



Northern Lake Service, Inc • 400 N Lake Ave • Crandon, WI 54520  
800-278-1254 • [www.nlslab.com](http://www.nlslab.com)

August 23, 2024

Mark Pauli  
Wisconsin Dept of Natural Res - Madison  
107 Sutliff Ave  
Rhinelander, WI 54501

Project: 2024 0.5 Expanded Zone (Starks/Stella)  
Project Number: Julie and Nicholas Church - 3330 Meadow Lane  
Work Order: CC09136  
Received: 08/12/24

Enclosed are the results of analyses for samples received by our laboratory on 8/12/2024. If you have any questions concerning this report, please feel free to contact a client service representative at [clientservices@nlslab.com](mailto:clientservices@nlslab.com).

Sincerely,

A handwritten signature in black ink that reads "Steven M. Hefter". The signature is written in a cursive style with a long horizontal stroke extending to the right.

Steven M. Hefter For Client Services  
Northern Lake Service, Inc.



Wisconsin Dept of Natural Res - Madison  
107 Sutliff Ave  
Rhineland, WI 54501

Project: 2024 0.5 Expanded Zone (Starks/Stella)  
Project Number: Julie and Nicholas Church - 3330 Meadow Lane  
Project Manager: Mark Pauli

**Reported:**  
8/23/24 16:06

**Work Order:**  
CC09136

### Sample Summary

Descriptions of all qualifiers listed throughout this report can be found on the Qualifiers and Definitions Page.

Lab ID	Sample	Matrix	Qualifiers	Date Sampled	Date Received
CC09136-01	Kitchen Faucet	DW		8/12/24 8:10	8/12/24 13:00
CC09136-02	Kitchen Faucet Field Blank	DW		8/12/24 8:10	8/12/24 13:00



Wisconsin Dept of Natural Res - Madison 107 Sutliff Ave Rhineland, WI 54501	Project: 2024 0.5 Expanded Zone (Starks/Stella) Project Number: Julie and Nicholas Church - 3330 Meadow Lane Project Manager: Mark Pauli	<b>Reported:</b> 8/23/24 16:06	<b>Work Order:</b> CC09136
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**Sample Results**

**Sample: Kitchen Faucet**

**CC09136-01 (DW) Sampled: 08/12/24 08:10**

Analyte	Result	Qualifier	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
<b>Semi-Volatiles</b>											
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.31	1.0		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.48	1.6		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.42	1.4		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		0.95	3.1		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.8	5.9		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	6.6		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorobutanesulfonic acid (PFBS)	29		0.74	2.5		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorodecanoic acid (PFDA)	ND		0.55	1.9		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorododecanoic acid (PFDoA)	ND		0.64	2.1		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluoroheptanoic acid (PFHpA)	17		0.55	1.9		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorohexanoic acid (PFHxA)	14		0.57	1.9		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorohexanesulfonic acid (PFHxS)	2.2		0.65	2.2		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorononanoic acid (PFNA)	ND		0.53	1.8		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorooctanoic acid (PFOA)	4.3		0.48	1.6		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorooctanesulfonic acid (PFOS)	ND		0.49	1.7		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorotetradecanoic acid (PFTA)	ND		0.55	1.9		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluorotridecanoic acid (PFTTrDA)	ND		0.55	1.9		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
perfluoroundecanoic acid (PFUnA)	ND		0.53	1.8		ng/L	8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
Surrogate: (SURRE) C13-PFHxA	90%		Limits: 70-130%				8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
Surrogate: (SURRE) C13-HFPODA	90%		Limits: 70-130%				8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
Surrogate: (SURRE) C13-PFDA	92%		Limits: 70-130%				8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2
Surrogate: (SURRE) d5-NEtFOSAA	74%		Limits: 70-130%				8/15/24 9:29	8/16/24 11:53	JPW	EPA 537.1, Rev 2.0	2



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**Sample: Kitchen Faucet Field Blank**

**CC09136-02 (DW) Sampled: 08/12/24 08:10**

Analyte	Result	Qualifier	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
<b>Semi-Volatiles</b>											
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.29	0.98		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.45	1.5		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.39	1.3		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		0.89	2.9		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.7	5.6		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.9	6.2		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorobutanesulfonic acid (PFBS)	ND		0.70	2.4		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorodecanoic acid (PFDA)	ND		0.52	1.8		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorododecanoic acid (PFDoA)	ND		0.60	2.0		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluoroheptanoic acid (PFHpA)	ND		0.52	1.8		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorohexanoic acid (PFHxA)	ND		0.54	1.8		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorohexanesulfonic acid (PFHxS)	ND		0.61	2.1		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorononanoic acid (PFNA)	ND		0.50	1.7		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorooctanoic acid (PFOA)	ND		0.45	1.5		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorooctanesulfonic acid (PFOS)	ND		0.46	1.6		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorotetradecanoic acid (PFTA)	ND		0.52	1.8		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluorotridecanoic acid (PFTTrDA)	ND		0.52	1.8		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
perfluoroundecanoic acid (PFUnA)	ND		0.50	1.7		ng/L	8/22/24 5:38	8/22/24 16:13	JPW	EPA 537.1, Rev 2.0	2
<i>Surrogate: (SURR) C13-PFHxA</i>	<i>93%</i>		<i>Limits: 70-130%</i>				<i>8/22/24 5:38</i>	<i>8/22/24 16:13</i>	<i>JPW</i>	<i>EPA 537.1, Rev 2.0</i>	<i>2</i>
<i>Surrogate: (SURR) C13-HFPODA</i>	<i>92%</i>		<i>Limits: 70-130%</i>				<i>8/22/24 5:38</i>	<i>8/22/24 16:13</i>	<i>JPW</i>	<i>EPA 537.1, Rev 2.0</i>	<i>2</i>
<i>Surrogate: (SURR) C13-PFDA</i>	<i>94%</i>		<i>Limits: 70-130%</i>				<i>8/22/24 5:38</i>	<i>8/22/24 16:13</i>	<i>JPW</i>	<i>EPA 537.1, Rev 2.0</i>	<i>2</i>
<i>Surrogate: (SURR) d5-NEtFOSAA</i>	<i>86%</i>		<i>Limits: 70-130%</i>				<i>8/22/24 5:38</i>	<i>8/22/24 16:13</i>	<i>JPW</i>	<i>EPA 537.1, Rev 2.0</i>	<i>2</i>



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### List of Certifications

<b>Code</b>	<b>Description</b>	<b>Number</b>	<b>Expires</b>
2	NLS (Crandon) WDNR Laboratory ID No.	721026460	8/31/24



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### Qualifiers and Definitions

Item	Definition
J	Result is between LOD and LOQ and considered to be within a region of less-certain quantitation.
ND	Analyte NOT DETECTED at or above the LOD or MRL.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
NA	Not Applicable.
Dry	Dry Weight Basis.
Wet	Wet Weight Basis.
% Dry	Equal to: (mg/kg dry) / 10000.
1000 ug/L	Equal to: 1 mg/L.
MCL	Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.
RPD	Relative Percent Difference.
%REC	Percent Recovery.
Source	Sample that was matrix spiked or duplicated.

All LOD/LOQs adjusted to reflect preparation volumes, dilutions, and/or solids content.

# Sample Collection Record

## Town of Stella-Starks Expanded PFAS (537.1) Sampling Project

**Return your sample no later than 2 days after collection to:**

Northern Lake Service  
400 N Lake Ave  
Crandon, WI 54520

**Please provide the following information:**

Name: Nicholas Church

Address: 3330 Meadow Ln

City/State/Zip: Rhineland, WI 54501

Phone: 415-250-2517

Sample Collection Date: 8/12/2024 Sample Collection Time: 08:10 (A)MPM

Sample Collection Location (ex. Kitchen Sink): Kitchen faucet

Sample Collected By (Signature): Nicholas Church

\*\*Per EPA 537.1, each sample set **must** be accompanied by a field blank. The purpose of the field blank is to allow for the identification of potential contamination during sample collection and handling.

Final results will be reported directly to the Wisconsin DNR. WDNR will review, interpret, and inform residents of further action. **DO NOT CONTACT NORTHERN LAKE SERVICE DIRECTLY FOR SAMPLE RESULTS.**

CC09136



**Laboratory use only:**

Received at NLS by (Signature): [Signature] Date/Time: 08/12/2024 1300

Method of Delivery: Speedee ✓ Condition (on ice / no ice) Blue Ice Packs

Receiving Temperature (°C) 3.0 Thermometer # 11

cooling

Speedee

Lot #s ✓

# Spee Dee Delivery EZR Request for Pick-Up



## Pick-up Information:

Requested Pick-up Date 8/12/2024  
Phone Number 415-250-2517  
Name of Business Northern Lake Service  
Contact Person Nick Church  
Pick-up Location:  
Street Address 3330 Meadow Ln  
City Rhinelanders State WI Zip Code 54501  
Special Pick-up Instructions \_\_\_\_\_



SHIPMENTS RECEIVED ARE SUBJECT TO  
SPEE DEE RATES AND RULES AS PUBLISHED  
AT WWW.SPEEDEEDELIVERY.COM

## Return Information:

Name of Business Northern Lake Service, Inc.  
City Crandon State WI Zip Code 54520

EMAIL: [EZR@speeedelivery.com](mailto:EZR@speeedelivery.com)

-OR-

FAX: (320) 251-0168

Please make sure packages are ready. The driver will only make one attempt to pick-up. Pick-up fees will be applied if the packages are not ready.