



August 1, 2016

Debra Spring Matrix Head Start 2051 Rosa Parks Boulevard Detroit, Michigan 48216

SUBMITTED VIA EMAIL TO: dspring@matrix.org

SUBJECT: Drinking Water Screening Report

The Word of Truth (WOT) - Building 2

4900 Lovett Street

Detroit, Michigan 48210

Dear Ms. Spring:

ATC Group Services, LLC (ATC) is pleased to submit this Drinking Water Screening Report for the subject school. The drinking water samples collected from the school were submitted to TriMatrix Laboratories, for Michigan Department of Environmental Quality (MDEQ) Drinking Water Certified lead analysis.

SCOPE OF WORK

At the request of the Matrix Head Start (Matrix), ATC collected drinking water samples as a general screening for lead at the subject school. Matrix in coordination with the City of Detroit Health Department determined that the screening would consist of collection of water samples from three (3) high priority water outlets (drinking fountains, kitchen/food preparation area faucets, etc.), regularly used by students and staff for drinking, as designated by Matrix personnel. Two (2) samples were collected at each outlet: a first draw (Primary) sample; and a Flush sample. The Primary samples were collected from outlets that had been inactive for a minimum of eight hours. The Flush samples were collected after the water was allowed to run for a minimum of thirty (30) seconds at each of the sample locations.

The drinking water samples were collected in 125 milliliter, wide-mouth sample containers, containing nitric acid (preservative). Each sample container was labeled utilizing a coding system that identified: the type of drinking outlet sampled, Drinking Water Fountain (DWF), Drinking Water Cooler (DWC), Kitchen Faucet (KF) etc.; and a (P) for primary samples and a (F) for flush samples.





The samples were transported under chain of custody to TriMatrix Laboratories, located at 5560 Corporate Exchange Court SE, Grand Rapids Michigan for MDEQ drinking water certified lead analysis, using analytical method EPA 200.8 rev 5.4.

As per the EPA's 3T's for Reducing Lead in Drinking Water in Schools, Revised Technical Guidance (October 2006) analysis of the flush sample(s) was only performed if analysis of the first draw (Primary) sample(s) indicated lead and/or copper concentrations greater than the EPA established Maximum Contaminate Level (MCL).

FINDINGS

Analytical results indicate that none of the samples analyzed were above the EPA recommended limits of 0.015 milligrams per liter (mg/L) for lead. The table below summarizes the analytical results for the samples submitted. The laboratory analytical reports and chain of custody are provided in Attachment A.

Sample Number	Total Lead (Drinking Water)	MCL
1-WF-P-WOT (Classroom #4 – Right Sink)	0.0012 mg/L	0.015 mg/L
1-WF-F-WOT (Classroom #4 – Right Sink)	NA	0.015 mg/L
2-WF-P-WOT (Classroom #5 – Right Sink)	<0.0010 mg/L	0.015 mg/L
2-WF-F-WOT (Classroom #5 – Right Sink)	NA	0.015 mg/L
3-DWC-P-WOT (Water Fountain – Main Hallway)	<0.0010 mg/L	0.015 mg/L
3-DWC-WOT (Water Fountain – Main Hallway)	NA	0.015 mg/L

Key: NA - Not Analyzed

mg/L- milligrams per liter /parts per million (ppm)



46555 Humboldt Drive Novi, Michigan 48377 Telephone 248-669-5140 www.atcgroupservices.com

LIMITATIONS

The sampling and analysis completed was: a preliminary screening for lead only, to assess lead concentrations (mg/L) at drinking water outlets in the school designated as high use by Matrix, and may not be representative of all drinking water outlets within the school. If lead concentrations are identified above their respective MCL's at any of the drinking water outlets tested, further review of the plumping system, fixtures affected, and testing should be completed to assess the source of the elevated levels of lead, as well as, any other response actions deemed necessary by Matrix.

The drinking water screening proposed and conducted by ATC was devised in cooperation with Matrix, City of Detroit Health Department and utilizing the EPA's 3Ts for Reducing Lead in Drinking Water in Schools and may not meet all of the recommendations provided by the MDEQ "Guidance on Drinking Water Sampling for Lead and Copper at Schools and Daycares on Community Water Supplies" Version 2.0 - April 13, 2016. Future drinking water evaluation and sampling in accordance with the recommendations may be predicated on applicable guidelines by the MDEQ or EPA and will be determined prior to developing a sampling plan for the school.

Sincerely,

ATC Group Services, LLC

Marte & Somble

Martin Gamble

Senior Project Manager

Robert C. Smith

Building Science Department Manager

Robert C. Kiniz

APPENDIX A LABORATORY ANALYTICAL REPORT



June 08, 2016

ATC Group Services Attn: Mr. Robert Smith 46555 Humboldt, Suite 100 Novi, MI 48377

Project: Matrix Human Services

Dear Mr. Robert Smith,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	Received	Description
1605671	05/27/2016	World of Truth Bldg 2

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ANAB DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003329); Kentucky DEP (AL123065/#0021); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/53116); North Carolina DNRE (#659); Virginia DCLS (#460153/7952); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-14-00305).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Gary L. Wood **Project Chemist**



PROJECT TECHNICAL NARRATIVE(s)

No Project Narrative is associated with this report.

Page 2 of 11



STATEMENT OF DATA QUALIFICATIONS

All analyses have been validated and comply with our Quality Control Program. No Qualification is required.



ANALYTICAL REPORT

Client: ATC Group Services Work Order: 1605671

Project: Matrix Human Services Description: World of Truth Bldg 2
Client Sample ID: **1-WF-P-WOT2 classroom #4 right sink** Sampled: 05/26/16 06:41

Lab Sample ID: **1605671-01** Sampled By: ATC

Matrix: Drinking Water Received: 05/27/16 16:45

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	Ву	QC Batch
Lead	0.0012	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	06/07/16 11:02	DSC	1605652



ANALYTICAL REPORT

Client: ATC Group Services Work Order: 1605671

Project: Matrix Human Services Description: World of Truth Bldg 2
Client Sample ID: **2-WF-P-WOT2 classroom #5 right sink** Sampled: 05/26/16 06:44

Lab Sample ID: **1605671-03** Sampled By: ATC

Matrix: Drinking Water Received: 05/27/16 16:45

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	Ву	QC Batch
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	06/07/16 11:04	DSC	1605652

Page 5 of 11



ANALYTICAL REPORT

Client: **ATC Group Services** Work Order: 1605671

Project: Description: Matrix Human Services World of Truth Bldg 2 Client Sample ID: 3-DWF-P-WOT2 water fountain in main hallway 05/26/16 06:46 Sampled:

Lab Sample ID: 1605671-05 Sampled By: ATC

Received: 05/27/16 16:45 Matrix: **Drinking Water**

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	Ву	QC Batch
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	06/07/16 11:12	DSC	1605652

Page 6 of 11



QUALITY CONTROL REPORT

Metals in Drinking Water by EPA 200 Series Methods

	Sample	Spike			Spike	Control		RPD	
QC Type	Conc.	Qty.	Result	Unit	% Rec.	Limits	RPD	Limits	RL

Analyte: Lead/USEPA-200.8 Rev. 5.4

QC Batch: 1605652 (Metals Direct Analysis)					Analyzed: 06/07/2016	By: DSC
Method Blank		<0.0010	mg/L			0.0010
Laboratory Control Sample	0.0400	0.0386	mg/L	96	85-115	0.0010



PRETREATMENT SUMMARY PAGE

Client: ATC Group Services
Project: Matrix Human Services

				Date & Time	
Pretreatment	Lab Sample ID	Batch	Ву	Prepared	
USEPA 600/R-94/173	1605671-01	1605652	LNS	06/02/16 08:15	
	1605671-03	1605652	LNS	06/02/16 08:15	
	1605671-05	1605652	LNS	06/02/16 08:15	



Chain of Custody Record

COC No. 160538291

age 9 of 1	Date Time 3 Received For Liab By AROLN 5/27/	1000	Ó	wednesd	J Fred	1240		Replaced By Line of 2	
Date Time	Date Time 3 Relinquished By	$^{\prime}$		inquished B	200	1700	Date	1. Rolling/School By 5.	Company
	S. S.							Tracking No.	Samplep's Signature
lush samples	If lead or copper is above detection limits, please analyze flush samples WOT2 = World of Truth Building 2	lead or	=	nents	Comments		Carrier	How Shipped? Hand	Andrew Rauser
								10	
								ω	
								00	1016
								7.	
	×	>	X DW		16 647	1 5/26/16	TM2531	6 3-DWF-F WOT2 water fountain in main hallway	02 04
22		DW X	×		16 646	1 5/26/16	TM2531	5 3-DWF-P-WOT2 water fountain in main hallway	0) 05
	×	2	X DW	2270	16 645	1 5/26/16	TM2531	4 2-WF-F-WOT2 classroom #5 right sink	02 04
		×	X DW	100	16 644	1 5/26/16	TM2531	3 2-WF-P WOT2 classroom #5 right sink	07 03
(LLA	×	2	X DW		16 642	1 5/26/16	TM2531	2 1-WF-F-WOT2 classroom #4 right sink	22 02
		×	X DW	300000	16 641	1 5/26/16	TM2531	1 1-WF-P-WOT2 classroom #4 right sink	01 0
Total Sample Comments	Number of Containers Submitted	tix.	A Matrix	uzo	Time	Date	Cooler ID	Field Sample ID	Schedule Code Number
H Other (note below)	Container Type (corresponds to Container Packing List)	Cont	0	0.0		Kopert Smith		Email TODE	11 00
	Le	Le			or To	Contact/Report To	5147	35	Work Order No.
E NaOH pH>12 F ZnAc/NaOH pH>9	ad - Flu	ad - Pri	ments	Other (comments)		Invoice To		ate Zip /// 48377	Project Chemist Jim McFadden
C H ₂ SO ₄ pH<2 D 1+1 HCl pH<2	ush (F)	mary (f		No.	Client Project No. / P.O. No. 188BS16284	ent Project	윤	Address 46555 Humboldt Drive, Ste 100	Receipt Log No
A NONE pH~7 B HNO ₃ pH<2	- Hold	N	th Bid	Project Name Matrix Human Services - World of Truth Bidg	Services -	Project Name Matrix Human	Pro	ATC Group Services	VOA Rack/Tray
C PRESERVATIVES	B	В			Ž				2
Pg. 1 of 1	Analyses Requested		3	www.trimatrixlabs.com	w.trimat	3 ww	942-746	Phone (616) 975-4500 Fax (616) 942-7463 www.trimatrixlabs.c	Cart / 2
						1000	7		

ORIGINAL - LABORATORY

COPY - SAMPLER

SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRI	X Cient QTC GR	OUP New / Add To	Order #. 1605671
LABORATORI	E S Receipt Record Page/Line #	Project Chemist Samp	01-06
Recorded by (initials/date) 5/27/	Cooler Qly Red	Thermometer Used Digital Thermon	seter (#54) See Additional Cooler Information Form
Cooler # 1839	Cooler# Time	Cooler # Time	Cooler # Time
779,253 1839 Custody Seals:	Custody Seals:	Custody Seals;	Custody Seals:
None	□ None	□ None	□ None
Present / Intact	☐ Present / Intact	☐ Present / Intact	☐ Present / Intact
Coolant Type:	☐ Present / Not Intact Coolant Type:	Coolant Type:	Present / Not Intact Coolant Type:
☐ Loose Ice	Loose Ice	Loose Ice	Conselice
☐ Bagged Ice	Bagged Ice	☐ Bagged Ice	☐ Bagged Ice
Blue Ice	Blue Ice	☐ Blue Ice	□ Blue Ice
Coolant Location:	Coolant Location:	Coolant Location:	Coolant Location:
Dispersed / Top / Middle / Bottom	Dispersed / Top / Middle / Botto		Dispersed / Top / Middle / Bottom
Temp Blank Present: Yes No	Temp Blank Present: ☐ Yes ☐ No		Temp Blank Present: Yes No
If Present, Temperature Blank Location is:	If Present, Temperature Blank Location		If Present, Temperature Blank Location is:
Representative Not Representative	Representative Not Represental		☐ Representative ☐ Not Representative
Observed Correction *C Factor *C Actual *C	Observed Correction *C Factor *C Actual *	Observed Correction Actual *C	Observed Correction Factor *C Actual *C
Temp Blank:	Temp Blank:	Temp Blank	Temp Black
Sample 1: 25.7 0 25.7	Sample 1:	Sample 1	Sample 1:
Sample 2 24.6 0 24.6	Sample 2:	Sample 2	Sample 2:
Sample 3 24.4 0 24.4	Sample 3:	Sample 2	Sample 3:
3 Sample Average °C: 24.9	3 Sample Average °C:	3 Sample Average °C:	3 Sample Average °C:
Cooler ID on COC? VOC Trip Blank received?	Cooler ID on COC? VOC Trip Blank received?	Cooler ID on COC? VOC Trip Blank received?	☐ Cooler ID on COC? ☐ VOC Trip Blank received?
		Receiving Non-Conformance and/o	
Paperwork Received	reas checked, complete dample		r inventory roun
Yes, No		Check Sample Preservation	
Chain of Custody record(s)?	If No, Initiated By		nk OR average sample temperature, ≥6° C?
Received for Lab Signed/Dat	te/Time?		was thermal preservation required?
Shipping document?		The Parties of the Control of the Co	ct Chemist Approval Initials:
COC Information			eted Non Con Cooler - Cont Inventory Form?
TriMatrix COC D, Other			ally preserved correctly?
COC ID Numbers: /6 0538	29/	6 D If "No", added on	
		Received pre-pre	served VOC soils?
Check COC for Accuracy		Charles Shart Hald Till Bar (A	□ Na ₂ SO ₄
Yes, No		Check for Short Hold-Time Prep/A Bacteriological	nalyses
☐ Analysis Requested?		☐ Air Bags	AFTER HOURS ONLY:
Sample ID matches COC?		☐ EnCores / Methanol Pre-Preserved	COPIES OF COC TO LAB AREA(S)
Sample Date and Time match	nes COC?	☐ Formaldehyde/Aldehyde	NONE RECEIVED
Sample Date and Time match Container type completed on Display All container types indicated in		☐ Green-tagged containers	☐ RECEIVED, COCs TO LAB(S)
	are received?	Yellow/White-tagged 1 L ambers (SV F	Prep-Lab)
Sample Condition Summary N/A Yes No.		Notes	
Broken containers.	/lids?		
O Missing or incomp	Contraction of the Contraction o		
O Ø Illegible information			
D	ed?	☐ Trip Blank received ☐ Trip B	lank not listed on COC
	on-TriMatrix containers received?		Delivered (Date/Time) <1 Hour Goal Met?
	ontainers have headspace?	N 5/27/16 5/	7/16 Yes / No
☐ Extra sample locat	ions / containers not listed on COC?	The Died in I	

TRIMATRIX

SAMPLE PRESERVATION VERIFICATION FORM

page / of /

Receipt Log #	7-25		Completed By (initials/da	3/27/16	Project Chemist	5671		
COC ID # /60	538	29/	Adjusted by:	DO NOT AI	DJUST pH FOR THESE	CONTAINER TYPES	pH Strip F	Reagent #
Container Type	5/23	4	13	6	15			
Tag Color	Lt. Blue	Blue	Brown	Red	Red Stripe			
Preservative	NaOH	H ₂ SO ₄	H ₂ SO ₄	HNO ₃	HNO ₃			
Expected pH	>12	<2	<2	<2	<2			
COC Line #1							Aqueous Samp	
COC Line #2		P.65'-	PARSON ST			TO THE	each sample ar	
COC Line #3	TWE						type, check the acceptable. If p	oH is not
COC Line #4		ENTE			Tale of the last	mg la	acceptable for a container, recor	
COC Line #5							and note on Sa	mple
COC Line #6				V	38 3	- # 5-V-35	Receiving Chec Sample Receiving	
COC Line #7							Conformance F	orm. If
COC Line #8			1 - 3 - 3 - 3	E. T. 1997	591	A THE WAY	approved by Pr add acid or bas	
COC Line #9						THE REST	sample to achie	eve the corre
CONTRACTOR OF THE PARTY OF THE							pH. Add up to,	
COC Line #10 Comments							exceed 2x the v added at contain table below for used). Add oral sample contains information requires	ner prep (sei initial volume nge pH tag t er and record
COC Line #10 Comments COC ID #			Adjusted by:	DO NOT AL	DJUST pH FOR THESE	CONTAINER TYPES	added at contai table below for used). Add ora	ner prep (see initial volume inge pH tag to er and record uested. d pH on this djust pH for
Comments			Date:			CONTAINER TYPES	added at contai table below for used). Add ora sample contain information required Record adjusted form. Do not ad	ner prep (see initial volume inge pH tag to er and record uested. d pH on this djust pH for
COC ID #	5/23	4	Date:	6	15	CONTAINER TYPES	added at contai table below for used). Add ora sample contain information required Record adjusted form. Do not ad	ner prep (ser initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15.
COC ID # Container Type Tag Color	Lt. Blue	Blue	Date:13 Brown	6 Red	15 Red Stripe	CONTAINER TYPES	added at contai table below for used). Add ora sample contain information required Record adjusted form. Do not ad	ner prep (ser initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15.
COC ID #	Lt. Blue NaOH	Blue H ₂ SO ₄	13 Brown H ₂ SO ₂	6 Red HNO ₃	15 Red Stripe HNO ₃	CONTAINER TYPES	added at contai table below for used). Add ora sample contain information requ Record adjusted form. Do not ad container types	ner prep (ser initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15.
COC ID # Container Type Tag Color Preservative	Lt. Blue	Blue	Date:13 Brown	6 Red	15 Red Stripe	CONTAINER TYPES	added at contained table below for used). Add or a sample contained information requirements form. Do not accontainer types	ner prep (ser initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15.
COC ID # Container Type Tag Color Preservative Expected pH	Lt. Blue NaOH	Blue H ₂ SO ₄	13 Brown H ₂ SO ₂	6 Red HNO ₃	15 Red Stripe HNO ₃	CONTAINER TYPES	added at contained table below for used). Add or a sample contained information requirements form. Do not accontainer types Container Size (mL)	ner prep (sei initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15. Original Vol. of Preservative (mL)
COC ID # Container Type Tag Color Preservative Expected pH COC Line #1	Lt. Blue NaOH	Blue H ₂ SO ₄	13 Brown H ₂ SO ₂	6 Red HNO ₃	15 Red Stripe HNO ₃ <2	CONTAINER TYPES	added at contained table below for used). Add or a sample contained information requirements form. Do not accontained types Contained Size (mL) Contained Type 5	ner prep (ser initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15. Orlginal Vol. Preservative (mL) NaOH
COC ID # Container Type Tag Color Preservative Expected pH COC Line #1 COC Line #2	Lt. Blue NaOH	Blue H ₂ SO ₄	13 Brown H ₂ SO ₂	6 Red HNO ₃	15 Red Stripe HNO ₃ <2	CONTAINER TYPES	added at contained table below for used). Add or a sample contained information required form. Do not accontainer types Container Size (mL) Container Type 5	ner prep (sei initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15. Original Vol. Preservative (mL) NaOH
COC ID # Container Type Tag Color Preservative Expected pH COC Line #1 COC Line #2 COC Line #3	Lt. Blue NaOH	Blue H ₂ SO ₄	13 Brown H ₂ SO ₂	6 Red HNO ₃	15 Red Stripe HNO ₃ <2	CONTAINER TYPES	added at containable below for used). Add oral sample containable information requirements and adjusted form. Do not accontainer types Container Size (mL) Container Type 5 500 1000	ner prep (ser initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15. Original Vol. Preservative (mL) NaOH 2.5 5.0
COC ID # Container Type Tag Color Preservative Expected pH COC Line #1 COC Line #2 COC Line #3 COC Line #4	Lt. Blue NaOH	Blue H ₂ SO ₄	13 Brown H ₂ SO ₂	6 Red HNO ₃	15 Red Stripe HNO ₃ <2	CONTAINER TYPES	added at contained table below for used). Add or a sample contained information requirements form. Do not accontainer types Container Size (mL) Container Type 5 500 1000 Container Type 4	ner prep (ser initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15. Orlginal Vol. Preservative (mL) NaOH 2.5 5.0 H ₂ SO ₄
COC ID # Container Type Tag Color Preservative Expected pH COC Line #1 COC Line #2 COC Line #3 COC Line #4 COC Line #4	Lt. Blue NaOH	Blue H ₂ SO ₄	13 Brown H ₂ SO ₂	6 Red HNO ₃	15 Red Stripe HNO ₃ <2	CONTAINER TYPES	added at contained table below for used). Add or a sample contained information required form. Do not accontainer types Container Size (mL) Container Type 5 500 1000 Container Type 4	ner prep (see initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15. Original Vol. of Preservative (mL) NaOH 2.5 5.0 H ₂ SO ₄ 0.5
COC ID # Container Type Tag Color Preservative Expected pH COC Line #1 COC Line #2 COC Line #3 COC Line #4 COC Line #6 COC Line #6	Lt. Blue NaOH	Blue H ₂ SO ₄	13 Brown H ₂ SO ₂	6 Red HNO ₃	15 Red Stripe HNO ₃ <2	CONTAINER TYPES	added at contained table below for used). Add or a sample contained information required form. Do not accontainer types Container Size (mL) Container Type 5 500 1000 Container Type 4	ner prep (see initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15. Original Vol. of Preservative (mL) NaOH 2.5 5.0 H ₂ SO ₄ 0.5 1.0
COC ID # Container Type Tag Color Preservative Expected pH COC Line #1 COC Line #2 COC Line #3 COC Line #4 COC Line #6 COC Line #6 COC Line #7	Lt. Blue NaOH	Blue H ₂ SO ₄	13 Brown H ₂ SO ₂	6 Red HNO ₃	15 Red Stripe HNO ₃ <2	CONTAINER TYPES	added at containable below for used). Add or a sample containable information requirements form. Do not accontainer types Container Size (mL) Container Type 5 500 1000 Container Type 4 125 250 500	ner prep (see initial volume inge pH tag to er and record uested. d pH on this djust pH for 6 and 15. Original Vol. of Preservative (mL) NaOH 2.5 5.0 H ₂ SO ₄ 0.5 1.0 2.0 4.0