

January 31, 2023

Ryan Peasel
Wentzville Water Reclamation Center
2455 Mette Road
Wentzville, MO 63385
TEL: (636) 639-7541
FAX: (636) 639-2075



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: Wentzville Quarterly PFAS

WorkOrder: 23010184

Dear Ryan Peasel:

TEKLAB, INC received 3 samples on 1/4/2023 1:18:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Patrick Riley
Project Manager
(618)344-1004 ex 44
patrickriley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Wentzville Water Reclamation Center

Work Order: 23010184

Client Project: Wentzville Quarterly PFAS

Report Date: 31-Jan-23

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	10
Chain of Custody	Appended

Client: Wentzville Water Reclamation Center

Work Order: 23010184

Client Project: Wentzville Quarterly PFAS

Report Date: 31-Jan-23

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)

Client: Wentzville Water Reclamation Center

Work Order: 23010184

Client Project: Wentzville Quarterly PFAS

Report Date: 31-Jan-23

Qualifiers

- # - Unknown hydrocarbon
- C - RL shown is a Client Requested Quantitation Limit
- H - Holding times exceeded
- J - Analyte detected below quantitation limits
- ND - Not Detected at the Reporting Limit
- S - Spike Recovery outside recovery limits
- X - Value exceeds Maximum Contaminant Level
- B - Analyte detected in associated Method Blank
- E - Value above quantitation range
- I - Associated internal standard was outside method criteria
- M - Manual Integration used to determine area response
- R - RPD outside accepted recovery limits
- T - TIC(Tentatively identified compound)

Client: Wentzville Water Reclamation Center

Work Order: 23010184

Client Project: Wentzville Quarterly PFAS

Report Date: 31-Jan-23

Cooler Receipt Temp: 4.2 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425

Phone (618) 344-1004

Fax (618) 344-1005

Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415

Phone (217) 698-1004

Fax (217) 698-1005

Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214

Phone (913) 541-1998

Fax (913) 541-1998

Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425

Phone (618) 344-1004

Fax (618) 344-1005

Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515

Phone (630) 324-6855

Fax

Email arenner@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Wentzville Water Reclamation Center

Work Order: 23010184

Client Project: Wentzville Quarterly PFAS

Report Date: 31-Jan-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2023	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2023	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2023	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2023	Collinsville
Arkansas	ADEQ	88-0966		3/14/2023	Collinsville
Illinois	IDPH	17584		5/31/2023	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2023	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



Laboratory Results

<http://www.teklabinc.com/>

Client: Wentzville Water Reclamation Center

Work Order: 23010184

Client Project: Wentzville Quarterly PFAS

Report Date: 31-Jan-23

Lab ID: 23010184-001

Client Sample ID: COW-WRC-EFF C

Matrix: AQUEOUS

Collection Date: 01/04/2023 9:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
MODIFIED 537.1								
PFBS	*	1.99		5.40	ng/L	1	01/10/2023 18:18	201685
PFHxA	*	1.99		9.94	ng/L	1	01/10/2023 18:18	201685
HFPO-DA	*	1.99		ND	ng/L	1	01/10/2023 18:18	201685
PFHpA	*	2.0	J	1.6	ng/L	1	01/10/2023 18:18	201685
PFHxS (Linear)	*	1.99		3.78	ng/L	1	01/10/2023 18:18	201685
ADONA	*	1.99		ND	ng/L	1	01/10/2023 18:18	201685
PFOA	*	1.99		8.12	ng/L	1	01/10/2023 18:18	201685
PFOS (Linear)	*	1.99	S	9.93	ng/L	1	01/10/2023 18:18	201685
PFNA	*	2.0	J	1.5	ng/L	1	01/10/2023 18:18	201685
9CI-PF3ONS	*	1.99		ND	ng/L	1	01/10/2023 18:18	201685
PFDA	*	1.99		2.29	ng/L	1	01/10/2023 18:18	201685
N-MeFOSAA (Linear)	*	2.0	J	0.50	ng/L	1	01/10/2023 18:18	201685
PFUdA	*	1.99		ND	ng/L	1	01/10/2023 18:18	201685
N-EtFOSAA (Linear)	*	1.99	S	ND	ng/L	1	01/10/2023 18:18	201685
11CI-PF3OUdS	*	1.99	S	ND	ng/L	1	01/10/2023 18:18	201685
PFDoA	*	1.99		ND	ng/L	1	01/10/2023 18:18	201685
PFTTrDa	*	1.99	S	ND	ng/L	1	01/10/2023 18:18	201685
PFTA	*	1.99	S	ND	ng/L	1	01/10/2023 18:18	201685
Surr: M2-PFDA	*	70-130		90.8	%REC	1	01/10/2023 18:18	201685
Surr: M2-PFHxA	*	70-130		74.6	%REC	1	01/10/2023 18:18	201685
Surr: M3-HFPO-DA	*	70-130	S	59.5	%REC	1	01/10/2023 18:18	201685
Surr: M5-N-EtFOSAA	*	70-130	S	26.0	%REC	1	01/10/2023 18:18	201685

Surrogate recovery is outside control limits due to matrix interference.

Matrix spike did not recover within control limits due to matrix interference.



Laboratory Results

<http://www.teklabinc.com/>

Client: Wentzville Water Reclamation Center
Client Project: Wentzville Quarterly PFAS
Lab ID: 23010184-002
Matrix: SOLID

Work Order: 23010184
Report Date: 31-Jan-23
Client Sample ID: COW-WRC-BIOSOLIDS G
Collection Date: 01/04/2023 9:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS								
Subcontracted Analysis	*	0		See Attached		1	01/13/2023 0:00	R324189



Laboratory Results

<http://www.teklabinc.com/>

Client: Wentzville Water Reclamation Center

Work Order: 23010184

Client Project: Wentzville Quarterly PFAS

Report Date: 31-Jan-23

Lab ID: 23010184-003

Client Sample ID: COW-WRC-DIWATER

Matrix: AQUEOUS

Collection Date: 01/04/2023 9:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
MODIFIED 537.1								
PFBS	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFHxA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
HFPO-DA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFHpA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFHxS (Linear)	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
ADONA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFOA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFOS (Linear)	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFNA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
9CI-PF3ONS	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFDA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
N-MeFOSAA (Linear)	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFUdA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
N-EtFOSAA (Linear)	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
11CI-PF3OUdS	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFDoA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFTTrDa	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
PFTA	*	1.99		ND	ng/L	1	01/10/2023 19:19	201685
Surr: M2-PFDA	*	70-130		91.6	%REC	1	01/10/2023 19:19	201685
Surr: M2-PFHxA	*	70-130		98.8	%REC	1	01/10/2023 19:19	201685
Surr: M3-HFPO-DA	*	70-130		93.7	%REC	1	01/10/2023 19:19	201685
Surr: M5-N-EtFOSAA	*	70-130		87.3	%REC	1	01/10/2023 19:19	201685



Receiving Check List

<http://www.teklabinc.com/>

Client: Wentzville Water Reclamation Center

Work Order: 23010184

Client Project: Wentzville Quarterly PFAS

Report Date: 31-Jan-23

Carrier: Justin Colp

Received By: ANC

Completed by:

Reviewed by:

On:

On:

04-Jan-23

04-Jan-23

Lindsey Maddox

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- Shipping container/cooler in good condition? Yes No Not Present Temp °C **4.2**
- Type of thermal preservation? None Ice Blue Ice Dry Ice
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Reported field parameters measured: Field Lab NA
- Container/Temp Blank temperature in compliance? Yes No

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

- Water – at least one vial per sample has zero headspace? Yes No No VOA vials
- Water - TOX containers have zero headspace? Yes No No TOX containers
- Water - pH acceptable upon receipt? Yes No NA
- NPDES/CWA TCN interferences checked/treated in the field? Yes No NA

Any No responses must be detailed below or on the COC.

CHAIN OF CUSTODY

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Wentzville Water Reclamation Center	Samples on: <input checked="" type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE 9.2 °C LTG# 5
Address: 2455 Mette Road	Preserved in: <input type="checkbox"/> LAB <input type="checkbox"/> FIELD FOR LAB USE ONLY
City / State / Zip: Wentzville, MO 63385	Lab Notes:
Contact: Ryan Peasel Phone: (636) 639-2071	Client Comments: Courier
E-Mail: ryan.peasel@wentzvillemo.gov Fax: (636) 639-2075	

Are these samples known to be involved in litigation? If yes, a surcharge will apply Yes No

Are these samples known to be hazardous? Yes No

Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. Yes No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																				
Wentzville Quarterly PFAS		MARCOS OLIVERO		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	PFAS EPA 533	PFAS EPA 537.1	DC water	FIELD	SAMPLE												
Results Requested	Billing Instructions	# and Type of Containers																								
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge)	<input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER																	
Lab Use Only	Sample Identification									Date/Time Sampled																
23010184-001	COV-WR-EFF-C									1-4-23 9:00am																
002	COV-WR-BOS-W3-6	1-4-23 9:00am								3																
003	COV-WR-Drum-PP	1-4-23 9:00am											2													
Relinquished By		Date/Time		Received By		Date/Time																				
MARCOS OLIVERO		1-4-23 12:00 PM		J. Colb		1-4-23 12:00																				
J. Colb		1-4-23 1318		Allison Colb		1/4/23 1318																				

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 75302



CERT 14-22



Analytical Laboratory Report

Report ID: S44069.01(01)
Generated on 01/31/2023

Report to

Attention: Partick Riley
Teklab Inc.
5445 Horseshoe Lake Road
Collinsville, IL 62234

Phone: 618-344-1004 FAX:
Email: patrickriley@teklabinc.com

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S44069.01
Project: 23010184
Collected Date(s): 01/04/2023
Submitted Date/Time: 01/06/2023 14:30
Sampled by: Unknown
P.O. #: 33814

Table of Contents

Cover Page (Page 1)
General Report Notes (Page 2)
Report Narrative (Page 2)
Laboratory Certifications (Page 3)
Qualifier Descriptions (Page 3)
Glossary of Abbreviations (Page 3)
Method Summary (Page 4)
Sample Summary (Page 5)

Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report



Analytical Laboratory Report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
ASTM D7968-17M	ASTM Method D7968 - 17 Modified (Isotopic Dilution)
SM2540B	Standard Method 2540 B 2015

Parameter Summary

Parameter	Synonym	Cas #
PFBA	Perfluorobutanoic Acid	375-22-4
PFPeA	Perfluoropentanoic Acid	2706-90-3
4:2 FTSA	4:2 Fluorotelomer Sulfonic Acid	757124-72-4
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFPeS	Perfluoropentane Sulfonic Acid	2706-91-4
6:2 FTSA	6:2 Fluorotelomer Sulfonic Acid	27619-97-2
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFHxS-LN	Perfluorohexane Sulfonic Acid - LN	355-46-4-LN
PFHxS-BR	Perfluorohexane Sulfonic Acid - BR	355-46-4-BR
PFNA	Perfluorononanoic Acid	375-95-1
8:2 FTSA	8:2 Fluorotelomer Sulfonic Acid	39108-34-4
PFHpS	Perfluoroheptane Sulfonic Acid	375-92-8
PFDA	Perfluorodecanoic Acid	335-76-2
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6
PFOS	Perfluorooctane Sulfonic Acid	1763-23-1
PFOS-LN	Perfluorooctane Sulfonic Acid - LN	1763-23-1-LN
PFOS-BR	Perfluorooctane Sulfonic Acid - BR	1763-23-1-BR
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFNS	Perfluorononane Sulfonic Acid	68259-12-1
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFDS	Perfluorodecane Sulfonic Acid	335-77-3
PFTTrDA	Perfluorotridecanoic Acid	72629-94-8
FOSA	Perfluorooctane Sulfonamide	754-91-6
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6



Analytical Laboratory Report

Sample Summary (1 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S44069.01	23010184-002	Soil	01/04/23 09:00



Analytical Laboratory Report

Lab Sample ID: S44069.01

Sample Tag: 23010184-002

Collected Date/Time: 01/04/2023 09:00

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	250ml Plastic	None	Yes	4.9	IR
1	15ml Centrifuge Tube	None	Yes	4.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.89/6.38/10	ASTM D7968-17M	01/12/23 14:00	PTW	

Inorganics

Method: SM2540B, Run Date: 01/09/23 15:20, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	1.8	1		%	1		

Organics

28 PFAs, Method: ASTM D7968-17M, Run Date: 01/13/23 20:39, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	2,500	2,000		ng/kg	101	375-22-4	I
PFPeA*	12,000	1,000		ng/kg	101	2706-90-3	
4:2 FTSA*	Not detected	1,000		ng/kg	101	757124-72-4	I
PFHxA*	6,000	1,000		ng/kg	101	307-24-4	
PFBS*	8,800	1,000		ng/kg	101	375-73-5	
PFHpA*	1,300	1,000		ng/kg	101	375-85-9	
PFPeS*	Not detected	1,000		ng/kg	101	2706-91-4	
6:2 FTSA*	Not detected	1,000		ng/kg	101	27619-97-2	I
PFOA*	16,000	1,000		ng/kg	101	335-67-1	
PFHxS*	1,600	1,000		ng/kg	101	355-46-4	
PFHxS-LN*	1,200	1,000		ng/kg	101	355-46-4-LN	
PFHxS-BR*	Not detected	1,000		ng/kg	101	355-46-4-BR	
PFNA*	4,500	1,000		ng/kg	101	375-95-1	
8:2 FTSA*	Not detected	1,000		ng/kg	101	39108-34-4	I
PFHpS*	Not detected	1,000		ng/kg	101	375-92-8	
PFDA*	22,000	1,000		ng/kg	101	335-76-2	
N-MeFOSAA*	2,500	1,000		ng/kg	101	2355-31-9	
EtFOSAA*	1,700	1,000		ng/kg	101	2991-50-6	
PFOS*	34,000	1,000		ng/kg	101	1763-23-1	
PFOS-LN*	31,000	1,000		ng/kg	101	1763-23-1-LN	
PFOS-BR*	3,000	1,000		ng/kg	101	1763-23-1-BR	
PFUnDA*	3,500	1,000		ng/kg	101	2058-94-8	
PFNS*	Not detected	1,000		ng/kg	101	68259-12-1	
PFDODA*	5,400	1,000		ng/kg	101	307-55-1	
PFDS*	Not detected	1,000		ng/kg	101	335-77-3	
PFTTrDA*	Not detected	1,000		ng/kg	101	72629-94-8	
FOSA*	Not detected	1,000		ng/kg	101	754-91-6	
PFTeDA*	1,400	1,000		ng/kg	101	376-06-7	
11Cl-PF3OUdS*	Not detected	1,000		ng/kg	101	763051-92-9	
9Cl-PF3ONS*	Not detected	1,000		ng/kg	101	756426-58-1	

I-Matrix interference with internal standard



Analytical Laboratory Report

Lab Sample ID: S44069.01 (continued)

Sample Tag: 23010184-002

28 PFAs, Method: ASTM D7968-17M, Run Date: 01/13/23 20:39, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
ADONA*	Not detected	1,000		ng/kg	101	919005-14-4	
HFPO-DA*	Not detected	1,000		ng/kg	101	13252-13-6	

Merit Laboratories Login Checklist

Lab Set ID:S44069

Client:TEKLAB (Teklab Inc.)

Project: 23010184

Submitted:01/06/2023 14:30 Login User: MMC

Attention: Partick Riley

Address: Teklab Inc.
5445 Horseshoe Lake Road
Collinsville, IL 62234

Phone: 618-344-1004 FAX:

Email:patrickriley@teklabinc.com

Selection	Description	Note
Sample Receiving		
01.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Samples are received at 4C +/- 2C Thermometer # IR 4.9
02.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Received on ice/ cooling process begun
03.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Samples shipped FedEx
04.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples left in 24 hr. drop box
05.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	COC adequately filled out
07.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	COC signed and relinquished to the lab
08.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sample tag on bottles match COC
09.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Subcontracting needed? Subcontracted to:
Preservation		
10.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Do sample have correct chemical preservation
11.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Completed pH checks on preserved samples? (no VOAs)
12.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	All bottles intact
14.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Appropriate analytical bottles are used
15.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Merit bottles used
16.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sufficient sample volume received
17.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples require laboratory filtration
18.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Samples submitted within holding time
19.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Do water VOC or TOX bottles contain headspace

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES NO With: Ice Blue Ice Preserved in: Lab Field

Teklab Inc
5445 Horseshoe Lake Road
Collinsville, IL 62234

Cooler Temp: Sampler: QC Level:

Project#

Comments: **Please issue reports and invoices via email only**
Please analyze for PFAS using the method below and your Std TAT
Any changes to analysis/methods must be approved by Teklab, Inc.
Please run method 1633 PL

Contact: Email:
Requested Due Date: Billing/PO:

Phone:

115123

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

PFAS EPA 608.1-633 *PL*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44069.01	23010184-002	1/4/23 0900	Unpres	Sludge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Other	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Other	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Other	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Other	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Other	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Other	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Other	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Other	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Relinquished By	Date/Time	Received By	Date/Time
<i>[Signature]</i>	1/4/23		
FedEx	1/6/23 1430	<i>M. Chloeb</i>	1/6/23 1430

IR 4.9