

ENVIRONMENTAL CONSULTANTS, LLC

Illinois Office

#6 Meadow Heights Professional Park Drive
Casey, Illinois 62234
Phone (618) 343-3590
Fax: (618) 343-3597

June 11, 2018

Ms. Dee Scott, Superintendent
Casey-Westfield Community Unit School District #4
502 East Delaware Street
Casey, Illinois 62420

Subject: Results of Drinking Water Re-Testing for Lead Content

**Site(s): Monroe Elementary School
300 East Monroe
Casey, Illinois 62420**

Dear Ms. Scott,

On the morning of May 12, 2018, Environmental Consultants, LLC (EC) performed lead re-sampling of twelve (12) water sources at the Monroe Elementary School located at 801 300 East Monroe in Casey, Illinois. The retest sampling was completed on four water sources that were reported above 5 ppb in previous sampling. Sampling was performed by trained and licensed personnel in accordance with USEPA, HUD and State of Illinois Regulations and Guidelines. Inspectors involved with sampling activities had EPA approved training in Lead. Certifications for our firm and the inspector collecting the samples is included within this document.

All samples were collected on a "first draw" basis. "First draw" is achieved by allowing the water system to rest for at least eight hours prior to sampling in order to collect any existing debris or settlement within the sample. The intent of this sampling is to replicate "worst case scenario" conditions. As such, EC inspectors met at the school at 6:00 a.m. to collect water samples before the systems were used by staff or students. Sampling was completed in accordance with the Illinois Senate Bill 550 requirements. The Illinois Department of Public Health (IDPH) and other regulatory agencies recommend that water sources run for at least thirty seconds and as long as two minutes prior to use to avoid settling within the water system.

Drinking water samples were collected from four (4) different locations at Monroe Elementary School during the sampling event. The water samples were collected from sinks potentially utilized for cooking or drinking activities at the campus. After sample collection, samples were immediately iced down and delivered to Teklab, Inc. located in

Collinsville, Illinois following strict chain of custody procedures. Teklab is a NELAP accredited and State of Illinois licensed laboratory specializing in drinking water analysis. Detailed sampling locations and sample results are located in Appendix A of this report.

The analytical sensitivity utilized for the analysis of the water samples submitted identified a reporting limit (RL) of 1.0 micrograms per liter ($\mu\text{g/L}$). The analytical sensitivity utilized for the analysis of the water samples submitted identified a reporting limit (RL) of 1.0 microgram of lead per liter ($\mu\text{g/L}$). This reporting value equates to 1.0 parts per billion (ppb) of lead. The USEPA action level for lead in drinking water is 15.0 ppb for PSW. The USEPA document titled "Lead in Drinking Water at Schools and Child Care Facilities" last updated November 9, 2015 identifies an action level for drinking water collected from a plumbing fixture as 20.0 ppb. **All four (4) samples collected from the selected locations at the Monroe Elementary School reported sample results which were less than the USEPA action level.** This information can be found under the National Primary Drinking Water Regulations provided by the EPA, CFR 2010 Title 40. (See Appendix A and B for Sample Results)

Although no samples were identified above the USEPA action level, EC recommends that all water sources run for at least thirty seconds prior to use as recommended by the USEPA.

EC is pleased to provide this information to Casey-Westfield Community Unit School District #4 and we appreciate the opportunity to provide quality environmental consulting services. Please call us at (618) 343-3590 if you have any questions or to arrange a meeting to discuss.

Sincerely,
Environmental Consultants, LLC



Jim Yasitis
Principal

APPENDIX A
SAMPLE LOCATIONS & RESULTS

TABLE 1

**Drinking Water Sampling for Lead Content
Casey-Westfield Community Unit School District #4
Monroe Elementary School
Re-Sampled: May 12, 2018**

Sample ID	Location	Water Source	Results (ppb)
06R2	Room 36	Sink	<1.0
10R2	Room 35	Sink	<1.0
12R2	Room 32	Sink	<1.0
19R2	Room 72	Sink	3.4

A/B Samples were precautionary samples collected at 30 seconds following the “first draw” samples (A) and 3 minutes following the A sample (B).



Water sources in excess of 20 ppb. Recommendation is to remove from service immediately. Do not return to service until re-testing confirms mitigation was effective.

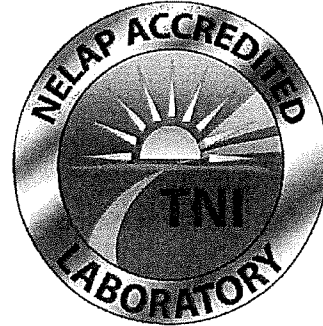
#####

Water source is < 20 ppb, but still displays evidence of lead. Recommendation is to re-test source on an annual basis at a minimum

APPENDIX B
LABORATORY ANALYSIS

May 16, 2018

Jeff Faust
Environmental Consultants, LLC
#6 Meadow Heights Professional Park
Collinsville, IL 62234
TEL: (618) 343-3590
FAX: (618) 343-3597



RE: DW Lead

WorkOrder: 18050886

Dear Jeff Faust:

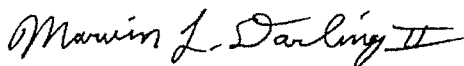
TEKLAB, INC received 4 samples on 5/14/2018 9:24:00 AM for the analysis presented in the following report.

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,



Marvin L. Darling
Project Manager
(618)344-1004 ex 41
mdarling@teklabinc.com



Report Contents

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

Client: Environmental Consultants, LLC

Work Order: 18050886

Client Project: DW Lead

Report Date: 16-May-18

This reporting package includes the following:

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Chain of Custody	Appended



Definitions

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

Client: Environmental Consultants, LLC

Work Order: 18050886

Client Project: DW Lead

Report Date: 16-May-18

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
- 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)

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 |
| 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: Environmental Consultants, LLC

Work Order: 18050886

Client Project: DW Lead

Report Date: 16-May-18

Cooler Receipt Temp: 21.00 °C

Samples were collected in 250mL containers.

Date/time of last use: 5/11/18 22:00

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

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

Springfield

Address 3920 Pintail Dr
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: Environmental Consultants, LLC

Work Order: 18050886

Client Project: DW Lead

Report Date: 16-May-18

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2019	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2019	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2018	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2018	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2018	Collinsville
Arkansas	ADEQ	88-0966		3/14/2019	Collinsville
Illinois	IDPH	17584		5/31/2019	Collinsville
Indiana	ISDH	C-IL-06		1/31/2019	Collinsville
Kentucky	KDEP	98006		12/31/2018	Collinsville
Kentucky	UST	0073		1/31/2019	Collinsville
Louisiana	LDPH	LA170027		12/31/2018	Collinsville
Missouri	MDNR	930		1/31/2019	Collinsville
Missouri	MDNR	00930		5/31/2019	Collinsville
Oklahoma	ODEQ	9978		8/31/2018	Collinsville
Tennessee	TDEC	04905		1/31/2019	Collinsville



Laboratory Results

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

Client: Environmental Consultants, LLC

Work Order: 18050886

Client Project: DW Lead

Report Date: 16-May-18

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									
18050886-001A	06R2	NELAP		1.0	< 1.0	µg/L	1	05/15/2018 12:39	05/12/2018 7:00
18050886-002A	10R2	NELAP		1.0	< 1.0	µg/L	1	05/15/2018 11:44	05/12/2018 7:00
18050886-003A	12R2	NELAP		1.0	< 1.0	µg/L	1	05/15/2018 11:50	05/12/2018 7:00
18050886-004A	19R2	NELAP		1.0	3.4	µg/L	5	05/15/2018 14:12	05/12/2018 7:00



Receiving Check List

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

Client: Environmental Consultants, LLC

Work Order: 18050886

Client Project: DW Lead

Report Date: 16-May-18

Carrier: Darrell Bough

Received By: AMD

Completed by:

Amber M. Dilallo

Reviewed by:

Elizabeth A. Hurley

On:

14-May-18

Amber M. Dilallo

On:

14-May-18

Elizabeth A. Hurley

Pages to follow: Chain of custody Extra pages included

- | | | | | |
|---|--|------------------------------|--|----------------------------------|
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> | Temp °C 21.00 |
| Type of thermal preservation? | None <input checked="" type="checkbox"/> | Ice <input type="checkbox"/> | Blue Ice <input type="checkbox"/> | Dry Ice <input type="checkbox"/> |
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | |
| Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | |
| All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | |
| Reported field parameters measured: | Field <input type="checkbox"/> | Lab <input type="checkbox"/> | NA <input checked="" type="checkbox"/> | |
| Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | |

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 <input type="checkbox"/> | No <input type="checkbox"/> | No VOA vials <input checked="" type="checkbox"/> |
| Water - TOX containers have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |

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

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

CHAIN OF CUSTODY

pg. 1 of 1

Work order # 18050882

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

Client: Environmental Consultants, LLC
Address: #6 Meadow Heights Professional Park
 Collinsville, IL 62234
Contact: Jeff Faust
 Phone: (618) 343-3590
E-Mail: jeff@environmentalconsultantsllc.com
 Fax: (618) 343-3597

Samples on: ICE BLUE ICE NO ICE 2100 °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:
Report Results in ppb
School closed at 10:00PM 5/11/18

Project Name/Number DW Lead	Sample Collector's Name D. Baugh	Billing Instructions	# and Type of Containers																			
			OTHER	NaHSO4	MeOH	HCl	H2SO4	NaOH	HNO3	UNPRES												
Lab Use Only	Sample Identification	Date/Time Sampled																				
18050882	06R2	5-12-18 7:00AM	X																			
002	10R2		X																			
003	12R2		X																			
004	19R2		X																			

MATRIX	INDICATE ANALYSIS REQUESTED																					
Aqueous	X	X	X	X																		
Drinking Water	X	X	X	X																		
Soil																						
Sludge																						
Special Waste																						
Groundwater																						
Lead (DW)	X	X	X	X																		

Requisitioned By: Wendy Baugh **Date/Time:** 5/14/18 9:24
Received By: Erin Dillman **Date/Time:** 5/14/18 9:04

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.



Bottle Order: 34876

TABLE 1

Drinking Water Sampling for Lead Content
Casey-Westfield Community Unit School District #4
Monroe Elementary School
Re-Sampled: May 12, 2018

<u>Sample ID</u>	<u>Location</u>	<u>Water Source</u>	<u>Results (ppb)</u>
06R2	Room 36	Sink	
10R2	Room 35	Sink	
12R2	Room 32	Sink	
19R2	Room 72	Sink	

A/B Samples were precautionary samples collected at 30 seconds following the "first draw" samples (A) and 3 minutes following the A sample (B).



Water sources in excess of 20 ppb. Recommendation is to remove from service immediately. Do not return to service until re-testing confirms mitigation was effective.



Water source is < 20 ppb, but still displays evidence of lead. Recommendation is to re-test source on an annual basis at a minimum