

May 22, 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: Annual PFAS Monitoring

WorkOrder: 23050842

Dear Ryan Peasel:

TEKLAB, INC received 1 sample on 5/10/2023 4:20:00 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: 23050842

Client Project: Annual PFAS Monitoring

Report Date: 22-May-23

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Client: Wentzville Water Reclamation Center

Work Order: 23050842

Client Project: Annual PFAS Monitoring

Report Date: 22-May-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: 23050842

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Report Date: 22-May-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)



Case Narrative

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

Client: Wentzville Water Reclamation Center

Work Order: 23050842

Client Project: Annual PFAS Monitoring

Report Date: 22-May-23

Cooler Receipt Temp: 3.4 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

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Collinsville, IL 62234-7425
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Email EHurley@teklabinc.com

Springfield

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Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

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

Client: Wentzville Water Reclamation Center

Work Order: 23050842

Client Project: Annual PFAS Monitoring

Report Date: 22-May-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	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		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2023	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2024	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: 23050842

Client Project: Annual PFAS Monitoring

Report Date: 22-May-23

Lab ID: 23050842-001

Client Sample ID: G COW-DOM2-ATNVLLS

Matrix: WASTE WATER

Collection Date: 05/08/2023 12:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 D 1997, 2011								
Total Suspended Solids	NELAP	6	H	85	mg/L	1	05/15/2023 15:43	R328807
<i>Sample analysis did not meet hold time requirements.</i>								
US EPA METHOD 1633								
11CI-PF3OUdS	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
3,3 FTCA	*	3.66		ND	ng/L	1	05/17/2023 20:52	206103
4,2 FTS	*	7.33	I	ND	ng/L	1	05/17/2023 20:52	206103
5,3 FTCA	*	18.3		ND	ng/L	1	05/17/2023 20:52	206103
6,2 FTS	*	7.33	I	ND	ng/L	1	05/17/2023 20:52	206103
7,3 FTCA	*	18.3		ND	ng/L	1	05/17/2023 20:52	206103
8,2 FTS	*	7.33		ND	ng/L	1	05/17/2023 20:52	206103
9CI-PF3ONS	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
ADONA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
HFPO-DA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
NEtFOSA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
NEtFOSAA	*	1.8	J	0.48	ng/L	1	05/17/2023 20:52	206103
NEtFOSE	*	9.16		ND	ng/L	1	05/17/2023 20:52	206103
NFDHA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
NMeFOSA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
NMeFOSAA	*	1.8	J	0.16	ng/L	1	05/17/2023 20:52	206103
NMeFOSE	*	9.16		ND	ng/L	1	05/17/2023 20:52	206103
PFBA	*	7.3	J	3.2	ng/L	1	05/17/2023 20:52	206103
PFBS	*	1.8	J	0.81	ng/L	1	05/17/2023 20:52	206103
PFDA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFDaA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFDoS	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFDS	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFEESA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFHpA	*	1.8	J	0.88	ng/L	1	05/17/2023 20:52	206103
PFHpS	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFHxA	*	1.83		5.05	ng/L	1	05/17/2023 20:52	206103
PFHxS	*	1.8	J	0.95	ng/L	1	05/17/2023 20:52	206103
PFMBA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFMPA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFNA	*	1.8	J	0.44	ng/L	1	05/17/2023 20:52	206103
PFNS	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFOA	*	1.8	J	1.4	ng/L	1	05/17/2023 20:52	206103
PFOS	*	1.8	J	1.3	ng/L	1	05/17/2023 20:52	206103
PFOSA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFPeA	*	3.66		ND	ng/L	1	05/17/2023 20:52	206103
PFPeS	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFTeDA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFTrDa	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
PFUnA	*	1.83		ND	ng/L	1	05/17/2023 20:52	206103
Surr: M2-4,2FTS	*	25-200	S	210.5	%REC	1	05/17/2023 20:52	206103
Surr: M2-6,2FTS	*	25-200	S	286.5	%REC	1	05/17/2023 20:52	206103
Surr: M2-8,2FTS	*	25-200		81.9	%REC	1	05/17/2023 20:52	206103
Surr: M2-PFDoA	*	10-150		18.4	%REC	1	05/17/2023 20:52	206103



Laboratory Results

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

Client: Wentzville Water Reclamation Center

Work Order: 23050842

Client Project: Annual PFAS Monitoring

Report Date: 22-May-23

Lab ID: 23050842-001

Client Sample ID: G COW-DOM2-ATNVLLS

Matrix: WASTE WATER

Collection Date: 05/08/2023 12:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
US EPA METHOD 1633								
Surr: M2-PFTeDA	*	10-130		79.0	%REC	1	05/17/2023 20:52	206103
Surr: M3-HFPO-DA	*	25-160		91.3	%REC	1	05/17/2023 20:52	206103
Surr: M3-NMeFOSA	*	10-130		30.4	%REC	1	05/17/2023 20:52	206103
Surr: M3-NMeFOSAA	*	10-200		31.4	%REC	1	05/17/2023 20:52	206103
Surr: M3-PFBS	*	25-150		68.8	%REC	1	05/17/2023 20:52	206103
Surr: M3-PFHxS	*	25-150		96.1	%REC	1	05/17/2023 20:52	206103
Surr: M4-PFBA	*	10-130		61.6	%REC	1	05/17/2023 20:52	206103
Surr: M4-PFHpA	*	40-150		127.6	%REC	1	05/17/2023 20:52	206103
Surr: M5-NEtFOSA	*	10-130		32.7	%REC	1	05/17/2023 20:52	206103
Surr: M5-NEtFOSAA	*	10-200		16.5	%REC	1	05/17/2023 20:52	206103
Surr: M5-PFHxA	*	40-150		91.7	%REC	1	05/17/2023 20:52	206103
Surr: M5-PFPeA	*	40-150		84.0	%REC	1	05/17/2023 20:52	206103
Surr: M6-PFDA	*	20-140		91.0	%REC	1	05/17/2023 20:52	206103
Surr: M7-NMeFOSE	*	10-150		30.1	%REC	1	05/17/2023 20:52	206103
Surr: M7-PFUnA	*	20-140		44.3	%REC	1	05/17/2023 20:52	206103
Surr: M8-PFOA	*	30-140		84.4	%REC	1	05/17/2023 20:52	206103
Surr: M8-PFOS	*	20-140		95.1	%REC	1	05/17/2023 20:52	206103
Surr: M8-PFOSA	*	10-130		14.1	%REC	1	05/17/2023 20:52	206103
Surr: M9-NEtFOSE	*	10-150		35.2	%REC	1	05/17/2023 20:52	206103
Surr: M9-PFNA	*	30-140		95.7	%REC	1	05/17/2023 20:52	206103

The associated internal standard was outside method criteria. Subsequent analysis produced similar results. Results of "I" flagged analytes should be considered estimated.

Surrogate M2-4,2FTS and M2-6,2FTS recovered outside the upper control limits.



Receiving Check List

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

Client: Wentzville Water Reclamation Center

Work Order: 23050842

Client Project: Annual PFAS Monitoring

Report Date: 22-May-23

Carrier: Tyler Maddox

Received By: MBP

Completed by:

Reviewed by:

On:

11-May-23

Allison Colin

On:

11-May-23

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- Shipping container/cooler in good condition? Yes No Not Present Temp °C **3.4**
- 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: <u>Wentzville Water Reclamation Center</u> Address: <u>2455 Mette Road</u> City/State/Zip: <u>Wentzville, MO 63385</u> Contact: <u>Ryan Peasel</u> Phone: <u>(636) 639-2071</u> Email: <u>ryan.peasel@wentzvillemo.gov</u> Fax: <u> </u>				Samples on: <input checked="" type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE <u>3H °C</u> Preserved in: <input type="checkbox"/> LAB <input type="checkbox"/> FIELD <u>FOR LAB USE ONLY</u> LAB NOTES: <u>Pulled Sample 5-8-23 @ 12:30pm</u> Client Comments: <u>Courier</u> *Test Method 1633 **TSS to be analyzed from the 125mL container.													
Are these samples known to be involved in litigation? If yes, a surcharge will apply: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Are these samples known to be hazardous? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		PROJECT NAME/NUMBER <u>Annual PFAS Monitoring</u>		SAMPLE COLLECTOR'S NAME <u>MARCOS QUINTERO</u>													
RESULTS REQUESTED <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)		BILLING INSTRUCTIONS															
Lab Use Only <input type="checkbox"/> G/C <input type="checkbox"/>	G/C <u>G</u>	Sample ID <u>COW-DOM2-ATNVLLS</u>	Date/Time Sampled <u>5-8-23/12:30pm</u>	Matrix <u>Wastewater</u>	# and Type of Containers UNP HNO3 NaOH H2SO4 HCL MeOH NaHSO4 TSP Other PFAS* TSS		INDICATE ANALYSIS REQUESTED										
<u>20842-001</u>	<u>G</u>	<u>COW-DOM2-ATNVLLS</u>	<u>5-8-23/12:30pm</u>	<u>Wastewater</u>	<u>5</u>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
				Aqueous													
				Aqueous													
				Aqueous													
				Aqueous													
				Aqueous													
				Aqueous													
		Field pH:		Aqueous													
		Field Temp:		Aqueous													
		Ship on ice! BOD HT = 48		Aqueous													
Relinquished By <u>Dan [Signature]</u>			Date/Time <u>5-10-23</u>		Received By <u>[Signature]</u>			Date/Time <u>5/10/23 2:55pm</u>									
			<u>5-10-23 4:00pm</u>		<u>[Signature]</u>			<u>5/10/23 1670</u>									

*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