

http://www.teklabinc.com/

January 11, 2024

Bill PietroburgoProfessional Environmental Engineers, Inc.2665 Scott Ave., Suite BSt. Louis, MO 63103TEL: (314) 531-0060FAX: (314) 531-0068

RE: De Soto School District- Early Childhood



WorkOrder: 23122084

Dear Bill Pietroburgo:

TEKLAB, INC received 7 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

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Client: Professional Environmental Engineers, Inc. Client Project: De Soto School District- Early Childhood Work Order: 23122084 Report Date: 11-Jan-24

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Definitions

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Client: Professional Environmental Engineers, Inc.

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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

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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

Client: Professional Environmental Engineers, Inc. Client Project: De Soto School District- Early Childhood

Cooler Receipt Temp: NA °C

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Work Order: 23122084 Report Date: 11-Jan-24

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/

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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

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Client: Professional Environmental Engineers, Inc.

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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, METALS BY ICPMS (TOTAL)										
Lead										
23122084-001	A ECC-WF-KIT-1-1	NELAP	1.0	1.6	µg/L	1	01/10/2024 1:10	12/22/2023 11:04		
23122084-002	A ECC-SN-KIT-1-2	NELAP	1.0	8.0	µg/L	1	01/10/2024 1:14	12/22/2023 11:05		
23122084-003	A ECC-WC-HA-1-3	NELAP	1.0	< 1.0	µg/L	1	01/10/2024 1:34	12/22/2023 11:00		
23122084-004	A ECC-WC-HA-1-4	NELAP	1.0	< 1.0	µg/L	1	01/10/2024 1:18	12/22/2023 11:01		
23122084-005	A ECC-F-N-1-5	NELAP	1.0	< 1.0	µg/L	1	01/10/2024 1:22	12/22/2023 10:57		
23122084-006	A ECC-WC-HB-1-6	NELAP	1.0	< 1.0	µg/L	1	01/10/2024 1:26	12/22/2023 10:54		
23122084-007	A ECC-F-FC-1-7	NELAP	1.0	1.7	µg/L	1	01/10/2024 1:30	12/22/2023 10:55		



Client: Professional Environmental Engineers, Inc.

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Carrier: Employee	Recei	ved By: CET		
Completed by: Mary E. Kemp 28-Dec-23 Mary E Kemp	0	ewed by: n: ec-23]	Elled Hopk Ellie Hopkins	ens
Pages to follow: Chain of custody 1	Extra pages included	0		
Shipping container/cooler in good condition?	Yes 🗸	No	Not Present	Temp °C NA
Type of thermal preservation?	None 🗸		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 complia 0.1°C - 6.0°C, or when samples are received on ice the sam		between		
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 r	must be detailed belo	w or on the	COC.	

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory. - MaryKemp - 12/28/2023 4:14:04 PM

CHAIN OF CUSTODY

Pg 1 of 1 Workorder # 23122084

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

																<u> </u>	-		_	_			
Client: Professional Environmental Engineers, Inc.				Samples on: \Box ICE \Box BLUE ICE X NO ICE NA °C																			
Address: 2665 Scot	t Avenue				Preserved in: LAB FIELD FOR LAB USE ONLY																		
City/State/Zip: St. Lo	ouis, MO 63103				LAB NOTES:																		
Contact: Bill Pietrobu	ırgo	Phone: 314-	531-0060)																			
Email: bpietroburgo@pe-engrs.com Fax: 314-531-0068					Client Comments:																		
Are these samples known to be involved in litigation? If yes, a surcharge will apply: Yes V No Are these samples known to be hazardous? Yes V No Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section: Ves No						opb							_										
PROJECT NAME/N		SAMPLE COLI	AMPLE COLLECTOR'S NAME														LYSIS REQUESTED						
De Soto School Distri	ict - Early Childhood	Michael Thiern	У										Lead										
RES ✓ Standard Other	SULTS REQUESTED 1-2 Day (100% S 3 Day (50% Surc	• •	BILLING INSTRUCTIONS		UNP	HNO3	NaOH	H2SO4	HCL	MADH	NaHSO4	Other	in Drinking									:	
Lab Use Only	Sample ID	Date/Time S	ampled	Matrix									Water										
23122084-001	ECC-WF-KIT-1-1	12/22/23, 1104	ļ	Drinking Water	х								\checkmark										
	ECC-SN-KIT-1-2	12/22/23, 1105	;	Drinking Water	х						i		\checkmark	Ί									
003	ECC-WC-HA-1-3	12/22/23, 1100)	Drinking Water	x								\checkmark	Ϊ									
004	ECC-WC-HA-1-4	12/22/23, 1101		Drinking Water	х								\checkmark	Ϊ									
005	ECC-F-N-1-5	12/22/23, 1057	7	Drinking Water	x									Ί									
000	ECC-WC-HB-1-6	12/22/23, 1054	Ļ	Drinking Water	x								$\overline{\mathbf{A}}$	Ί									
	ECC-F-FC-1-7	12/22/23, 1055	5	Drinking Water	x								\mathbf{V}	1							T	П	
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Michael Thierry				1306	Ţ	Ż	$\sum_{i \neq j}$	2	1=	\geq	4							13		3/2		5	+~
pee patton 12/29/23 /50					6	4	4			2		ł							<u>1</u>	<u>Z</u> 8	/2	<u> </u>	1530
					Τ																		

*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