100226

E-10374

05002

05003

9978

Illinois

Kansas

Louisiana

Louisiana

Oklahoma



January 16, 2024

Bill Pietroburgo Professional Environmental Engineers, Inc. 2665 Scott Ave., Suite B

St. Louis, MO 63103 TEL: (314) 531-0060 FAX: (314) 531-0068

RE: De Soto School District - Junior High WorkOrder: 23122086

Dear Bill Pietroburgo:

TEKLAB, INC received 25 samples on 12/28/2023 3:30:00 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: Professional Environmental Engineers, Inc.

Work Order: 23122086

Client Project: De Soto School District - Junior High

Report Date: 16-Jan-24

This reporting package includes the following:

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Chain of Custody	Appended



Definitions

http://www.teklabinc.com/

Client: Professional Environmental Engineers, Inc.

Work Order: 23122086

Client Project: De Soto School District - Junior High Report Date: 16-Jan-24

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)



Definitions

http://www.teklabinc.com/

Client: Professional Environmental Engineers, Inc.

Work Order: 23122086

Client Project: De Soto School District - Junior High Report Date: 16-Jan-24

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: Professional Environmental Engineers, Inc. Work Order: 23122086

Client Project: De Soto School District - Junior High Report Date: 16-Jan-24

Cooler Receipt Temp: N/A °C

Locations

	Collinsville		Springfield		Kansas City
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com
	Collinsville Air		Chicago		
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.		
	Collinsville, IL 62234-7425		Downers Grove, IL 60515		
Phone	(618) 344-1004	Phone	(630) 324-6855		
Fax	(618) 344-1005	Fax			
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com		



Accreditations

http://www.teklabinc.com/

Client: Professional Environmental Engineers, Inc.

Work Order: 23122086

Client Project: De Soto School District - Junior High Report Date: 16-Jan-24

State	Dept	Cert#	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	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: Professional Environmental Engineers, Inc.

Work Order: 23122086

Client Project: De Soto School District - Junior High Report Date: 16-Jan-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4	, 200.8 R5.4, METAL	S BY ICPMS (TOTAL)						
Lead								
23122086-001A	JHS-F-CON-2-1	NELAP	1.0	45.3	μg/L	5	01/10/2024 9:47	12/21/2023 10:24
23122086-002A	JHS-F-CON-2-2	NELAP	1.0	14.5	μg/L	5	01/10/2024 3:00	12/21/2023 10:25
23122086-003A	JHS-WC-HA-2-3	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 14:40	12/21/2023 10:27
23122086-004A	JHS-BF-HA-2-4	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 14:44	12/21/2023 10:29
23122086-005A	JHS-F-N-2-5	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 14:48	12/21/2023 10:20
23122086-006A	JHS-F-211-2-6	NELAP	1.0	3.2	μg/L	1	01/12/2024 14:59	12/21/2023 10:18
23122086-007A	JHS-WC-HB-2-7	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 15:02	12/21/2023 10:14
23122086-008A	JHS-BF-HB-2-8	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 15:06	12/21/2023 10:16
23122086-009A	JHS-F-ILC-1-9	NELAP	1.0	2.3	μg/L	1	01/12/2024 15:20	12/21/2023 10:44
23122086-010A	JHS-WC-HC-1-10	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 15:24	12/21/2023 10:47
23122086-011A	JHS-WC-HC-1-11	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 15:28	12/21/2023 10:49
23122086-012A	JHS-IM-KIT-1-12	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 15:31	12/22/2023 11:20
23122086-013A	JHS-WF-KIT-1-13	NELAP	1.0	3.4	μg/L	1	01/12/2024 15:35	12/21/2023 10:56
23122086-014A	JHS-SN-KIT-1-14	NELAP	1.0	66.8	μg/L	1	01/12/2024 15:39	12/21/2023 10:54
23122086-015A	JHS-KF-KIT-1-15	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 15:43	12/21/2023 10:57
23122086-016A	JHS-WC-CAFÉ-1-1	6 NELAP	1.0	< 1.0	μg/L	1	01/12/2024 15:46	12/21/2023 11:02
23122086-017A	JHS-BF-CAFÉ-1-17	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 15:50	12/21/2023 11:03
23122086-018A	JHS-F-SPED-2-18	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 15:54	12/21/2023 10:10
23122086-019A	JHS-WF-KIT-1-19	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 16:16	12/21/2023 10:59
23122086-020A	JHS-WF-OKIT-1-20	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 16:19	12/21/2023 10:39
23122086-021A	JHS-WF-OKIT-1-21	NELAP	1.0	1.6	μg/L	1	01/12/2024 16:23	12/21/2023 10:41
23122086-022A	JHS-WC-GYM-1-22	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 16:27	12/21/2023 10:32
23122086-023A	JHS-BF-GYM-1-23	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 16:30	12/21/2023 10:34
23122086-024A	JHS-F-MO-G-24	NELAP	1.0	< 1.0	μg/L	1	01/12/2024 16:34	12/21/2023 11:10
23122086-025A	JHS-WC-MO-G-25	NELAP	1.0	< 1.0	μg/L	1	01/15/2024 11:20	12/21/2023 11:12



Client: Professional Environmental Engineers, Inc.

Receiving Check List

http://www.teklabinc.com/

Work Order: 23122086

Client Project: De Soto School District - Junior High Report Date: 16-Jan-24 Carrier: Employee Received By: CET Completed by: Reviewed by: OMOON DISCULC On: On: 28-Dec-23 28-Dec-23 Amber Dilallo Ellie Hopkins Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes **V** No 🗔 Not Present Temp °C N/A Type of thermal preservation? **~** Ice _ Blue Ice None Dry Ice Chain of custody present? **~** No L Yes Chain of custody signed when relinquished and received? **~** Yes No L **~** Chain of custody agrees with sample labels? No 🗀 Yes **~** Samples in proper container/bottle? Yes No 🗀 **V** Sample containers intact? Yes No Yes **~** No Sufficient sample volume for indicated test? **~** No \square All samples received within holding time? Yes NA 🗸 Field Lab \square Reported field parameters measured: Yes 🗸 No 🗌 Container/Temp Blank temperature in compliance? 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 🗸 No TOX containers Water - TOX containers have zero headspace? Yes No 🗌 Yes 🗹 No 🗌 Water - pH acceptable upon receipt? NA 🗸 NPDES/CWA TCN interferences checked/treated in the field? Yes No 🗀 Any No responses must be detailed below or on the COC.

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory. - amberdilallo - 12/28/2023 3:48:39 PM

CHAIN OF CUSTODY

Pg <u>\</u> of <u>3</u> Workorder # <u>331220%</u>

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

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City/State/Zip: St. Lo						vedi		L	j LA	8	L	FE	LD		<u>t</u>	FOR	LAB	USE	<u>: ON</u>	LY						
Contact: Bill Pietrobi		Phone: 314-531-	<u>-0060</u>	ľ	RN	OTE:	S:																			
Email: bpietroburg	o@pe-engrs.com	Fax: 314-531-00	068		Cor	nm	ents	:																		
Are these samples known Are there any required re limits in the comment sec	porting limits to be met on the ction:	Yes No requested analysis?. If y	ves, please provide		opb																					
PROJECT NAME/N		SAMPLE COLLEC	TOR'S NAME	# and Type of Containers INDICATE ANALYSIS REQUESTED														<u>D</u>								
De Soto School Distri	ict - Junior High	Michael Thierry		▋								Lead														
RE: Standard Other	SULTS REQUESTED 1-2 Day (100% S 3 Day (50% Surd	- · · · · · · · · · · · · · · · · · · ·		UNP	HNO3	NaOH	H2S04	HCI	NaHSO4	TSP	Other	in Drinking														
Lab Use Only	Sample ID	Date/Time Samp	oled Matrix									Water						\perp	丄	L		<u>i</u>				
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000	JHS-BF-HA-2-4	12/21/23, 1029	Drinking Water	х								\ \														
005	JHS-F-N-2-5	12/21/23, 1020	Drinking Water	х								√						Т	Т							
<u> </u>	JHS-F-211-2-6	12/21/23, 1018	Drinking Water	x								√							T							
<u> </u>	JHS-WC-HB-2-7	12/21/23, 1014	Drinking Water	x								1		T			T	1	\top	┌						
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010	JHS-WC-HC-1-10	12/21/23, 1047	Drinking Water	x								1				団		工								
1 213	JHS-WC-HC-1-11	12/21/23, 1049	Drinking Water	х								✓														
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^{*}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

CHAIN OF CUSTODY

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

Client Professional E	Environmental Engineers, Ir			Sa	mple	s on	:	Г	ICE		T	BLU	JE IC	Έ		NO	ICE			_ °c						
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Contact: Bill Pietrobu	ırgo	Phone: 314	-531-0060)																						
Email: bpietroburg	o@pe-engrs.com	Fax: 314-5	31-0068	O068 Client Comments:																						
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PROJECT NAME/N		SAMPLE COL	LECTOR'	S NAME	# and Type of Containers INDICATE ANALYSIS REQUESTED																					
De Soto School Distri	ct - Junior High	Michael Thier	ry										Lead								l					
RES ✓ Standard Other	SULTS REQUESTED 1-2 Day (100% St	- ,	BILLIN	CNP	HNO3	NaOH	H3SQL E	HCI Wech	NaHSO4	TSP	Other	in Drinking														
Lab Use Only	Sample ID	Date/Time \$	Sampled	Matrix	L								Water													
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CHAIN OF CUSTODY

Pg<u>3_</u> of <u>3</u> Workorder # <u>2 3 1 2 20%</u>

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

	Environmental Engineers, Ir	nc.			Sar	nple	s or	1:] IC	E		В	LUE	ICE] N	o IC	E .			°c				
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City/State/Zip: St. Lo	ouis, MO 63103	4-1			LAE	3 N	OTES	S :																		
Contact: Bill Pietrobu	urgo	Phone: 314	-531-0060	}	L																					
Email: bpietroburg	o@pe-engrs.com	Fax: 314-5	31-0068	1-0068 Client Comments:																						
Are these samples know Are there any required re limits in the comment sec	porting limits to be met on the rection:	o s?. If yes, ple		5 p	•																					
PROJECT NAME/N		SAMPLE COL	LECTOR'	SNAME	#	and	1 Ty	pe	of C	ont	aine	rs		IN	DIC	ATE	ANALYSIS REQUESTED									
De Soto School Distri	ict - Junior High	Michael Thier	ry										Lead													
RE: ✓ Standard Other	urcharge) narge)	BILLIN	dND	HNO3	NaOH	H2SO4	HCL	ManaOH	TSP	Other	in Drinking															
Lab Use Only	Sample ID	Date/Time S	Sampled	Matrix				_	\perp	╧			Water			┸	<u> </u>									
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^{*}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