14/2023 1:14 AM	013 BP3T1/2
Surr: HFPO-DAS (S)	80%		1	%REC		01/14/2023 1:14 AM	013 BP3T1/2
Surr: NEtFOSAA-d5 (S)	82%		1	%REC		01/14/2023 1:14 AM	013 BP3T1/2

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

Date Reported: 01/16/2023

Jennifer Aracri

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575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

WorkOrder :
70242728

Laboratory Certifications

Pace Analytical Services Ormond Beach
8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maine Certification #: FL01264
Maryland Certification: #346
Massachusetts Certification #: M-FL1264
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Ohio DEP 87780
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

WorkOrder :
70242728

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

Pace

CHAIN-OF-CUSTODY / Analytical Request Doc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must b

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelab

WO#: 70242728

70242728

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Water Auth. of Western Nassau	Report To:	Joseph Corbisiero	Attention:	
Address:	1580 Union Tpke.	Copy To:		Company Name:	
New Hyde Park, NY 11040				Address:	Regulatory Agency
Email:	jcorbisiero@wawnc.org	Purchase Order #:		Pace Quote:	
Phone:	(516)527-4053 Fax:	Project Name:	PFAS/1,4 Dioxane 1/10	Pace Project Manager:	jennifer.aracri@pacelabs.com, State / Location
Requested Due Date:		Project #:		Pace Profile #:	5131 NY

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	PFAS by 537	1,4 Dioxane	Residual Chlorine (Y/N)	
1	N-10206	DW				1/10/23	12:29												X	X		001
2	N-10207	DW					12:35												X	X		002
3	N-07482	DW					11:28												X	X		003
4	N-02414	DW					10:54												X	X		004
5	GAC-02414	DW					11:01												X			005
6	N-10211	DW					10:48												X	X		006
7	N-03720	DW					10:20												X	X		007
8	N-05155	DW					1308												X	X		008
9	N-05156	DW					1312												X	X		009
10	AS/GAC-44/44A	DW					12:51												X			010
11	N-06744	DW					1340												X	X		011
12	N-06745	DW				↓	1332												X	X		013

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		1/10/23	1530		1/10/23	15:30	6.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: ILHAN ILIK

SIGNATURE of SAMPLER: DATE Signed: 1/10/23

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Page 16 of 18

Pace

CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacela

WO#: 70242728

PM: JSA Due Date: 01/23/23

CLIENT: WAWN

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Water Auth. of Western Nassau	Report To:	Joseph Corbisiero	Attention:	
Address:	1580 Union Tpke.	Copy To:		Company Name:	
New Hyde Park, NY 11040				Address:	
Email:	jcorbisiero@wawnc.org	Purchase Order #:		Pace Quote:	
Phone:	(516)327-4053 Fax:	Project Name:	PFAS/1,4 Dioxane 1/10	Pace Project Manager:	jennifer.aracri@pacelabs.com.
Requested Due Date:		Project #:		Pace Profile #:	5131

Regulatory Agency	State / Location
	NY

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	PFAS by 537	1,4 Dioxane	Residual Chlorine (Y/N)	
13	AS/GAC-44B/44C	DW				1/10/23	1316												X			D12
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		1/10/23	1530		1/10/23	15:30	6.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	ILHAN ILIK		
SIGNATURE of SAMPLER:		DATE Signed:	1/10/23

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

Client Name: WAWN

PM: JSA Due Date: 01/23/23
CLIENT: WAWN

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: T-148 Correction Factor: + 0.1
☑ Samples on ice, cooling process has begun.
Cooler Temperature(°C): 6.5 Cooler Temperature Corrected(°C): 6.6
Date/Time 5035A kits placed in freezer 1/10/23
Temp should be above freezing to 6.0°C
USDA Regulated Soil (☑ N/A, water sample)
Date and Initials of person examining contents: I.I 1530

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 (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:	☑ 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 #				
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

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

Project Location: PFAS 3/1
Sample Description:
Work Order: 23C0638

Date Received: 3/6/2023
Field Sample #: N-05155 44 RAW
Sampled: 3/1/2023 11:47
Sample ID: 23C0638-01
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
Perfluorobutanesulfonic acid (PFBS)	6.2	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:02	AMS
Perfluorohexanesulfonic acid (PFHxS)	4.2	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:02	AMS
Perfluoroheptanoic acid (PFHpA)	4.8	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:02	AMS
Perfluorooctanoic acid (PFOA)	16	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:02	AMS
Perfluorooctanesulfonic acid (PFOS)	8.9	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:02	AMS
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:02	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	93.1	70-130		3/8/23 16:02
M3HFPO-DA	96.2	70-130		3/8/23 16:02
13C-PFDA	98.5	70-130		3/8/23 16:02
D5-NEtFOSAA	100	70-130		3/8/23 16:02

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Project Location: PFAS 3/1
Sample Description:
Work Order: 23C0638

Date Received: 3/6/2023
Field Sample #: N-05156 44A RAW
Sampled: 3/1/2023 11:52
Sample ID: 23C0638-02
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
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:09	AMS
Perfluorohexanesulfonic acid (PFHxS)	4.9	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:09	AMS
Perfluoroheptanoic acid (PFHpA)	2.9	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:09	AMS
Perfluorooctanoic acid (PFOA)	7.0	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:09	AMS
Perfluorooctanesulfonic acid (PFOS)	19	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:09	AMS
Perfluorononanoic acid (PFNA)	8.3	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:09	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	99.0	70-130		3/8/23 16:09
M3HFPO-DA	100	70-130		3/8/23 16:09
13C-PFDA	101	70-130		3/8/23 16:09
D5-NEtFOSAA	98.4	70-130		3/8/23 16:09

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Work Order: 23C0638

Project Location: PFAS 3/1
Sample Description:
Date Received: 3/6/2023
Field Sample #: AS/GAC-44/44A 44/44A TREATED
Sampled: 3/1/2023 11:44
Sample ID: 23C0638-05
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
Perfluorobutanesulfonic acid (PFBS)	5.4	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:38	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:38	AMS
Perfluoroheptanoic acid (PFHpA)	2.5	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:38	AMS
Perfluorooctanoic acid (PFOA)	4.6	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:38	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:38	AMS
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:38	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	104	70-130		3/8/23 16:38
M3HFPO-DA	108	70-130		3/8/23 16:38
13C-PFDA	103	70-130		3/8/23 16:38
D5-NEtFOSAA	105	70-130		3/8/23 16:38

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Project Location: PFAS 3/1
Sample Description:
Work Order: 23C0638

Date Received: 3/6/2023
Field Sample #: N-06744 44B RAW
Sampled: 3/1/2023 12:02
Sample ID: 23C0638-03
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
Perfluorobutanesulfonic acid (PFBS)	7.8	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:17	AMS
Perfluorohexanesulfonic acid (PFHxS)	6.0	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:17	AMS
Perfluoroheptanoic acid (PFHpA)	8.0	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:17	AMS
Perfluorooctanoic acid (PFOA)	24	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:17	AMS
Perfluorooctanesulfonic acid (PFOS)	12	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:17	AMS
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:17	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	91.2	70-130		3/8/23 16:17
M3HFPO-DA	95.4	70-130		3/8/23 16:17
13C-PFDA	98.2	70-130		3/8/23 16:17
D5-NEtFOSAA	98.4	70-130		3/8/23 16:17

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Work Order: 23C0638

Project Location: PFAS 3/1
Sample Description:

Date Received: 3/6/2023
Field Sample #: N-06745 AAC RAW
Sampled: 3/1/2023 12:07

Sample ID: 23C0638-04

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
Perfluorobutanesulfonic acid (PFBS)	6.7	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:31	AMS
Perfluorohexanesulfonic acid (PFHxS)	4.6	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:31	AMS
Perfluoroheptanoic acid (PFHpA)	6.4	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:31	AMS
Perfluorooctanoic acid (PFOA)	19	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:31	AMS
Perfluorooctanesulfonic acid (PFOS)	9.4	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:31	AMS
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:31	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	87.5	70-130		3/8/23 16:31
M3HFPO-DA	95.7	70-130		3/8/23 16:31
13C-PFDA	93.5	70-130		3/8/23 16:31
D5-NEtFOSAA	95.6	70-130		3/8/23 16:31

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

Project Location: PFAS 3/1 Sample Description: Work Order: 23C0638

Date Received: 3/6/2023 44B|44C TREATED

Field Sample #: AS/GAC--44B/44C Sampled: 3/1/2023 12:04

Sample ID: 23C0638-06

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
Perfluorobutanesulfonic acid (PFBS)	4.2	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:45	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:45	AMS
Perfluoroheptanoic acid (PFHpA)	2.4	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:45	AMS
Perfluorooctanoic acid (PFOA)	3.3	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:45	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:45	AMS
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 537.1	3/7/23	3/8/23 16:45	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	93.6	70-130		3/8/23 16:45
M3HFPO-DA	98.3	70-130		3/8/23 16:45
13C-PFDA	93.0	70-130		3/8/23 16:45
D5-NEtFOSAA	95.7	70-130		3/8/23 16:45

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

Pace

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
Special

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70243631001
Client Sample ID.: RAW WELL 57

Federal ID : 2902830
Collected : 01/18/2023 11:00 AM Point RAW WELL 57
Received : 01/18/2023 03:40 PM Location
Collected By PACE

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/19/2023 7:28 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	4.3*		5	ug/L	.1	01/20/2023 2:58 PM	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	80%		5	%REC		01/20/2023 2:58 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.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported: 02/02/2023

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

Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (516) 370-6000 FAX: (516) 886-5526
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Sample Information:
Type: Drinking Water
Origin: Treated Well
Special

Treatment
AOP

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70243631002
Client Sample ID.: AOP 57 EFF

Federal ID : 2902830
Collected : 01/18/2023 11:00 AM Point AOP 57 EFF
Received : 01/18/2023 03:40 PM Location
Collected By PACE

Analytical Method: EPA 522 Prep Method: EPA 522 Prep Date: 01/19/2023 7:28 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.024		1	ug/L	1	01/20/2023 12:27	002 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	85%		1	%REC		01/20/2023 12:27	002 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.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported: 02/02/2023

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

Pace

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
Special

Treatment
GAC

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70243631003
Client Sample ID.: GAC 57 EFF

Federal ID : 2902830
Collected : 01/18/2023 11:00 AM Point GAC 57 EFF
Received : 01/18/2023 03:40 PM Location
Collected By PACE

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/19/2023 7:28 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.12		1	ug/L	1	01/20/2023 12:43	003 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	83%		1	%REC		01/20/2023 12:43	003 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: 02/02/2023

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.

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

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TEL: (516) 370-6000 FAX: (516) 886-5526
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Sample Information:
Type: Drinking Water
Origin: Raw Well
Special

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242963001
Client Sample ID.: RAW WELL 57

Federal ID : 2902830
Collected : 01/11/2023 10:50 AM Point RAW WELL 57
Received : 01/11/2023 01:08 PM Location
Collected By H2M

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/13/2023 12:09

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	4.2*	L1	5	ug/L	1	01/16/2023 10:48	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	85%		5	%REC		01/16/2023 10:48	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
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.

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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

Pace

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
Special

Treatment
AOP

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242963002
Client Sample ID.: AOP 57 EFF

Federal ID : 2902830
Collected : 01/11/2023 10:50 AM Point AOP 57 EFF
Received : 01/11/2023 01:08 PM Location
Collected By H2M

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/13/2023 12:09

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	<0.020	L1	1	ug/L	1	01/13/2023 8:14 PM	002 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	81%		1	%REC		01/13/2023 8:14 PM	002 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
See qualifiers page for additional qualifier definitions.

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

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Pace

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
Special

Treatment
GAC

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242963004
Client Sample ID.: GAC 57 EFF

Federal ID : 2902830
Collected : 01/11/2023 10:50 AM Point GAC 57 EFF
Received : 01/11/2023 01:08 PM Location
Collected By H2M

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 01/13/2023 12:09

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.17	L1	1	ug/L	1	01/13/2023 8:30 PM	004 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	86%		1	%REC		01/13/2023 8:30 PM	004 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
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.

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Pace
575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242974002
Client Sample ID.: RAW WELL 57

Federal ID : 2902830
Collected : 01/11/2023 10:50 AM Point RAW WELL 57
Received : 01/11/2023 01:08 PM Location
Collected By H2M

Analytical Method:EPA 533 Prep Method: EPA 533 Prep Date: 01/17/2023 12:05

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
11Cl-PF3OUdS	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
4:2 FTS	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
6:2 FTS	<3.9	L1	1	ng/L		01/19/2023 1:06 AM	002 BP351/2
8:2 FTS	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
9Cl-PF3ONS	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
ADONA	<2.0	L1	1	ng/L		01/19/2023 1:06 AM	002 BP351/2
HFPO-DA	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
NFDHA	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
PFBA	4.9		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
PFEESA	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
PFHpS	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
PFMBA	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
PFMPA	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
PFPeA	7.5		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
PFPeS	2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
Perfluorobutanesulfonic acid	2.9		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
Perfluorodecanoic acid	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
Perfluorododecanoic acid	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
Perfluoroheptanoic acid	7.7		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
Perfluorohexanesulfonic acid	8.6		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
Perfluorohexanoic acid	13.3		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
Perfluorononanoic acid	25.4		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
Perfluorooctanesulfonic acid	**30.8***		1	ng/L	10	01/19/2023 1:06 AM	002 BP351/2
Perfluorooctanoic acid	**76.3***		1	ng/L	10	01/19/2023 1:06 AM	002 BP351/2
Perfluoroundecanoic acid	<2.0		1	ng/L		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C2-PFDoA (S)	45%	S0	1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C24:2FTS (S)	100%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C26:2FTS (S)	94%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C28:2FTS (S)	89%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C3-PFBS (S)	85%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C3-PFHxS (S)	87%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C3HFPO-DA(S)	67%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C4-PFBA (S)	77%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C4-PFHpA (S)	70%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C5-PFHxA (S)	74%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C5-PFPeA (S)	74%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C6-PFDA (S)	45%	S0	1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C7-PFUdA (S)	41%	S0	1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C8-PFOA (S)	65%		1	%REC		01/19/2023 1:06 AM	002 BP351/2
Surr: 13C8-PFOS (S)	87%		1	%REC		01/19/2023 1:06 AM	002 BP351/2

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.
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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.

Jennifer Aracri

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Date Reported: 01/19/2023

Laboratory Results

Results for the samples and analytes requested

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Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

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

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242974002
Client Sample ID.: RAW WELL 57

Federal ID : 2902830
Collected : 01/11/2023 10:50 AM Point RAW WELL 57
Received : 01/11/2023 01:08 PM Location
Collected By H2M

Surr: 13C9-PFNA (S)	54%	1	%REC	01/19/2023 1:06 AM	002 BP351/2

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.
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J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
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Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

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Pace

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Effluent
Special

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242974001
Client Sample ID.: GAC 57 EFF

Federal ID : 2902830
Collected : 01/11/2023 10:50 AM Point GAC 57 EFF
Received : 01/11/2023 01:08 PM Location
Collected By H2M

Analytical Method:EPA 533 Prep Method: EPA 533 Prep Date: 01/17/2023 12:05

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
11Cl-PF3OUdS	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
4:2 FTS	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
6:2 FTS	<4.1	L1	1	ng/L		01/19/2023 12:32	001 BP351/2
8:2 FTS	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
9Cl-PF3ONS	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
ADONA	<2.0	L1	1	ng/L		01/19/2023 12:32	001 BP351/2
HFPO-DA	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
NFDHA	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
PFBA	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
PFEESA	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
PFHpS	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
PFMBA	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
PFMPA	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
PFPeA	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
PFPeS	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
Perfluorobutanesulfonic acid	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
Perfluorodecanoic acid	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
Perfluorododecanoic acid	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
Perfluoroheptanoic acid	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
Perfluorohexanesulfonic acid	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
Perfluorohexanoic acid	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
Perfluorononanoic acid	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
Perfluorooctanesulfonic acid	<2.0		1	ng/L	10	01/19/2023 12:32	001 BP351/2
Perfluorooctanoic acid	<2.0		1	ng/L	10	01/19/2023 12:32	001 BP351/2
Perfluoroundecanoic acid	<2.0		1	ng/L		01/19/2023 12:32	001 BP351/2
Surr: 13C2-PFDoA (S)	68%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C24:2FTS (S)	84%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C26:2FTS (S)	87%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C28:2FTS (S)	85%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C3-PFBS (S)	82%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C3-PFHxS (S)	85%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C3HFPO-DA(S)	48%	S0	1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C4-PFBA (S)	57%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C4-PFHpA (S)	58%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C5-PFHxA (S)	57%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C5-PFPeA (S)	56%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C6-PFDA (S)	62%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C7-PFUdA (S)	66%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C8-PFOA (S)	57%		1	%REC		01/19/2023 12:32	001 BP351/2
Surr: 13C8-PFOS (S)	87%		1	%REC		01/19/2023 12:32	001 BP351/2

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

Jennifer Aracri

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

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www.pacelabs.com

Sample Information:
Type: Drinking Water
Origin: Effluent
Special

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70242974001
Client Sample ID.: GAC 57 EFF

Federal ID : 2902830
Collected : 01/11/2023 10:50 AM Point GAC 57 EFF
Received : 01/11/2023 01:08 PM Location
Collected By H2M

Surr: 13C9-PFNA (S)	58%	1	%REC	01/19/2023 12:32	001 BP351/2

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: 01/19/2023

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: WAWN1701 AOP 6/10
Pace Project No.: 70217937

Sample: RAW WELL 57A/AOP INF 30' **Lab ID: 70217937002** Collected: 06/10/22 09:50 Received: 06/10/22 15:05 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical Method: EPA 537.1 Preparation Method: EPA 537.1							
	Pace Analytical Services - Ormond Beach							
Perfluorobutanesulfonic acid	**<1.8**	ng/L	1.8	1	06/14/22 23:05	06/17/22 22:33	375-73-5	P4
Perfluoroheptanoic acid	**6.4**	ng/L	1.8	1	06/14/22 23:05	06/17/22 22:33	375-85-9	P4
Perfluorohexanesulfonic acid	**3.8**	ng/L	1.8	1	06/14/22 23:05	06/17/22 22:33	355-46-4	P4
Perfluorononanoic acid	**6.2**	ng/L	1.8	1	06/14/22 23:05	06/17/22 22:33	375-95-1	P4
Perfluorooctanesulfonic acid	**11.6**	ng/L	1.8	1	06/14/22 23:05	06/17/22 22:33	1763-23-1	P4
Perfluorooctanoic acid	**95.3**	ng/L	1.8	1	06/14/22 23:05	06/17/22 22:33	335-67-1	P4
Surrogates								
13C2-PFDA (S)	82	%	70-130	1	06/14/22 23:05	06/17/22 22:33		
13C2-PFHxA (S)	84	%	70-130	1	06/14/22 23:05	06/17/22 22:33		
HFPO-DAS (S)	77	%	70-130	1	06/14/22 23:05	06/17/22 22:33		
180.1 Turbidity	Analytical Method: EPA 180.1							
	Pace Analytical Services - Melville							
Turbidity	**<1.0**	NTU	1.0	1		06/11/22 15:13		
2120B W Apparent Color	Analytical Method: SM22 2120B							
	Pace Analytical Services - Melville							
Apparent Color	**<5.0**	units	5.0	1		06/11/22 14:29		
pH	**6.3**	Std. Units	0.10	1		06/11/22 14:29		
2150B Threshold Odor Number	Analytical Method: SM22 2150B							
	Pace Analytical Services - Melville							
Odor @ 60 Degrees C	**No odor observed**		1.0	1		06/10/22 15:53		
2320B Alkalinity	Analytical Method: SM22 2320B							
	Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**95.2**	mg/L	1.0	1		06/14/22 11:27		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
	Pace Analytical Services - Melville							
Total Dissolved Solids	**312**	mg/L	20.0	1		06/17/22 14:36		
4500H+ pH, Electrometric	Analytical Method: SM22 4500-H+B							
	Pace Analytical Services - Melville							
pH	**6.5**	Std. Units	0.10	1		06/14/22 13:09		H3,H6, N3
Temperature, Water (C)	**20.3**	deg C	0.10	1		06/14/22 13:09		H3,H6
5540C MBAS Surfactants	Analytical Method: SM22 5540C Preparation Method: SM22 5540C							
	Pace Analytical Services - Melville							
LAS Molecular Weight, g/mol	**320**			1	06/11/22 18:38	06/11/22 19:04		
MBAS, Calculated as LAS	**<0.080**	mg/L	0.080	1	06/11/22 18:38	06/11/22 19:04		

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: WAWN1701 AOP 6/10
Pace Project No.: 70217937

Sample: GAC 57A-1 EFF (DOH) 30' **Lab ID: 70217937006** Collected: 06/10/22 12:10 Received: 06/10/22 15:05 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical Method: EPA 537.1 Preparation Method: EPA 537.1							
	Pace Analytical Services - Ormond Beach							
Perfluorobutanesulfonic acid	<2.0	ng/L	2.0	1	06/27/22 23:05	06/30/22 16:35	375-73-5	H1,H2
Perfluoroheptanoic acid	<2.0	ng/L	2.0	1	06/27/22 23:05	06/30/22 16:35	375-85-9	H1,H2
Perfluorohexanesulfonic acid	<2.0	ng/L	2.0	1	06/27/22 23:05	06/30/22 16:35	355-46-4	H1,H2
Perfluorononanoic acid	<2.0	ng/L	2.0	1	06/27/22 23:05	06/30/22 16:35	375-95-1	H1,H2
Perfluorooctanesulfonic acid	<2.0	ng/L	2.0	1	06/27/22 23:05	06/30/22 16:35	1763-23-1	H1,H2
Perfluorooctanoic acid	<2.0	ng/L	2.0	1	06/27/22 23:05	06/30/22 16:35	335-67-1	H1,H2
Surrogates								
13C2-PFDA (S)	98	%	70-130	1	06/27/22 23:05	06/30/22 16:35		
13C2-PFHxA (S)	96	%	70-130	1	06/27/22 23:05	06/30/22 16:35		
HFPO-DAS (S)	91	%	70-130	1	06/27/22 23:05	06/30/22 16:35		
180.1 Turbidity	Analytical Method: EPA 180.1							
	Pace Analytical Services - Melville							
Turbidity	<1.0	NTU	1.0	1		06/11/22 15:24		
2120B W Apparent Color	Analytical Method: SM22 2120B							
	Pace Analytical Services - Melville							
Apparent Color	<5.0	units	5.0	1		06/11/22 14:35		
pH	6.5	Std. Units	0.10	1		06/11/22 14:35		
2150B Threshold Odor Number	Analytical Method: SM22 2150B							
	Pace Analytical Services - Melville							
Odor @ 60 Degrees C	No odor observed		1.0	1		06/10/22 15:56		
2320B Alkalinity	Analytical Method: SM22 2320B							
	Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	124	mg/L	1.0	1		06/14/22 11:45		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
	Pace Analytical Services - Melville							
Total Dissolved Solids	320	mg/L	20.0	1		06/17/22 14:36		
4500H+ pH, Electrometric	Analytical Method: SM22 4500-H+B							
	Pace Analytical Services - Melville							
pH	6.7	Std. Units	0.10	1		06/14/22 13:19		H3,H6, N3
Temperature, Water (C)	20.9	deg C	0.10	1		06/14/22 13:19		H3,H6
5540C MBAS Surfactants	Analytical Method: SM22 5540C Preparation Method: SM22 5540C							
	Pace Analytical Services - Melville							
LAS Molecular Weight, g/mol	320			1	06/11/22 18:40	06/11/22 19:06		
MBAS, Calculated as LAS	<0.080	mg/L	0.080	1	06/11/22 18:40	06/11/22 19:06		

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: WAWN1701 AOP 6/10
Pace Project No.: 70217937

Sample: GAC 57A-2 EFF (DOH) 30' **Lab ID: 70217937008** Collected: 06/10/22 12:10 Received: 06/10/22 15:05 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical Method: EPA 537.1 Preparation Method: EPA 537.1							
	Pace Analytical Services - Ormond Beach							
Perfluorobutanesulfonic acid	<1.8	ng/L	1.8	1	06/27/22 23:05	06/30/22 16:51	375-73-5	H1,H2
Perfluoroheptanoic acid	<1.8	ng/L	1.8	1	06/27/22 23:05	06/30/22 16:51	375-85-9	H1,H2
Perfluorohexanesulfonic acid	<1.8	ng/L	1.8	1	06/27/22 23:05	06/30/22 16:51	355-46-4	H1,H2
Perfluorononanoic acid	<1.8	ng/L	1.8	1	06/27/22 23:05	06/30/22 16:51	375-95-1	H1,H2
Perfluorooctanesulfonic acid	<1.8	ng/L	1.8	1	06/27/22 23:05	06/30/22 16:51	1763-23-1	H1,H2
Perfluorooctanoic acid	<1.8	ng/L	1.8	1	06/27/22 23:05	06/30/22 16:51	335-67-1	H1,H2
Surrogates								
13C2-PFDA (S)	94	%	70-130	1	06/27/22 23:05	06/30/22 16:51		
13C2-PFHxA (S)	97	%	70-130	1	06/27/22 23:05	06/30/22 16:51		
HFPO-DAS (S)	93	%	70-130	1	06/27/22 23:05	06/30/22 16:51		
180.1 Turbidity	Analytical Method: EPA 180.1							
	Pace Analytical Services - Melville							
Turbidity	<1.0	NTU	1.0	1		06/11/22 15:26		
2120B W Apparent Color	Analytical Method: SM22 2120B							
	Pace Analytical Services - Melville							
Apparent Color	<5.0	units	5.0	1		06/11/22 14:36		
pH	6.6	Std. Units	0.10	1		06/11/22 14:36		
2150B Threshold Odor Number	Analytical Method: SM22 2150B							
	Pace Analytical Services - Melville							
Odor @ 60 Degrees C	**No odor observed**		1.0	1		06/10/22 15:55		
2320B Alkalinity	Analytical Method: SM22 2320B							
	Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	95.8	mg/L	1.0	1		06/14/22 11:53		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
	Pace Analytical Services - Melville							
Total Dissolved Solids	222	mg/L	20.0	1		06/17/22 14:36		
4500H+ pH, Electrometric	Analytical Method: SM22 4500-H+B							
	Pace Analytical Services - Melville							
pH	6.6	Std. Units	0.10	1		06/14/22 13:21		H3,H6, N3
Temperature, Water (C)	20.8	deg C	0.10	1		06/14/22 13:21		H3,H6
5540C MBAS Surfactants	Analytical Method: SM22 5540C Preparation Method: SM22 5540C							
	Pace Analytical Services - Melville							
LAS Molecular Weight, g/mol	320			1	06/11/22 18:41	06/11/22 19:07		
MBAS, Calculated as LAS	<0.080	mg/L	0.080	1	06/11/22 18:41	06/11/22 19:07		

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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

Pace

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
Special

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70248133001
Client Sample ID.: RAW WELL 57A

Federal ID : 2902830
Collected : 03/03/2023 09:00 AM Point RAW WELL 57A
Received : 03/03/2023 09:57 AM Location
Collected By H2M

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 3:25 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	**24.4***		10	ug/L	1	03/07/2023 11:31	001 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	113%		10	%REC		03/07/2023 11:31	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.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported: 03/07/2023

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

Pace

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

Sample Information:
Type: Drinking Water
Origin: Effluent
Special

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70248133002
Client Sample ID.: AOP 57A EFF

Federal ID : 2902830
Collected : 03/03/2023 09:00 AM Point AOP 57A EFF
Received : 03/03/2023 09:57 AM Location
Collected By H2M

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 3:25 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.034		1	ug/L	1	03/06/2023 8:21 PM	002 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	111%		1	%REC		03/06/2023 8:21 PM	002 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.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported: 03/07/2023

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

Pace

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

Sample Information:
Type: Drinking Water
Origin: Effluent
Special

Water Auth. of Western Nassau
1580 Union Tpke.
New Hyde Park, NY 11040
Attn To : Michael Leiner

Lab No. : 70248133003
Client Sample ID.: GAC 57A EFF

Federal ID : 2902830
Collected : 03/03/2023 09:00 AM Point GAC 57A EFF
Received : 03/03/2023 09:57 AM Location
Collected By H2M

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 03/03/2023 3:25 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.029		1	ug/L	1	03/06/2023 8:56 PM	003 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	113%		1	%REC		03/06/2023 8:56 PM	003 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: 03/07/2023

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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