

June 24, 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:

<b>Work Order</b>	<b>Received</b>	<b>Description</b>
1606228	06/09/2016	East Lake Center

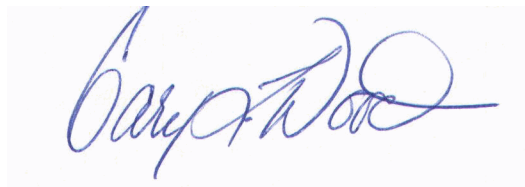
This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

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)****Metals in Drinking Water by EPA 200 Series Methods**

**Narrative:** Due to sample volumes, batch matrix quality control (QC) was not performed for this analysis. A Method Blank and Laboratory Control Sample comprise the batch QC.

Analysis: USEPA-200.8 Rev. 5.4

Sample/Analyte: 1606228-05 3-F-P-ELC, Room 11 Faucet

**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**  
 Project: Matrix Human Services  
 Client Sample ID: **1-F-P-ELC, Kitchen Faucet**  
 Lab Sample ID: **1606228-01**  
 Matrix: Drinking Water

Work Order: **1606228**  
 Description: East Lake Center  
 Sampled: 06/07/16 07:02  
 Sampled By: Andrew Rauser  
 Received: 06/09/16 16:30

### Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Lead	0.10	0.0050	0.015	mg/L	5	USEPA-200.8 Rev. 5.4	06/20/16 13:15	MSB	1606243

**ANALYTICAL REPORT**

Client: **ATC Group Services**  
Project: Matrix Human Services  
Client Sample ID: **2-WC-P-ELC, Hallway Water Cooler**  
Lab Sample ID: **1606228-03**  
Matrix: Drinking Water

Work Order: **1606228**  
Description: East Lake Center  
Sampled: 06/07/16 07:05  
Sampled By: Andrew Rauser  
Received: 06/09/16 16:30

**Metals in Drinking Water by EPA 200 Series Methods**

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	06/20/16 11:37	MSB	1606243

## ANALYTICAL REPORT

Client: **ATC Group Services**  
 Project: Matrix Human Services  
 Client Sample ID: **3-F-P-ELC, Room 11 Faucet**  
 Lab Sample ID: **1606228-05**  
 Matrix: Drinking Water

Work Order: **1606228**  
 Description: East Lake Center  
 Sampled: 06/07/16 07:08  
 Sampled By: Andrew Rauser  
 Received: 06/09/16 16:30

### Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Lead	<b>0.019</b>	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	06/23/16 12:30	MSB	1606193

## QUALITY CONTROL REPORT

### Metals in Drinking Water by EPA 200 Series Methods

QC Type	Sample Conc.	Spike Qty.	Result	Unit	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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**Analyte:** Lead/USEPA-200.8 Rev. 5.4

QC Batch: 1606243 (Metals Direct Analysis)

Analyzed: 06/20/2016 By: MSB

Method Blank			<0.0010	mg/L					0.0010
Laboratory Control Sample		0.0400	<b>0.0383</b>	mg/L	96	85-115			0.0010

QC Batch: 1606193 (200.2 Digestion)

Analyzed: 06/23/2016 By: MSB

Method Blank			<0.0010	mg/L					0.0010
Laboratory Control Sample		0.0500	<b>0.0500</b>	mg/L	100	85-115			0.0010

**PRETREATMENT SUMMARY PAGE**

Client: **ATC Group Services**  
Project: **Matrix Human Services**

<b>Pretreatment</b>	<b>Lab Sample ID</b>	<b>Batch</b>	<b>By</b>	<b>Date &amp; Time Prepared</b>
USEPA-200.2 Metals Digestion	1606228-05	1606193	JBA	06/22/16 12:40
USEPA 600/R-94/173	1606228-01	1606243	PNS	06/16/16 12:40
	1606228-03	1606243	PNS	06/16/16 12:40





# Chain of Custody Record

COC No.

160612394

For Lab Use Only

5560 Corporate Exchange Court SE, Grand Rapids, MI 49512  
Phone (616) 975-4500 Fax (616) 942-7463 www.trimatrixlabs.com

Analyses Requested

Pg. 1 of 1

VOA Rack/Tray

Client Name  
ATC Group Services

Receipt Log No.

Address  
46555 Humboldt Drive, Ste 100

Project Chemist

City, State Zip  
Novi MI 48377

Work Order No.

Phone: 248-669-5140 Fax 248-669-5147  
Email robert.smith@atcassociates.net

Project Name  
Matrix Human Services - East Lake Center

Client Project No. / P.O. No.  
188BS16284

Invoice To  
☒ Client  
☐ Other (comments)

Contact/Report To  
Robert Smith

Container Type (corresponds to Container Packing List)

Schedule

Field Sample ID

Cooler ID

Sample Date

Sample Time

Matrix

Number of Containers Submitted

Total

Sample Comments

01

1-F-P-ELC, Kitchen faucet

6/7/16

702

X DW

X

1

02

2-1-F-F-ELC, Kitchen faucet

6/7/16

703

X DW

X

1

03

3-2-WC-P-ELC, Hallway water cooler

6/7/16

705

X DW

X

1

04

4-2-WC-F-ELC, Hallway water cooler

6/7/16

706

X DW

X

1

05

5-3-F-P-ELC, Room 11 faucet

6/7/16

708

X DW

X

1

06

6-3-F-F-ELC, Room 11 faucet

6/7/16

709

X DW

X

1

Sampled By (print)  
Andrew Rausser

Sample's Signature

How Shipped?

Hand

Carrier

Company

Relinquished By

Date  
6/8/16

Time  
1700

2. Relinquished By

Date  
6/9/16

Time  
1630

3. Received for Lab By

Date

Time

Comments

If lead or copper is above detection limits, please analyze flush samples

ELC = East Lake Center

← PRESERVATIVES

A NONE pH~7

B HNO<sub>3</sub> pH<2

C H<sub>2</sub>SO<sub>4</sub> pH<2

D 1+1 HCl pH<2

E NaOH pH>12

F ZnAc/NaOH pH>9

G MeOH

H Other (note below)

ORIGINAL - LABORATORY

COPY - SAMPLER



# SAMPLE RECEIVING / LOG-IN CHECKLIST



**TRIMATRIX**  
LABORATORIES

Client: <u>ATC</u>	Work Order #: <u>16006228</u>
Receipt Record Page/Line #: <u>22-29</u>	New / Add To: _____ Project Chemist: _____ Sample #: _____

Recorded by (initials/date): <u>LA 6/10/16</u>	<input checked="" type="checkbox"/> Cooler <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	Qty Received: <u>1</u>	Thermometer Used: <input checked="" type="checkbox"/> IR Gun (#202) <input type="checkbox"/> Digital Thermometer (#54) <input type="checkbox"/> See Additional Cooler Information Form <input type="checkbox"/> Other (# _____)
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Cooler #	Time	Cooler #	Time	Cooler #	Time	Cooler #	Time	
<u>4m2389</u>	<u>0749</u>							
Custody Seals:		Custody Seals:		Custody Seals:		Custody Seals:		
<input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		<input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		<input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		<input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		
Coolant Type:		Coolant Type:		Coolant Type:		Coolant Type:		
<input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input checked="" type="checkbox"/> None		<input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		<input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		<input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		
Coolant Location:		Coolant Location:		Coolant Location:		Coolant Location:		
Dispersed / Top / Middle / Bottom		Dispersed / Top / Middle / Bottom		Dispersed / Top / Middle / Bottom		Dispersed / Top / Middle / Bottom		
Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No		
If Present, Temperature Blank Location is:		If Present, Temperature Blank Location is:		If Present, Temperature Blank Location is:		If Present, Temperature Blank Location is:		
<input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		<input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		<input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		<input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		
Observed °C	Correction Factor °C	Actual °C	Observed °C	Correction Factor °C	Actual °C	Observed °C	Correction Factor °C	
Temp Blank:			Temp Blank:			Temp Blank:		
Sample 1:	<u>22.8</u>	<u>-</u>	<u>22.8</u>			Sample 1:		
Sample 2:	<u>22.7</u>	<u>-</u>	<u>22.7</u>			Sample 2:		
Sample 3:	<u>22.8</u>	<u>-</u>	<u>22.8</u>			Sample 3:		
3 Sample Average °C: <u>22.8</u>			3 Sample Average °C:			3 Sample Average °C:		
<input type="checkbox"/> Cooler ID on COC? <input type="checkbox"/> VOC Trip Blank received?			<input type="checkbox"/> Cooler ID on COC? <input type="checkbox"/> VOC Trip Blank received?			<input type="checkbox"/> Cooler ID on COC? <input type="checkbox"/> VOC Trip Blank received?		

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

## Paperwork Received

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chain of Custody record(s)? If No, Initiated By _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Received for Lab Signed/Date/Time?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Shipping document?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other _____

## COC Information

☒ TriMatrix COC ☐ Other \_\_\_\_\_  
 COC ID Numbers: \_\_\_\_\_

## Check COC for Accuracy

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Analysis Requested?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sample ID matches COC?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sample Date and Time matches COC?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Container type completed on COC?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	All container types indicated are received?

## Sample Condition Summary

N/A	Yes	No	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Broken containers/lids?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Missing or incomplete labels?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Illegible information on labels?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Low volume received?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Inappropriate or non-TriMatrix containers received?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VOC vials / TOX containers have headspace?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Extra sample locations / containers not listed on COC?

## Check Sample Preservation

N/A	Yes	No	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Blank OR average sample temperature, ≥6° C?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If either is ≥6° C, was thermal preservation required?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If "Yes", Project Chemist Approval Initials: _____
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If "Yes" Completed Non Con Cooler - Cont Inventory Form?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Completed Sample Preservation Verification Form?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Samples chemically preserved correctly?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If "No", added orange tag?
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Received pre-preserved VOC soils?
		<input type="checkbox"/>	MeOH <input type="checkbox"/> Na <sub>2</sub> SO <sub>4</sub>

## Check for Short Hold-Time Prep/Analyses

<input type="checkbox"/> Bacteriological <input type="checkbox"/> Air Bags <input type="checkbox"/> EnCores / Methanol Pre-Preserved <input type="checkbox"/> Formaldehyde/Aldehyde <input type="checkbox"/> Green-tagged containers <input type="checkbox"/> Yellow/White-tagged 1 L ambers (SV Prep-Lab)	<b>AFTER HOURS ONLY:</b> COPIES OF COC TO LAB AREA(S) <input checked="" type="checkbox"/> NONE RECEIVED <input type="checkbox"/> RECEIVED, COCs TO LAB(S)
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## Notes

<input type="checkbox"/> Trip Blank received Cooler Received (Date/Time): <u>6/9/16 1630</u>	<input type="checkbox"/> Trip Blank not listed on COC Paperwork Delivered (Date/Time): <u>6/10/16 0845</u>	≤1 Hour Goal Met? <u>Yes / No</u>
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Client <b>ATC ELC</b>	Work Order # <b>1606228</b>
Receipt Log #	Completed By/Initials/Date <b>AC 6/10/16</b>
Project Chemist	

COC ID # <b>160613394</b>				Adjusted by: _____ Date: _____				DO NOT ADJUST pH FOR THESE CONTAINER TYPES			
Container Type	5 / 23	4	13	6	15						
Tag Color	Lt. Blue	Blue	Brown	Red	Red Stripe						
Preservative	NaOH	H <sub>2</sub> SO <sub>4</sub>	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HNO <sub>3</sub>						
Expected pH	>12	<2	<2	<2	<2						
COC Line #1				✓							
COC Line #2				✓							
COC Line #3				✓							
COC Line #4				✓							
COC Line #5				✓							
COC Line #6				✓							
COC Line #7											
COC Line #8											
COC Line #9											
COC Line #10											

pH Strip Reagent #
<input checked="" type="checkbox"/> <b>6040263</b>
<input type="checkbox"/>

Aqueous Samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container, record pH in box, and note on Sample Receiving Checklist and on Sample Receiving Non-Conformance Form. If approved by Project Chemist, add acid or base to the sample to achieve the correct pH. Add up to, but do not exceed 2x the volume initially added at container prep (see table below for initial volumes used). Add orange pH tag to sample container and record information requested. Record adjusted pH on this form. Do not adjust pH for container types 6 and 15.

COC ID #				Adjusted by: _____ Date: _____				DO NOT ADJUST pH FOR THESE CONTAINER TYPES			
Container Type	5 / 23	4	13	6	15						
Tag Color	Lt. Blue	Blue	Brown	Red	Red Stripe						
Preservative	NaOH	H <sub>2</sub> SO <sub>4</sub>	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HNO <sub>3</sub>						
Expected pH	>12	<2	<2	<2	<2						
COC Line #1											
COC Line #2											
COC Line #3											
COC Line #4											
COC Line #5											
COC Line #6											
COC Line #7											
COC Line #8											
COC Line #9											
COC Line #10											

Container Size (mL)	Original Vol. of Preservative (mL)
Container Type 5 NaOH	
500	2.5
1000	5.0
Container Type 4 H <sub>2</sub> SO <sub>4</sub>	
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13 H <sub>2</sub> SO <sub>4</sub>	
500	2.5

Comments
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