OCCU-TEC
Protecting People, Places and Performance

2604 NE Industrial Dr., Ste. 230
North Kansas City, MO 64117

September 6, 2023

Mr. Jason Samples
Valley R-IV School District
#1 Viking Drive
Caledonia, MO 63631

RE: Drinking Water Sampling – Valley Preschool
#1 Viking Drive
Caledonia, MO 63631
Project Number: 923206

Mr. Samples,

OCCU-TEC, Inc. (OCCU-TEC) is pleased to present the following report for drinking water sampling completed at Valley Preschool in Caledonia, Missouri. The sampling was requested and approved by Mr. Jason Samples of Valley R-IV School District (VSD). OCCU-TEC completed drinking water sampling of all potential drinking water sources, sources used in food preparation, and utensil cleaning. Drinking water sampling was completed in accordance with the requirements set forth in Missouri Senate Bill #681/662 known as the "Get the Lead Out of School Drinking Water Act".

METHODOLOGY

On August 1st, 2023, Mr. Nathaniel Jones of OCCU-TEC completed testing of two (2) sources throughout Valley preschool. Samples were collected as 'First Draw' samples after the fixtures had remained unused for a minimum period of 8 hours. Samples were collected in dedicated, laboratory-provided 250-milliliter plastic sample containers. Sample location information and photographic documentation are noted in the attached table.

Samples were shipped to Teklab, Inc. (Teklab) of Collinsville, Illinois for analysis using EPA method 200.8. Teklab is approved for sample analysis by the Missouri Department of Natural Resources (MDNR) under certification number 00930. A copy of the laboratory analytical results and Chain of Custody documentation are attached to this report.

RESULTS

Samples results were compared to the regulatory limit of 5 parts per billion (ppb) or ug/L outlined in Missouri Senate Bill 681/662. Of the samples collected, one (1) of the two (2) contained lead concentrations at or above 5 ppb. Below is a list of samples containing elevated concentrations of lead.

206-VPS-01	Kitchen	Sink Faucet	6.1

LIMITATIONS

At the request of VSD, bathroom sinks and janitorial closet sinks were excluded from sampling. OCCU-TEC recommends placing signage on all sources not sampled during this assessment that indicate the source is not to be used for drinking water.

RECOMMENDATIONS

The following recommendations are in accordance with Senate Bill 681/662.

In accordance with the requirements set forth in Missouri Bill 681/662, fixtures exhibiting lead concentrations above 5 ppb must be remediated by replacement of lead-containing pipes, solder, fittings or fixtures with lead-free components, or the school shall install filtration at each point where water enters the building until such time as the source can be remediated. If installing a filter is not feasible, the school shall provide purified water at each outlet inventoried.

Additionally, any water coolers or drinking water outlets identified by the United States Environmental Protection Agency (EPA) as not being lead-free under the federal Lead Contamination Control Act of 1988 shall be replaced unless the unit has been tested and determined to have lead results under 5 ppb.

Within two weeks after receiving test results, the school shall make all testing results and any lead remediation plans available on the school's website. The school shall notify parents and staff via written notification within seven (7) business days after receiving test results exceeding 5 ppb. The notification shall include the following:

- Test results and a summary explaining the results.
- A description of any remedial steps taken.
- A description of the general health effects of lead contamination and community specific resources.
- Provide bottled water if there is not enough water to meet the drinking water needs of the students, teachers, and staff.

For fixtures exhibiting results above 5 ppb, follow up random "Flush" sampling shall be conducted annually on at least 25-percent of the remediated outlets until all outlets have been remediated. Drinking water sampling shall be conducted annually and annual drinking water test results shall be submitted by the district to the Department of Health and Senior Services (MDHSS).

SIGNATURE(S)

OCCU-TEC appreciates the opportunity to provide the above referenced consulting services to the VSD. If you have any questions regarding the contents of this report, please contact us at (816) 231-5580.

Respectfully,

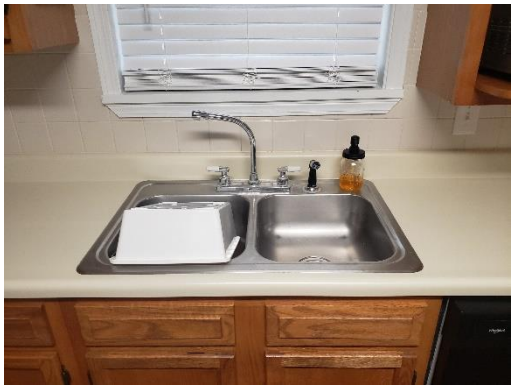
Nathaniel Jones
Environmental Scientist

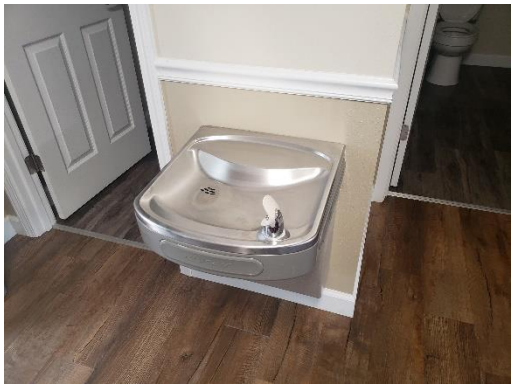
Kevin Heriford
Director EH&S Dept. (QA/QC)

ATTACHMENTS

Outlet Inventory with Analytical Results Summary
Laboratory Analytical Results and COC Documentation

Drinking Water Assessment
Valley Preschool
Valley School District

ID:	206-VPS-01	Location:	Kitchen	
Photo:		Manufacturer:	Unknown	
		Description:		
		Kitchen Sink		
		Result:		ppb
		Date Sampled:	8/1/2023	By: NJ
Recommended Action:				

ID:	206-VPS-02	Location:	Outside Restrooms	
Photo:		Manufacturer:	Elkay	
		Description:		
		Drinking Fountain Bubbler		
		Result:	<1.0	ppb
		Date Sampled:	8/1/2023	By: NJ
Recommended Action:				

September 05, 2023

Justin Arnold
Occu-Tec
2604 NE Industrial Drive
Suite 230
North Kansas, MO 64117
TEL: (816) 810-3276
FAX:

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

RE: 923206 VPS **WorkOrder:** 23080303

Dear Justin Arnold:

TEKLAB, INC received 2 samples on 8/3/2023 11:50:00 AM 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: Occu-Tec
Work Order: 23080303
Client Project: 923206 VPS
Report Date: 05-Sep-23

This reporting package includes the following:

Client: Occu-Tec **Work Order:** 23080303

Client Project: 923206 VPS **Report Date:** 05-Sep-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)

Definitions

Client: Occu-Tec **Work Order:** 23080303

Client Project: 923206 VPS **Report Date:** 05-Sep-23

Qualifiers

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

Case Narrative

http://www.teklabinc.com/

Client: Occu-Tec
Client Project: 923206 VPS

Work Order: 23080303
Report Date: 05-Sep-23

Cooler Receipt Temp: NA °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

Client: Occu-Tec **Work Order:** 23080303

Client Project: 923206 VPS **Report Date:** 05-Sep-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP		Collinsville
Kansas	KDHE	E-10374	NELAP		Collinsville
Louisiana	LDEQ	05002	NELAP		Collinsville
Louisiana	LDEQ	05003	NELAP		Collinsville
Oklahoma	ODEQ	9978	NELAP		Collinsville
Arkansas	ADEQ	88-0966			Collinsville
Illinois	IDPH	17584			Collinsville
Iowa	IDNR	430			Collinsville
Kentucky	UST	0073			Collinsville
Missouri	MDNR	00930			Collinsville
Missouri	MDNR	930			Collinsville

Client: Occu-Tec **Work Order:** 23080303

Client Project: 923206 VPS **Report Date:** 05-Sep-23

Lab ID: 23080303-001 **Client Sample ID:** 206-VPS-01

Matrix: DRINKING WATER **Collection Date:** 08/01/2023 10:34

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
Lead	NELAP			**6.1**	µg/L	1	08/31/2023 23:44	

Client: Occu-Tec
Work Order: 23080303
Client Project: 923206 VPS
Report Date: 05-Sep-23
Lab ID: 23080303-002
Client Sample ID: 206-VPS-02
Matrix: DRINKING WATER
Collection Date: 08/01/2023 10:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
Lead	NELAP			**< 1.0**	µg/L	1	09/01/2023 14:32	

Receiving Check List

http://www.teklabinc.com/

Client: Occu-Tec
Client Project: 923206 VPS

Work Order: 23080303
Report Date: 05-Sep-23

Carrier: Crossroads
Received By: TWM

Completed by: Allison Colin
On: 03-Aug-23

Reviewed by: Ellie Hopkins
On: 04-Aug-23

Pages to follow: Chain of custody 1 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C	NA
	☑	☐	☐	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 ☐			
Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑		
Water - TOX containers have zero headspace?	☐	☐	☑		
Water - pH acceptable upon receipt?	☑	☐	NA ☐		
NPDES/CWA TCN interferences checked/treated in the field?	☐	☐	☑		

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

Samples were checked for turbidity and then preserved with nitric acid upon arrival at the laboratory.

Print PDF

CHAIN OF CUSTODY

Pg 1 of 1 Workorder # 23080303

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

Client: OCCU-TEC Inc,

Address: 2604 NE Industrial Drive Suite 230

City/State/Zip: North Kansas City, MO 64117

Contact: Justin Arnold Phone: 816-810-3276

Email: jarnold@occutec.com Fax: 816-994-3478

Samples on: ☐ ICE ☐ BLUE ICE ☒ NO ICE NA °C

Preserved in: ☒ LAB ☐ FIELD FOR LAB USE ONLY

LAB NOTES:

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

Client Comments:
<5ppb

PROJECT NAME/NUMBER	SAMPLE COLLECTOR'S NAME
923206	Nathaniel Jones

RESULTS REQUESTED

☑ Standard ☐ 1-2 Day (100% Surcharge)

☐ Other ____ ☐ 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Lead by 200.8
23080303-001	206-VPS-01	08/01/2023 10:34	Drinking Water										✓
002	206-VPS-02	08/01/2023 10:35	Drinking Water										✓
			Drinking Water										
			Drinking Water										
			Drinking Water										
			Drinking Water										
			Drinking Water										
			Drinking Water										
			Drinking Water										
			Drinking Water										
			Drinking Water										

Relinquished By	Date/Time	Received By	Date/Time
Nathaniel Jones	8/02/2023 8:05		08/02/23 1400
	8/2/23 1600		8·3·23 1150

*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