

July 8, 2025

Jericho Water District  
PWS ID No. NY2902831  
MCL Exemption for 1,4-Dioxane  
Quarterly Report – Second Quarter 2025

## **Introduction**

On behalf of the Jericho Water District (JWD or District), D&B Engineers and Architects (D&B) has prepared this document in accordance with the requirements of the New York State Department of Health (NYSDOH) for public water suppliers who have been granted exemptions from maximum contaminant level (MCL) violations for 1,4-dioxane. The District was granted an MCL deferral for 1,4-dioxane in 2020, which was renewed in 2022 and which was to expire in August 2023. JWD was then granted an exemption in August 2023 due to the proactive approach to its efforts to establish and implement an action plan for managing the above-referenced compound. This exemption expired in August 2024. JWD submitted and received an extension for the MCL exemption that moved the compliance deadline to August 2025 to allow for time to complete and place into service multiple treatment projects.

The last four years have been a time of unprecedented disruption in the supply chain of chemical supplies, equipment, infrastructure components, pipe and materials (e.g., steel), and treatment systems. Contractors and water suppliers, locally and nationwide, have been impacted by these issues in completing both small-scale and large-scale projects. Shortages of necessary items have significantly impacted the District, primarily in terms of price increases, decreased availability, and longer lead times. In addition, due to the rapidly changing regulatory environment through an expanded list of contaminants with lower regulatory advisory levels or MCLs, the District has experienced local and state regulators experiencing a large number of capital project submissions, in addition to their regular responsibilities. This increased workload has led to longer regulatory review times of engineering reports, detailed design plans, and specifications. In many cases, these factors, which are out of the District's control, have caused delays in obtaining final regulatory approval, commencing construction, procuring equipment and necessary components, and conforming to the construction schedules proposed in the District's original application for a deferral.

The District has done everything within its power to adhere to the project schedules approved in the original deferral request, as described in the previous quarterly deferral reports. The wide reach of the impact of supply chain issues and delays was not known at the time of the original compliance deferrals and, as such, these delays were expected to become worse before improving because of increased national demand. As noted earlier, recognizing these exceptional circumstances, the District requested and received a 12-month deferral renewal, which extended our MCL compliance deadline to August 25, 2023, and a 12-month exemption, which extended our MCL compliance deadline to August 25, 2024. However, the supply chain issues and delays did not lessen and, therefore, additional time was necessary to achieve compliance. As such, the District requested and received a second 12-month exemption which extended our MCL compliance deadline to August 25, 2025.

Despite the challenges of the current supply chain along with the ever-changing regulatory environment, the District has worked tirelessly to preserve the quality of its drinking water. There are currently four different treatment plants at various stages of completion for the treatment and removal of 1,4-dioxane from seven of the District's wells. Treatment has been approved for operation at four of these wells. The combined cost of these projects is greater than \$50 million, and this cost does not include the other construction projects that the District currently has ongoing to enhance other components of its water infrastructure.

The District's goal, as always, is to provide an adequate supply of potable water to its community and will continue to move forward on these projects to further that goal.

The following is a report describing JWD's progress towards maintaining the highest quality of water for our customers and working to meet the deadlines set forth in the original deferral approval. Updated schedules for each project are contained in **Attachment A**.

### **Corrective Action Plan Milestones**

#### Wells 9 and 14

This project has been completed. The NYSDOH issued an Approval of Completed Works for the project in May 2024. The new advanced oxidation process (AOP) and granular activated carbon (GAC) treatment systems were authorized to be placed online on May 20, 2024. These wells have been used and are operating to the distribution system using the new treatment in compliance with the adopted emerging contaminant MCLs.

#### Wells 20 and 21

This project has been completed and the Nassau County Department of Health (NCDH) and NYSDOH issued the Approval of Completed Works, allowing operation of the wells and the AOP system for the beginning of pumping season. Punch list work continues with the contractors as the final phase of the project.

Although it was granted an exemption, during construction, Wells 20 and 21 were taken out of service until approval was received to operate the wells but the wells are now back in operation.

#### Well 22

This project is currently in the construction phase. The NCDH and NYSDOH issued approval of the engineering report in October 2022 and approval of the design specifications and plans in November 2023. Construction commenced in November 2023; however, due to foreseen circumstances, the general construction contract of the project was re-bid, with bids being opened on March 15, 2024. Construction is now progressing on-site.

The well was removed from service in the fall of 2023 and will remain out of service for the duration of construction. Final completion of construction is anticipated in spring 2026 due to the current construction schedules and the expected duration of performance testing and approvals.

Accordingly, the well, with treatment installed, is anticipated to be returned to service in anticipation of pumping season 2026.

Wells 25 and 26 (Kirby Lane Facility)

This project has been completed. The NYSDOH issued an Approval of Completed Works for the project in August 2024. The new AOP and GAC treatment systems were authorized to be placed online on August 2, 2024.

These wells have been used and are operating to the distribution system using the new treatment in compliance with the adopted emerging contaminant MCL.

Although it was granted an exemption, JWD monitored and minimized the usage of these wells during construction to the greatest extent practicable while meeting system demands.

**Public Notification**

In accordance with the terms of the exemption, JWD has maintained an open line of communication with the public regarding its exemption. The exemption public notification documentation and the previous deferral and exemption quarterly reports are still featured prominently on the District website. The 2024 exemption extension was published in the District newspaper of record as well as on the website on September 6, 2024.

**Analytical Sampling**

Sample results for Wells 9, 14 and combined 20/21 (four of the wells for which the exemption was granted) taken during the second quarter of 2025 are contained in the table below. Full laboratory reports for each sample are contained in **Attachment B**. The AOP systems for Wells 9 and 14 and Wells 25 and 26 are currently in operation and under routine compliance sampling. Well 22 was not sampled during the second quarter of 2025 and will not be sampled until the project is completed.

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

Well	Date		
	April 2025	May 2025	June 2025
Well 9 (N-04245) GAC Effluent Train 1	ND	ND	ND
Well 14 (N-06651) GAC Effluent Train 2	NS	NS	ND
Wells 20 and 21 (N-10149 and N-12795) AOP Effluent 1	NS	NS	ND
Well 22 (N-07781)	NS	NS	NS
Well 25 (N-08355)	NS	NS	NS
Well 26 (N-13119)	NS	NS	NS

ND – Not Detected

NS – Not Sampled

## **Conclusion**

As demonstrated above, JWD is actively working to preserve the quality of water for its customers and comply with the requirements put forth by the NYSDOH. The District looks forward to continuing to work towards completion of its treatment facilities.

## **Acknowledgment**

At this time, the Board of Commissioners, and all the employees of the Jericho Water District, would like to acknowledge the effort put forth by the NYSDOH and NCDH in overseeing the installation and implementation of invaluable and necessary treatment equipment for the removal of 1,4-dioxane.

These past 5 years have certainly been unprecedented, and yet, while the workload at both agencies most certainly increased manifold, they continued to provide guidance and assurance that the water provided to our customers met all of their requirements. For that, they are to be commended.

The District would also like to acknowledge the tremendous effort that D&B Engineers and Architects, D.P.C., as well as H2M architects + engineers, provided in working with both health department agencies in researching, designing and overseeing the installation of this critical equipment.

Should you have any questions, please contact Superintendent Peter Logan at 516-921-8280 or visit the District website, [www.jerichowater.org](http://www.jerichowater.org).

Very truly yours,

Board of Commissioners  
Jericho Water District

Enclosures

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

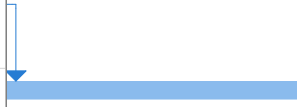
**ATTACHMENT A**

**Project Schedules Associated with  
MCL Exemption**

Jericho Water District  
MCL Exemption  
Quarterly Report - Q2 2025

Wells 9 and 14  
AOP Project Schedule

Task Name	2024				2025	
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2
Pilot Test and Planning (Complete)						
Engineering Report (Complete)						
NCDH and NYSDOH Review of Engineering Report (Complete)						
Detailed Design (Complete)						
NCDH and NYSDOH Review of Contract Documents (Complete)						
Bidding and Construction (Complete)						
Startup and Testing (Complete); NCDH Approval (Complete)						



Jericho Water District  
MCL Exemption  
Quarterly Report - Q2 2025

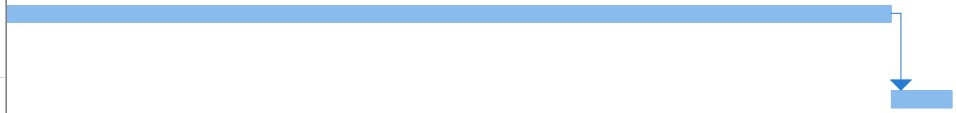
Wells 20 and 21  
AOP Project Schedule

Task Name	2024				2025			
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Pilot Test and Planning (Complete)								
Engineering Report (Complete)								
NCDH and NYSDOH Review of Engineering Report (Complete)								
Detailed Design (Complete)								
NCDH and NYSDOH Review of Contract Documents (Complete)								
Bidding and Award of Contracts (Complete)								
Construction (Complete)								
Startup and Testing (Complete); Approval to Operate (Complete)								

Jericho Water District  
MCL Exemption  
Quarterly Report - Q2 2025

Well 22  
AOP Project Schedule

Task Name	2024				2025				2026		
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
Pilot Test and Planning (Complete)											
Engineering Report (Complete)											
NCDH and NYSDOH Review/Approval of Engineering Report (Complete)											
Detailed Design (Complete)											
NCDH and NYSDOH Review of Contract Documents (Complete)											
Bidding (Complete) and Construction (In Progress)											
Startup and Testing											



Jericho Water District  
MCL Exemption  
Quarterly Report - Q2 2025

Wells 25 and 26  
AOP Project Schedule

Task Name	2024		
	Qtr 1	Qtr 2	Qtr 3
Pilot Test (Complete)			
Engineering Report (Complete)			
NCDH and NYSDOH Review of Engineering Report (Complete)			
Detailed Design (Complete)			
NCDH and NYSDOH Review of Contract Documents (Complete)			
Bidding and Construction (Complete)			
Startup and Testing (Complete); Approval to Operate (Complete)			

**ATTACHMENT B**

**Water Quality Data**



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

**Jericho Water District**  
**125 Convent Rd.**  
**Syosset, NY 11791**

**Lab No. : 70348479004**  
**Client Sample ID.: N-04245 GAC EFF TRAIN 1**

Attn To : Peter Logan

Federal ID : 2902831

Collected : 04/09/2025 09:35 AM Point N-04245 GAC EFF  
 Received : 04/09/2025 01:08 PM Location Well 9 GAC EFF Train 1  
 Collected By CLIENT

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	<0.020	1		ug/L	1	04/17/2025 11:58	004 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	94%		1	%REC		04/17/2025 11:58	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

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.

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

Date Reported: 04/28/2025



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

**WorkOrder :**  
70348479

## Laboratory Certifications

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**Pace Analytical Services, LLC - Melville, NY**

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  
Texas Certification #: T104704582  
Florida Certification #: E871198



WJO#: 70348479



70348479

# Sample Request Form PUBLIC WATER SUPPLIER

WELL OFF LINE

WELL RUN TO SYSTEM

Date: 11-24-25

Collected By: Randy P. V. [Signature]

Accepted By: [Signature]

Cooler Temp: 11.0 °C

YES  NO VOC'S PRESERVED WITH HCl

**Client Info:**

Name or Code: Jerscho Water Dist

Address: 125 Concord Rd

Phone #: Systct N.Y 11791

Attn: (516) 924-8280

Proj. # or (Name): \_\_\_\_\_

Bill To: \_\_\_\_\_

Copies To: \_\_\_\_\_

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

**Sample Info:**

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl <sub>2</sub>	Field Readings pH/Temp	Analysis	Lab No.
4425 0845	PW	WEM #9 N-04245	RW		RO	∅		1,4-Dioxane	
0910	PW	WEM #9 GAC EFF. Train #1	<del>RW</del>	O	RO	∅		"	
0933	PW	WEM #9 GAC EFF. Train #1	E	O	RO	∅		"	
0845	PW	WEM #9 N-04245	RW		RO	∅		Pfos / PFOA	
0845	PW	" N-04245 FB	PW		RO	∅		"	Field Blank
0936	PW	WEM #9 GAC EFF. Train #1	E	O	RO	∅		Pfos / PFOA	
0936	PW	" " Field Blank	E	O	RO	∅		"	Field Blank

Remarks:

**WO#: 70348479**  
**PM: JSA** Due Date: 04/17/25  
**CLIENT: JWD**

Client Name: JWD Project:  
 Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other  
 Tracking #:

Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  No Temperature Blank Present:  Yes  No  
 Packing Material:  Bubble Wrap  Bubble Bags  Ziploc  None  Other Type of Ice: Wet  Blue  None  
 Thermometer Used: THAI Correction Factor: F.2  Samples on ice, cooling process has begun  
 Cooler Temperature(°C): 11.0 Cooler Temperature Corrected(°C): 11.2 Date/Time 5035A kits placed in freezer \_\_\_\_\_  
 Temp should be above freezing to 6.0°C

USDA Regulated Soil (  N/A, water sample)  
 Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)?  Yes  No  
 Did samples originate from a foreign source including Hawaii and Puerto Rico)?  Yes  No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.  
 Date and Initials of person examining contents: JSD 4/11/25

	COMMENTS:
Chain of Custody Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name & Signature on COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: (Triple volume provided for MS/MSD) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests <input type="checkbox"/> Yes <input type="checkbox"/> No <u>N/A</u>	11. Note: if sediment is visible in the dissolved container.
Sample Labels match COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes date/time/ID/Analysis Matrix: <u>SL</u> <u>WT</u> <u>OIL</u> OTHER	

Date and Initials of person checking preservation: JSD 4/11/25

All containers needing preservation have been pH paper Lot # All containers needing preservation are found to be in compliance with method recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl, NaOH>9 Sulfide, <input type="checkbox"/> Yes <input type="checkbox"/> No <u>N/A</u> NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl Sample #
Samples checked for dechlorination: <input type="checkbox"/> Yes <input type="checkbox"/> No <u>N/A</u> KI starch test strips Lot # Residual chlorine strips Lot #	14. Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulf <input type="checkbox"/> Yes <input type="checkbox"/> No <u>N/A</u> Lead Acetate Strips Lot #	15. Positive for Sulfide? Y N
Headspace in ALK Bottle (>6mm): <input type="checkbox"/> Yes <input type="checkbox"/> No <u>N/A</u> Headspace in VOA Vials (>6mm): <input type="checkbox"/> Yes <input type="checkbox"/> No <u>N/A</u>	16.
Trip Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No <u>N/A</u> Trip Blank Custody Seals Present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>N/A</u>	17.

Client Notification/ Resolution: \_\_\_\_\_ Field Data Required? Y / N  
 Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Comments/ Resolution: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* PM (Project Manager) review (which includes the SCUR) is documented electronically in LIMS.



## ANALYTICAL REPORT

Lab Number:	L2522861
Client:	Pace Analytical Services, LLC 575 Broad Hollow Rd Melville, NY 11747
ATTN:	Jennifer Aracri
Phone:	(516) 370-6016
Project Name:	JWD
Project Number:	WO70348479
Report Date:	04/28/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (9110), MN (025-999-495), NJ (MA015), NY (11627), NC (685), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708A1), USFWS (Permit #A24920).

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320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

<b>Lab Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2522861-01	N-04245	DW	NY	04/09/25 08:45	04/14/25
L2522861-02	N-04245 FB	DW	NY	04/09/25 08:45	04/14/25
L2522861-03	N-04245 GAC EFF TRAIN 1	DW	NY	04/09/25 09:35	04/14/25
L2522861-04	N-04245 GAC EFF TRAIN 1 FB	DW	NY	04/09/25 09:35	04/14/25

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**Case Narrative (continued)**

Perfluorinated Alkyl Acids by EPA 533

L2522861-03RE: The sample was re-extracted within holding time due to QC failures in the original extraction.

The results of the re-extraction are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

*Darian Dailey* Darian Dailey

Title: Technical Director/Representative

Date: 04/28/25

# ORGANICS

# SEMIVOLATILES

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**SAMPLE RESULTS**

Lab ID: L2522861-01  
 Client ID: N-04245  
 Sample Location: NY

Date Collected: 04/09/25 08:45  
 Date Received: 04/14/25  
 Field Prep: Not Specified

## Sample Depth:

Matrix: Dw  
 Analytical Method: 136,533  
 Analytical Date: 04/23/25 00:10  
 Analyst: CAP

Extraction Method: EPA 533  
 Extraction Date: 04/21/25 17:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	7.61		ng/l	1.86	--	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.86	--	1
Perfluoropentanoic Acid (PFPeA)	13.5		ng/l	1.86	--	1
Perfluorobutanesulfonic Acid (PFBS)	1.90		ng/l	1.86	--	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.86	--	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	1.86	--	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.86	--	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.86	--	1
Perfluorohexanoic Acid (PFHxA)	9.14		ng/l	1.86	--	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.86	--	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.86	--	1
Perfluoroheptanoic Acid (PFHpA)	4.55		ng/l	1.86	--	1
Perfluorohexanesulfonic Acid (PFHxS)	7.46		ng/l	1.86	--	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.86	--	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	7.16		ng/l	1.86	--	1
Perfluorooctanoic Acid (PFOA)	6.27		ng/l	1.86	--	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.86	--	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.86	--	1
Perfluorooctanesulfonic Acid (PFOS)	3.43		ng/l	1.86	--	1
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.86	--	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.86	--	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.86	--	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.86	--	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.86	--	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.86	--	1

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**SAMPLE RESULTS**

**Lab ID:** L2522861-01  
**Client ID:** N-04245  
**Sample Location:** NY

**Date Collected:** 04/09/25 08:45  
**Date Received:** 04/14/25  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	84		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	74		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	79		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	95		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	77		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	86		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	77		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	86		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	87		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	96		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	92		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	94		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	75		50-200

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**SAMPLE RESULTS**

Lab ID: L2522861-02  
 Client ID: N-04245 FB  
 Sample Location: NY

Date Collected: 04/09/25 08:45  
 Date Received: 04/14/25  
 Field Prep: Not Specified

## Sample Depth:

Matrix: Dw  
 Analytical Method: 136,533  
 Analytical Date: 04/23/25 00:19  
 Analyst: CAP

Extraction Method: EPA 533  
 Extraction Date: 04/21/25 17:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.79	--	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.79	--	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.79	--	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.79	--	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.79	--	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	1.79	--	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.79	--	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.79	--	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.79	--	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.79	--	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.79	--	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.79	--	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.79	--	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.79	--	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.79	--	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.79	--	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.79	--	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.79	--	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.79	--	1
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.79	--	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.79	--	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.79	--	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.79	--	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.79	--	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.79	--	1

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**SAMPLE RESULTS**

Lab ID: L2522861-02  
 Client ID: N-04245 FB  
 Sample Location: NY

Date Collected: 04/09/25 08:45  
 Date Received: 04/14/25  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			79		50-200	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			73		50-200	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			83		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)			94		50-200	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			77		50-200	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			82		50-200	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			89		50-200	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			85		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			99		50-200	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			90		50-200	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			94		50-200	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			94		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			99		50-200	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			100		50-200	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			104		50-200	
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)			74		50-200	

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**SAMPLE RESULTS**

Lab ID: L2522861-03 RE  
 Client ID: N-04245 GAC EFF TRAIN 1  
 Sample Location: NY

Date Collected: 04/09/25 09:35  
 Date Received: 04/14/25  
 Field Prep: Not Specified

## Sample Depth:

Matrix: Dw  
 Analytical Method: 136,533  
 Analytical Date: 04/25/25 15:08  
 Analyst: RDB

Extraction Method: EPA 533  
 Extraction Date: 04/24/25 07:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	6.71		ng/l	1.78	--	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.78	--	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.78	--	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.78	--	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.78	--	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	1.78	--	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.78	--	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.78	--	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.78	--	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.78	--	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.78	--	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.78	--	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.78	--	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.78	--	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.78	--	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.78	--	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.78	--	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.78	--	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.78	--	1
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.78	--	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	--	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.78	--	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	--	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.78	--	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	--	1

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**SAMPLE RESULTS**

Lab ID: L2522861-03 RE  
 Client ID: N-04245 GAC EFF TRAIN 1  
 Sample Location: NY

Date Collected: 04/09/25 09:35  
 Date Received: 04/14/25  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			79		50-200	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			64		50-200	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			75		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)			89		50-200	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			62		50-200	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			73		50-200	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			75		50-200	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			81		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			100		50-200	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			90		50-200	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			80		50-200	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			100		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			112		50-200	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			109		50-200	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			102		50-200	
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)			65		50-200	

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**SAMPLE RESULTS**

Lab ID: L2522861-04  
 Client ID: N-04245 GAC EFF TRAIN 1 FB  
 Sample Location: NY

Date Collected: 04/09/25 09:35  
 Date Received: 04/14/25  
 Field Prep: Not Specified

## Sample Depth:

Matrix: Dw  
 Analytical Method: 136,533  
 Analytical Date: 04/23/25 00:36  
 Analyst: CAP

Extraction Method: EPA 533  
 Extraction Date: 04/21/25 17:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.78	--	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.78	--	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.78	--	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.78	--	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.78	--	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	1.78	--	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.78	--	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.78	--	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.78	--	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.78	--	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.78	--	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.78	--	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.78	--	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.78	--	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.78	--	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.78	--	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.78	--	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.78	--	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.78	--	1
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.78	--	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	--	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.78	--	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	--	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.78	--	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	--	1

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**SAMPLE RESULTS**

Lab ID: L2522861-04  
 Client ID: N-04245 GAC EFF TRAIN 1 FB  
 Sample Location: NY

Date Collected: 04/09/25 09:35  
 Date Received: 04/14/25  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			69		50-200	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			65		50-200	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			85		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)			94		50-200	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			67		50-200	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			68		50-200	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			90		50-200	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			74		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			98		50-200	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			79		50-200	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			89		50-200	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			83		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			102		50-200	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			92		50-200	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			97		50-200	
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)			64		50-200	

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 136,533  
Analytical Date: 04/22/25 21:09  
Analyst: CAP

Extraction Method: EPA 533  
Extraction Date: 04/21/25 17:58

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 01-02,04 Batch: WG2056547-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	--
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.00	--
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	--
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	--
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.00	--
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.00	--
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.00	--
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	2.00	--
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	--
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	2.00	--
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	2.00	--
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	--
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	--
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	2.00	--
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	--
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	--
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	--
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	--
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	--
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	2.00	--
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	--
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	--
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	--
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	2.00	--
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	--

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 136,533  
Analytical Date: 04/22/25 21:09  
Analyst: CAP

Extraction Method: EPA 533  
Extraction Date: 04/21/25 17:58

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 01-02,04 Batch: WG2056547-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	77		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	81		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	97		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	82		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	86		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	80		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	91		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	88		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	86		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	96		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	78		50-200

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 136,533  
**Analytical Date:** 04/25/25 11:36  
**Analyst:** RDB

**Extraction Method:** EPA 533  
**Extraction Date:** 04/24/25 07:40

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 03 Batch: WG2057932-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	--
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.00	--
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	--
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	--
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.00	--
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.00	--
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.00	--
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	2.00	--
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	--
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	2.00	--
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	2.00	--
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	--
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	--
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	2.00	--
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	--
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	--
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	--
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	--
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	--
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	2.00	--
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	--
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	--
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	--
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	2.00	--
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	--

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 136,533  
Analytical Date: 04/25/25 11:36  
Analyst: RDB

Extraction Method: EPA 533  
Extraction Date: 04/24/25 07:40

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 03 Batch: WG2057932-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	74		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	61		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	73		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	83		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	64		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	88		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	72		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	89		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	111		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	116		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	85		50-200

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-02,04 Batch: WG2056547-2								
Perfluorobutanoic Acid (PFBA)	117		-		70-130	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	117		-		70-130	-		30
Perfluoropentanoic Acid (PFPeA)	118		-		70-130	-		30
Perfluorobutanesulfonic Acid (PFBS)	117		-		70-130	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	122		-		70-130	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	116		-		70-130	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	108		-		70-130	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	121		-		70-130	-		30
Perfluorohexanoic Acid (PFHxA)	116		-		70-130	-		30
Perfluoropentanesulfonic Acid (PFPeS)	117		-		70-130	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	116		-		70-130	-		30
Perfluoroheptanoic Acid (PFHpA)	120		-		70-130	-		30
Perfluorohexanesulfonic Acid (PFHxS)	118		-		70-130	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	114		-		70-130	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	123		-		70-130	-		30
Perfluorooctanoic Acid (PFOA)	121		-		70-130	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	120		-		70-130	-		30
Perfluorononanoic Acid (PFNA)	117		-		70-130	-		30
Perfluorooctanesulfonic Acid (PFOS)	115		-		70-130	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	113		-		70-130	-		30

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-02,04 Batch: WG2056547-2									
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	123		-		70-130		-		30
Perfluorodecanoic Acid (PFDA)	123		-		70-130		-		30
Perfluoroundecanoic Acid (PFUnA)	122		-		70-130		-		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	116		-		70-130		-		30
Perfluorododecanoic Acid (PFDoA)	117		-		70-130		-		30

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	94				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	83				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	113				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	112				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	101				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	89				50-200

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 03 Batch: WG2057932-2								
Perfluorobutanoic Acid (PFBA)	97		-		70-130	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	96		-		70-130	-		30
Perfluoropentanoic Acid (PFPeA)	98		-		70-130	-		30
Perfluorobutanesulfonic Acid (PFBS)	97		-		70-130	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	93		-		70-130	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	111		-		70-130	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	94		-		70-130	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	108		-		70-130	-		30
Perfluorohexanoic Acid (PFHxA)	101		-		70-130	-		30
Perfluoropentanesulfonic Acid (PFPeS)	94		-		70-130	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	108		-		70-130	-		30
Perfluoroheptanoic Acid (PFHpA)	88		-		70-130	-		30
Perfluorohexanesulfonic Acid (PFHxS)	118		-		70-130	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	94		-		70-130	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	100		-		70-130	-		30
Perfluorooctanoic Acid (PFOA)	105		-		70-130	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	90		-		70-130	-		30
Perfluorononanoic Acid (PFNA)	90		-		70-130	-		30
Perfluorooctanesulfonic Acid (PFOS)	93		-		70-130	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	98		-		70-130	-		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 03 Batch: WG2057932-2								
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	90		-		70-130	-		30
Perfluorodecanoic Acid (PFDA)	103		-		70-130	-		30
Perfluoroundecanoic Acid (PFUnA)	85		-		70-130	-		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	94		-		70-130	-		30
Perfluorododecanoic Acid (PFDoA)	86		-		70-130	-		30

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	82				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	70				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	73				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	94				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	81				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	84				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	85				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	87				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	103				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	96				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	130				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	108				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	112				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	74				50-200

### Matrix Spike Analysis Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-02,04 QC Batch ID: WG2056547-3 QC Sample: L2522644-01 Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	20.4	153	202	119		-	-		70-130	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	153	187	123		-	-		70-130	-		30
Perfluoropentanoic Acid (PFPeA)	15.7	153	195	117		-	-		70-130	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	136	166	122		-	-		70-130	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	153	182	119		-	-		70-130	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND	136	166	122		-	-		70-130	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	153	166	109		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	143	171	119		-	-		70-130	-		30
Perfluorohexanoic Acid (PFHxA)	11.2	153	184	113		-	-		70-130	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	143	163	114		-	-		70-130	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	153	172	113		-	-		70-130	-		30
Perfluoroheptanoic Acid (PFHpA)	5.20	153	192	122		-	-		70-130	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	139	161	116		-	-		70-130	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	144	166	115		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	145	177	122		-	-		70-130	-		30
Perfluorooctanoic Acid (PFOA)	6.12	153	191	121		-	-		70-130	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	146	178	122		-	-		70-130	-		30
Perfluorononanoic Acid (PFNA)	ND	153	186	122		-	-		70-130	-		30
Perfluorooctanesulfonic Acid (PFOS)	ND	142	164	116		-	-		70-130	-		30

## Matrix Spike Analysis Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-02,04 QC Batch ID: WG2056547-3 QC Sample: L2522644-01 Client ID: MS Sample												
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	142	168	118		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	146	174	119		-	-		70-130	-		30
Perfluorodecanoic Acid (PFDA)	ND	153	180	118		-	-		70-130	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	153	186	122		-	-		70-130	-		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	144	164	114		-	-		70-130	-		30
Perfluorododecanoic Acid (PFDoA)	ND	153	182	119		-	-		70-130	-		30

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS % Recovery</b>	<b>MS Qualifier</b>	<b>MSD % Recovery</b>	<b>MSD Qualifier</b>	<b>Acceptance Criteria</b>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	109				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	110				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	108				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	83				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	92				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	79				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98				50-200
Perfluoro[13C4]Butanoic Acid (MPFBA)	80				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	74				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92				50-200

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-02,04 QC Batch ID: WG2056547-3 QC Sample: L2522644-01 Client ID: MS Sample

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	85				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90				50-200

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Sample Associated sample(s): 03 QC Batch ID: WG2057932-3 QC Sample: L2522237-01 Client ID: MS												
Perfluorobutanoic Acid (PFBA)	2.94	161	160	98		-	-		70-130	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	161	132	82		-	-		70-130	-		30
Perfluoropentanoic Acid (PFPeA)	ND	161	160	99		-	-		70-130	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	143	136	95		-	-		70-130	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	161	155	96		-	-		70-130	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND	144	140	97		-	-		70-130	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	161	165	102		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	151	144	95		-	-		70-130	-		30
Perfluorohexanoic Acid (PFHxA)	ND	161	169	105		-	-		70-130	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	151	148	98		-	-		70-130	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	161	156	97		-	-		70-130	-		30
Perfluoroheptanoic Acid (PFHpA)	ND	161	164	102		-	-		70-130	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	147	165	112		-	-		70-130	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	152	147	97		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	153	145	95		-	-		70-130	-		30
Perfluorooctanoic Acid (PFOA)	ND	161	169	105		-	-		70-130	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	154	153	100		-	-		70-130	-		30
Perfluorononanoic Acid (PFNA)	ND	161	170	106		-	-		70-130	-		30
Perfluorooctanesulfonic Acid (PFOS)	ND	149	180	120		-	-		70-130	-		30

## Matrix Spike Analysis Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Sample Associated sample(s): 03 QC Batch ID: WG2057932-3 QC Sample: L2522237-01 Client ID: MS												
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	150	180	120		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	155	146	94		-	-		70-130	-		30
Perfluorodecanoic Acid (PFDA)	ND	161	181	112		-	-		70-130	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	161	146	91		-	-		70-130	-		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	152	173	114		-	-		70-130	-		30
Perfluorododecanoic Acid (PFDoA)	ND	161	169	105		-	-		70-130	-		30

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS % Recovery</b>	<b>MS Qualifier</b>	<b>MSD % Recovery</b>	<b>MSD Qualifier</b>	<b>Acceptance Criteria</b>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	130				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	127				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	124				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	80				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	84				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	76				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	85				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	85				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91				50-200
Perfluoro[13C4]Butanoic Acid (MPFBA)	86				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	68				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	74				50-200

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG2057932-3 QC Sample: L2522237-01 Client ID: MS Sample

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	82				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	81				50-200



## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-02,04 QC Batch ID: WG2056547-4 QC Sample: L2522644-02 Client ID: DUP Sample						
Perfluorobutanoic Acid (PFBA)	11.7	11.9	ng/l	2		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	ND	ng/l	NC		30
Perfluoropentanoic Acid (PFPeA)	ND	ND	ng/l	NC		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ng/l	NC		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	ND	ng/l	NC		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	ND	ng/l	NC		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/l	NC		30
Perfluorohexanoic Acid (PFHxA)	ND	ND	ng/l	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/l	NC		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	ND	ng/l	NC		30
Perfluoroheptanoic Acid (PFHpA)	ND	ND	ng/l	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ng/l	NC		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluorooctanoic Acid (PFOA)	ND	ND	ng/l	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonic Acid (PFOS)	ND	ND	ng/l	NC		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	ND	ng/l	NC		30

## Lab Duplicate Analysis

Batch Quality Control

Project Name: JWD  
Project Number: WO70348479

Lab Number: L2522861  
Report Date: 04/28/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-02,04 QC Batch ID: WG2056547-4 QC Sample: L2522644-02 Client ID: DUP Sample						
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	79		79		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	74		71		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96		95		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	96		104		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	77		76		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		80		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	92		95		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	81		81		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	92		96		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	81		89		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		93		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		93		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	102		107		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		96		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	101		105		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	76		74		50-200

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG2057932-4 QC Sample: L2522240-01 Client ID: DUP Sample						
Perfluorobutanoic Acid (PFBA)	ND	ND	ng/l	NC		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	ND	ng/l	NC		30
Perfluoropentanoic Acid (PFPeA)	ND	ND	ng/l	NC		30
Perfluorobutanesulfonic Acid (PFBS)	7.08	6.80	ng/l	4		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	ND	ng/l	NC		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	ND	ng/l	NC		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/l	NC		30
Perfluorohexanoic Acid (PFHxA)	ND	2.05	ng/l	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/l	NC		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	ND	ng/l	NC		30
Perfluoroheptanoic Acid (PFHpA)	ND	ND	ng/l	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	2.38	ng/l	NC		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluorooctanoic Acid (PFOA)	4.12	4.01	ng/l	3		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonic Acid (PFOS)	2.73	2.91	ng/l	6		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	ND	ng/l	NC		30

## Lab Duplicate Analysis

Batch Quality Control

Project Name: JWD  
Project Number: WO70348479

Lab Number: L2522861  
Report Date: 04/28/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG2057932-4 QC Sample: L2522240-01 Client ID: DUP Sample						
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		83		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	74		77		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	74		72		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	95		92		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	78		80		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		87		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	75		76		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	80		89		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		99		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	89		93		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85		81		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		98		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	99		99		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		108		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	102		109		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	73		74		50-200

**Project Name:** JWD**Lab Number:** L2522861**Project Number:** WO70348479**Report Date:** 04/28/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
B	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2522861-01A	Plastic 250ml Ammonium Acetate preserve	A	NA		2.1	Y	Absent		A2-533(28)
L2522861-01B	Plastic 250ml Ammonium Acetate preserve	A	NA		2.1	Y	Absent		A2-533(28)
L2522861-02A	Plastic 250ml Ammonium Acetate preserve	A	NA		2.1	Y	Absent		A2-533(28)
L2522861-03A	Plastic 250ml Ammonium Acetate preserve	B	NA		4.6	Y	Absent		A2-533(28)
L2522861-03B	Plastic 250ml Ammonium Acetate preserve	B	NA		4.6	Y	Absent		A2-533(28)
L2522861-04A	Plastic 250ml Ammonium Acetate preserve	B	NA		4.6	Y	Absent		A2-533(28)

**Project Name:** JWD  
**Project Number:** WO70348479

Serial\_No:04282510:20  
**Lab Number:** L2522861  
**Report Date:** 04/28/25

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
<b>PERFLUOROETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
<b>PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

**Project Name:** JWD  
**Project Number:** WO70348479

Serial\_No:04282510:20  
**Lab Number:** L2522861  
**Report Date:** 04/28/25

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

**Data Qualifiers**

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** JWD  
**Project Number:** WO70348479

**Lab Number:** L2522861  
**Report Date:** 04/28/25

## REFERENCES

- 136 Determination of Per- and Polyfluoroalkyl Substances in Drinking Water by Isotope Dilution Anion Exchange Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 533, EPA Document 815-B-19-020, November 2019.

## LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**

**SM 2540D:** TSS.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**MADEP-APH.**

**Nonpotable Water:** EPA RSK-175 Dissolved Gases

**Biological Tissue Matrix:** EPA 3050B

**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048**

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Nonpotable Water:** EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**

**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

**Drinking Water**

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

**Non-Potable Water**

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).

**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**

**Drinking Water**

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

**EPA 522, EPA 537.1.**

**Non-Potable Water**

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

**Pace Analytical Services LLC**

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

**Certification IDs:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048**

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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For a complete listing of analytes and methods, please contact your Project Manager.





# Sample Request Form PUBLIC WATER SUPPLIER

Date: 11-9-25

Collected By: [Signature]

Accepted By: [Signature]

Cooler Temp: 11.0 °C

WELL OFF LINE \_\_\_\_\_

WELL RUN TO SYSTEM \_\_\_\_\_

YES  NO VOC'S PRESERVED WITH HCl

**Client Info:**

Name or Code: Jericho Water Dist

Address: 125 Convent Rd

Syosset N.Y 11791

Phone #: (516) 921-8280

Attn: \_\_\_\_\_

Proj. # or (Name): \_\_\_\_\_

Bill To: \_\_\_\_\_

Copies To: \_\_\_\_\_

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

**Sample Info:**

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings		Analysis	Lab No.
						Cl <sub>2</sub>	pH/Temp		
<u>11-9-25</u>	<u>0845</u>	<u>Well #9 N-04245</u>	<u>RW</u>		<u>RO</u>	<u>Ø</u>		<u>1,4-Dioxane</u>	
	<u>0910</u>	<u>Well #9 AOP Eff. Tran #1</u>	<u>E</u>	<u>Ø</u>	<u>RO</u>	<u>Ø</u>		<u>"</u>	
	<u>0933</u>	<u>Well #9 GAC Eff. Tran #1</u>	<u>E</u>	<u>Ø</u>	<u>RO</u>	<u>Ø</u>		<u>"</u>	
	<u>0845</u>	<u>Well #9 N-04245</u>	<u>RW</u>		<u>RO</u>	<u>Ø</u>		<u>PFOS/PFOA</u>	
	<u>0845</u>	<u>" N-04245 FB</u>	<u>RW</u>		<u>RO</u>	<u>Ø</u>		<u>" Field Blank</u>	
	<u>0935</u>	<u>Well #9 GAC Eff. Tran #1</u>	<u>E</u>	<u>Ø</u>	<u>RO</u>	<u>Ø</u>		<u>PFOS/PFOA</u>	
	<u>0935</u>	<u>" " Field Blank</u>	<u>E</u>	<u>Ø</u>	<u>RO</u>	<u>Ø</u>		<u>" Field Blank</u>	

Remarks:

DC# Title: ENV-FRM-MELV-0024 v07\_SCUR  
Effective Date: 4/12/2024

**WO#: 70348479**  
PM: JSA Due Date: 04/17/25  
CLIENT: JWD

Client Name: JWD Project:

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  No Temperature Blank Present:  Yes  No  
Packing Material:  Bubble Wrap  Bubble Bags  Ziploc  None  Other Type of Ice: Wet  Blue  None

Thermometer Used: 7721 Correction Factor: +1.2  Samples on ice, cooling process has begun  
Cooler Temperature(°C): 11.0 Cooler Temperature Corrected(°C): 11.2 Date/Time 5035A kits placed in freezer: \_\_\_\_\_  
Temp should be above freezing to 6°C

USDA Regulated Soil ( N/A, water sample)

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

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

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: AD 4/11/25

	COMMENTS:
Chain of Custody Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name & Signature on COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: (Triple volume provided for MS/MSD) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note: if sediment is visible in the dissolved container.
Sample Labels match COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes date/time/ID/Analysis Matrix: <u>SL</u> <u>WT</u> <u>OIL</u> <u>OTHER</u>	

Date and Initials of person checking preservation: AD 4/11/25

All containers needing preservation have been pH paper Lot #	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with method recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl, NaOH > 9 Sulfide, <input type="checkbox"/> Yes <input type="checkbox"/> 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: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14. Positive for Res. Chlorine? Y N
KI starch test strips Lot #	
Residual chlorine strips Lot #	15. Positive for Sulfide? Y N
SM 4500 CN samples checked for sulf <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Lead Acetate Strips Lot #	
Headspace in ALK Bottle (>6mm): <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Headspace in VOA Vials (>6mm): <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17.
Trip Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Trip Blank Custody Seals Present: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution: \_\_\_\_\_ Field Data Required? Y / N  
Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\* PM (Project Manager) review (which includes the SCUR) is documented electronically in LIMS.



575 Broad Hollow Road, Melville, NY 11747  
 TEL: (516) 370-6000 FAX: (516) 886-5526  
[www.pacelabs.com](http://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: Effluent  
 Routine

**Jericho Water District**  
**125 Convent Rd.**  
**Syosset, NY 11791**

**Lab No. : 70357340002**  
**Client Sample ID.: N-04245 GAC EFF TRAIN 1**

**Attn To : Peter Logan**

Federal ID : 2902831

**Collected : 05/29/2025 10:28 AM**    **Point N-04245 GAC EFF**  
**Received : 05/29/2025 01:23 PM**    **Location Well 9 GAC EFF Train 1**  
**Collected By CLIENT**

Analytical Method: EPA 522		Prep Method: EPA 522			Prep Date: 05/31/2025 7:10 AM		
Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	<0.020	1		ug/L	1	06/03/2025 1:35 AM	002 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	102%		1	%REC		06/03/2025 1:35 AM	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

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.

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

Date Reported: 06/03/2025



575 Broad Hollow Road, Melville, NY 11747  
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**WorkOrder :**  
70357340

## Laboratory Certifications

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**Pace Analytical Services, LLC - Melville, NY**

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  
Texas Certification #: T104704582  
Florida Certification #: E871198



**WO#: 70357340**

**PM: JSA Due Date: 06/10/25**  
**CLIENT: JWD**

Client Name: JWD Project #

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  No Temperature Blank Present:  Yes  No  
 Packing Material:  Bubble Wrap  Bubble Bags  Ziploc  None  Other Type of Ice: Wet  Blue  None  
 Thermometer Used: T1211 Correction Factor: 10.2  Samples on ice, cooling process has begun  
 Cooler Temperature (°C): 4.8 Cooler Temperature Corrected (°C): 5.0 Date/Time 5035A kits placed in freezer \_\_\_\_\_

Temp should be above freezing to 6°C

USDA Regulated Soil ( N/A, water sample)

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

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

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: S/20/25

	COMMENTS:
Chain of Custody Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name & Signature on COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: (Triple volume provided for MS/MSD) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Containers Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note: if sediment is visible in the dissolved container.
Sample Labels match COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes date/time/ID/Analysis Matrix: SL <input checked="" type="checkbox"/> WT <input type="checkbox"/> OIL <input type="checkbox"/> OTHER	

Date and Initials of person checking preservation: S/20/25

All containers needing preservation have been pH paper Lot # <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with method recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl, NaOH>9 Sulfide, <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A NAOH>12 Cyanide)	Sample #
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).	Initial when completed: Lot # of added preservative: Date/Time preservative added:
Per Method, VOA pH is checked after analysis	
Samples checked for dechlorination: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
KI starch test strips Lot #	Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #	
SM 4500 CN samples checked for sulf <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Lead Acetate Strips Lot #	Positive for Sulfide? Y N
Headspace in ALK Bottle (>6mm): <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm): <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

\* PM (Project Manager) review (which includes the SCUR) is documented electronically in LIMS.



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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

## Sample Information:

Type: Drinking Water  
 Origin: Treated Well  
 Routine

## Treatment

AOP

**Jericho Water District**  
**125 Convent Rd.**  
**Syosset, NY 11791**

**Attn To : Peter Logan**

Federal ID : 2902831

Collected : 06/06/2025 09:17 AM Point WELL 20/21 AOP

Received : 06/06/2025 11:43 AM Location

Collected By CLIENT

**Lab No. : 70359166005**

**Client Sample ID.: WELL 20/21 AOP EFF 1**

Analytical Method: EPA 522		Prep Method: EPA 522			Prep Date: 06/13/2025 11:13		
Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	<0.020	1		ug/L	1	06/16/2025 5:33 PM	005 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	108%		1	%REC		06/16/2025 5:33 PM	005 AG2R1/2

### Qualifiers:

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit. Estimated value - below calibration range

U - Indicates the compound was analyzed for, but not detected

Result(s) reported meet(s) NYS Regulatory Limit(s).

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

Date Reported: 06/18/2025

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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**WorkOrder :**

70359166

## Laboratory Certifications

---

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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  
Texas Certification #: T104704582  
Florida Certification #: E871198



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**WorkOrder :**

70359166

**Additional Qualifiers**

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D6 - The precision between the sample and sample duplicate exceeded laboratory control limits.





**WO#: 70359166**

Client Name: JWD

Project #

PM: JSA

Due Date: 06/18/25

CLIENT: JWD

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other

Tracking #:

Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  No Temperature Blank Present:  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  Ziploc  None  Other Type of Ice: Wet  Blue  None

Thermometer Used: Ther Correction Factor: 1.2  Samples on ice, cooling process has begun

Cooler Temperature (°C): 11 Cooler Temperature Corrected (°C): 12.2 Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil ( N/A, water sample)

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

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

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: 6/6/25

	COMMENTS:
Chain of Custody Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name & Signature on COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: (Triple volume provided for MS/MSD) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Containers Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note: if sediment is visible in the dissolved container.
Sample Labels match COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes date/time/ID/Analysis Matrix: <u>SL</u> <u>WT</u> <u>OIL</u> <u>OTHER</u>	

Date and Initials of person checking preservation: 6/6/25

All containers needing preservation have been pH paper Lot # All containers needing preservation are found to be in compliance with method recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl, NaOH>9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
Samples checked for dechlorination: KI starch test strips Lot # Residual chlorine strips Lot #	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14. Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15. Positive for Sulfide? Y N
Lead Acetate Strips Lot #		
Headspace in ALK Bottle (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

\* PM (Project Manager) review (which includes the SCUR) is documented electronically in LIMS.



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# Laboratory Results

Results for the samples and analytes requested  
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## Sample Information:

Type: Drinking Water  
 Origin: Effluent  
 Routine

**Jericho Water District**  
**125 Convent Rd.**  
**Syosset, NY 11791**

**Lab No. : 70361268002**  
**Client Sample ID.: N-04245 GAC EFF TRAIN 1**

**Attn To : Peter Logan**

Federal ID : 2902831

**Collected : 06/16/2025 09:53 AM**    **Point N-04245 GAC EFF**  
**Received : 06/16/2025 12:37 PM**    **Location Well 9 GAC EFF Train 1**  
**Collected By CLIENT**

Analytical Method: EPA 522		Prep Method: EPA 522			Prep Date: 06/18/2025 10:13		
Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	<0.020		1	ug/L	1	06/18/2025 6:50 PM	002 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	117%		1	%REC		06/18/2025 6:50 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

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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

Date Reported: 06/19/2025



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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

### Sample Information:

Type: Drinking Water  
 Origin: Effluent  
 Routine

**Jericho Water District**  
**125 Convent Rd.**  
**Syosset, NY 11791**

**Lab No. : 70361268004**  
**Client Sample ID.: N-06651 GAC EFF TRAIN 2**

**Attn To : Peter Logan**

Federal ID : 2902831

**Collected :** 06/16/2025 10:05 AM **Point** N-06651 GAC EFF  
**Received :** 06/16/2025 12:37 PM **Location** Well 14 GAC EFF Train 2  
**Collected By** CLIENT

<u>Analytical Method:</u> EPA 522		<u>Prep Method:</u> EPA 522			<u>Prep Date:</u> 06/18/2025 10:13		
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Analyzed:</u>	<u>Container:</u>
1,4-Dioxane (p-Dioxane)	<0.020	1		ug/L	1	06/18/2025 7:28 PM	004 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	111%		1	%REC		06/18/2025 7:28 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

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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

Date Reported: 06/19/2025



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**WorkOrder :**  
70361268

## Laboratory Certifications

---

**Pace Analytical Services, LLC - Melville, NY**

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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  
Texas Certification #: T104704582  
Florida Certification #: E871198





**WO#: 70361268**  
**PM: JSA**      **Due Date: 06/24/25**  
**CLIENT: JWD**

Client Name: JWD  
 Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  O  
 Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  Yes  No      Seals intact:  Yes  No      Temperature Blank Present:  Yes  No  
 Packing Material:  Bubble Wrap  Bubble Bags  Ziploc  None  Other  \_\_\_\_\_      Type of Ice:  Wet  Blue  None  
 Thermometer Used: TH21      Correction Factor: +0.2       Samples on ice, cooling process has begun  
 Cooler Temperature(°C): 8.0      Cooler Temperature Corrected(°C): 8.2      Date/Time 5035A kits placed in freezer: \_\_\_\_\_  
 Temp should be above freezing to 6.0°C

USDA Regulated Soil  N/A, water sample)  
 Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)?  Yes  No  
 Did samples originate from a foreign source including Hawaii and Puerto Rico)?  Yes  No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: WJG 6/16/25

	COMMENTS:
Chain of Custody Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name & Signature on COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: (Triple volume provided for MS/MSD) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note: if sediment is visible in the dissolved container.
Sample Labels match COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes date/time/ID/Analysis Matrix: <input checked="" type="checkbox"/> SL <input type="checkbox"/> WT <input type="checkbox"/> OIL <input type="checkbox"/> OTHER	

Date and Initials of person checking preservation: WJG 6/16/25

All containers needing preservation have been pH paper Lot # <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with method recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl, NaOH>9 Sulfide, <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	Sample #  Initial when completed:      Lot # of added preservative:      Date/Time preservative added:
Samples checked for dechlorination: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
KI starch test strips Lot # Residual chlorine strips Lot #	Positive for Res. Chlorine?      Y      N
SM 4500 CN samples checked for sulf <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Lead Acetate Strips Lot #	Positive for Sulfide?      Y      N
Headspace in ALK Bottle (>6mm): <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm): <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution: \_\_\_\_\_      Field Data Required?      Y / N  
 Person Contacted: \_\_\_\_\_      Date/Time: \_\_\_\_\_  
 Comments/ Resolution: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* PM (Project Manager) review (which includes the SCUR) is documented electronically in LIMS.