



Northern Lake Service, Inc • 400 N Lake Ave • Crandon, WI 54520
800-278-1254 • www.nlslab.com

March 18, 2024

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

Project: David Grandt - 3304 County Hwy C
Project Number: 2024 0.5 Expanded Zone (Starks-Stella)
Work Order: CC02308
Received: 03/05/24

Enclosed are the results of analyses for samples received by our laboratory on 3/5/2024. If you have any questions concerning this report, please feel free to contact a client service representative at clientservices@nlslab.com.

Sincerely,

A handwritten signature in black ink, appearing to read "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: David Grandt - 3304 County Hwy C
Project Number: 2024 0.5 Expanded Zone (Starks-Stella)
Project Manager: Mark Pauli

Reported:
3/18/24 11:40

Work Order:
CC02308

Sample Summary

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

Lab ID	Sample	Matrix	Sample Type	Qualifiers	Date Sampled	Date Received
CC02308-01	Kitchen Sink	DW			3/5/24 12:45	3/5/24 13:13
CC02308-02	Field Blank	DW			3/5/24 12:45	3/5/24 13:13



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Sample Results

Sample: Kitchen Sink

CC02308-01 (DW) Sampled: 03/05/24 12:45

Analyte	Result	Qualifier	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Semi-Volatiles											
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.31	1.0		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.48	1.6		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.42	1.4		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		0.95	3.1		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.66	2.2		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.66	2.2		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorobutanesulfonic acid (PFBS)	ND		0.74	2.5		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorodecanoic acid (PFDA)	ND		0.55	1.9		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorododecanoic acid (PFDoA)	ND		0.64	2.1		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluoroheptanoic acid (PFHpA)	53		0.55	1.9		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanoic acid (PFHxA)	74		0.51	1.7		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanesulfonic acid (PFHxS)	0.84	J	0.65	2.2		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorononanoic acid (PFNA)	0.55	J	0.53	1.8		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanoic acid (PFOA)	78		0.48	1.6		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanesulfonic acid (PFOS)	2.4		0.49	1.7		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorotetradecanoic acid (PFTA)	ND		0.55	1.9		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluorotridecanoic acid (PFTTrDA)	ND		0.55	1.9		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
perfluoroundecanoic acid (PFUnA)	ND		0.53	1.8		ng/L	3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) C13-PFHxA	95%		Limits: 70-130%				3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) C13-HFPODA	91%		Limits: 70-130%				3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) C13-PFDA	93%		Limits: 70-130%				3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) d5-NEtFOSAA	89%		Limits: 70-130%				3/11/24 6:21	3/11/24 18:00	RAW	EPA 537.1, Rev 2.0	2



Wisconsin Dept of Natural Res - Madison 107 Sutliff Ave Rhineland, WI 54501	Project: David Grandt - 3304 County Hwy C Project Number: 2024 0.5 Expanded Zone (Starks-Stella) Project Manager: Mark Pauli	Reported: 3/18/24 11:40	Work Order: CC02308
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Sample: Field Blank

CC02308-02 (DW) Sampled: 03/05/24 12:45

Analyte	Result	Qualifier	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Semi-Volatiles											
11-chloroicosafafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.31	1.0		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.47	1.5		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.41	1.3		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		0.93	3.1		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.64	2.1		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.64	2.1		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorobutanesulfonic acid (PFBS)	ND		0.72	2.4		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorodecanoic acid (PFDA)	ND		0.54	1.8		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorododecanoic acid (PFDoA)	ND		0.62	2.0		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluoroheptanoic acid (PFHpA)	ND		0.54	1.8		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanoic acid (PFHxA)	ND		0.50	1.6		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanesulfonic acid (PFHxS)	ND		0.63	2.1		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorononanoic acid (PFNA)	ND		0.52	1.7		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanoic acid (PFOA)	ND		0.47	1.5		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanesulfonic acid (PFOS)	ND		0.48	1.6		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorotetradecanoic acid (PFTA)	ND		0.54	1.8		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluorotridecanoic acid (PFTTrDA)	ND		0.54	1.8		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
perfluoroundecanoic acid (PFUnA)	ND		0.52	1.7		ng/L	3/13/24 6:41	3/13/24 16:48	RAW	EPA 537.1, Rev 2.0	2
<i>Surrogate: (SURR) C13-PFHxA</i>	<i>90%</i>						<i>3/13/24 6:41</i>	<i>3/13/24 16:48</i>	<i>RAW</i>	<i>EPA 537.1, Rev 2.0</i>	<i>2</i>
<i>Surrogate: (SURR) C13-HFPODA</i>	<i>86%</i>						<i>3/13/24 6:41</i>	<i>3/13/24 16:48</i>	<i>RAW</i>	<i>EPA 537.1, Rev 2.0</i>	<i>2</i>
<i>Surrogate: (SURR) C13-PFDA</i>	<i>94%</i>						<i>3/13/24 6:41</i>	<i>3/13/24 16:48</i>	<i>RAW</i>	<i>EPA 537.1, Rev 2.0</i>	<i>2</i>
<i>Surrogate: (SURR) d5-NEtFOSAA</i>	<i>86%</i>						<i>3/13/24 6:41</i>	<i>3/13/24 16:48</i>	<i>RAW</i>	<i>EPA 537.1, Rev 2.0</i>	<i>2</i>



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List of Certifications

Code	Description	Number	Expires
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.

PFAS by EPA Method 537.1 Test Kit
18 PFAS compounds

Return your sample as soon as possible to:

Northern Lake Service
400 N Lake Ave
Crandon, WI 54520

CC02308



Please provide the following information:

Name: David Grandt

Address: 3304 County Hwy C

City/State/Zip: Rhinelander, WI 54501

Phone: 815-566-6939

Sample Collection Date: 03-05-2024 Sample Collection Time: 12:45 ^{12:45pm Per client collected at this time} ~~PM~~ ^{AM} GW 3/5/24

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

Sample Collected By (Signature): _____

↳ 3/5/24 GW - Per client collected by David Grandt

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**

GW 3/5/24
Sample Lot #s
match FB

Laboratory use only:

Received at NLS by (Signature): [Signature] ^{GW} Date/Time: 3/5/24 13:13

Method of Delivery: Hand delivered Condition (on ice / no ice) Ice

Receiving Temperature (°C) 0.2°C Thermometer # REC10