



January 18, 2017

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

Project: McKenny Center

Dear Mr. Robert Smith,

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

Work Order	Received	Description
1701057	01/04/2017	Laboratory Services

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); Georgia EPD (#026-999-161/1023062); Illinois DEP (#200026/003329); Kentucky DEP (AL123065/#0021); Michigan DPH (#0034); Minnesota DPH (#026-999-161/1023062); 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,

A handwritten signature in blue ink, appearing to read "Gary L. Wood", written over a light blue rectangular background.

Gary L. Wood
Client Services Manager



PROJECT TECHNICAL NARRATIVE(s)

Metals in Drinking Water by EPA 200 Series Methods

Narrative: The % difference between the values of the isotopes monitored for this analyte exceeded 25%; the lower of the two results has been reported.

Analysis: USEPA-200.8 Rev. 5.4

Sample/Analyte: 1701057-09 BRDWF-P-BlueRM Drinking Fountain Copper



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: McKenny Center
Client Sample ID: **YRDWF-P-YLW Drink Water**
Lab Sample ID: **1701057-01**
Matrix: Drinking Water

Work Order: **1701057**
Description: Laboratory Services
Sampled: 12/28/16 09:05
Sampled By: Kevin Klais
Received: 01/04/17 15:34

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
Copper	0.028	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:42	DSC	1700323
Lead	0.011	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:42	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: McKenny Center
Client Sample ID: **YRDS-P-YLWRM Diaper Sink**
Lab Sample ID: **1701057-03**
Matrix: Drinking Water

Work Order: **1701057**
Description: Laboratory Services
Sampled: 12/28/16 09:07
Sampled By: Kevin Klais
Received: 01/04/17 15:34

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
Copper	0.45	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:45	DSC	1700323
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:45	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services** Work Order: **1701057**
Project: McKenny Center Description: Laboratory Services
Client Sample ID: **YRKS-P-Yellow RM Kids Sink** Sampled: 12/28/16 09:09
Lab Sample ID: **1701057-05** Sampled By: ATC
Matrix: Drinking Water Received: 01/04/17 15:34

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
Copper	0.13	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:46	DSC	1700323
Lead	0.0027	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:46	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: McKenny Center
Client Sample ID: **BRKS-P-BlueRM Kids Sink**
Lab Sample ID: **1701057-07**
Matrix: Drinking Water

Work Order: **1701057**
Description: Laboratory Services
Sampled: 12/28/16 09:12
Sampled By: Kevin Klais
Received: 01/04/17 15:34

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
Copper	0.49	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:47	DSC	1700323
Lead	0.0030	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:47	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services** Work Order: **1701057**
Project: McKenny Center Description: Laboratory Services
Client Sample ID: **BRDWF-P-BlueRM Drinking Fountain** Sampled: 12/28/16 09:14
Lab Sample ID: **1701057-09** Sampled By: Kevin Klais
Matrix: Drinking Water Received: 01/04/17 15:34

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
Copper	0.0029	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:48	DSC	1700323
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:48	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: McKenny Center
Client Sample ID: **BRDS-P-Blue RM Diaper Sink**
Lab Sample ID: **1701057-11**
Matrix: Drinking Water

Work Order: **1701057**
Description: Laboratory Services
Sampled: 12/28/16 09:16
Sampled By: ATC
Received: 01/04/17 15:34

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
Copper	0.66	0.010	1.3	mg/L	10	USEPA-200.8 Rev. 5.4	01/17/17 11:35	DSC	1700323
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:49	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: McKenny Center
Client Sample ID: **GRDS-P-GRNRM Diaper Sink**
Lab Sample ID: **1701057-13**
Matrix: Drinking Water

Work Order: **1701057**
Description: Laboratory Services
Sampled: 12/28/16 09:20
Sampled By: Kevin Klais
Received: 01/04/17 15:34

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
Copper	1.8	0.010	1.3	mg/L	10	USEPA-200.8 Rev. 5.4	01/17/17 11:36	DSC	1700323
Lead	0.0015	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:50	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services** Work Order: **1701057**
Project: McKenny Center Description: Laboratory Services
Client Sample ID: **GRDWF-P-GRRM Drinking Fountain** Sampled: 12/28/16 09:22
Lab Sample ID: **1701057-15** Sampled By: Kevin Klais
Matrix: Drinking Water Received: 01/04/17 15:34

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
Copper	0.020	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:53	DSC	1700323
Lead	0.0029	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:53	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: McKenny Center
Client Sample ID: **GRKS-P-GRMRM-Kids Sink**
Lab Sample ID: **1701057-17**
Matrix: Drinking Water

Work Order: **1701057**
Description: Laboratory Services
Sampled: 12/28/16 09:24
Sampled By: Kevin Klais
Received: 01/04/17 15:34

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
Copper	0.47	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:54	DSC	1700323
Lead	0.0026	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:54	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: McKenny Center
Client Sample ID: **RRDS-P-REDRM Diaper Sink**
Lab Sample ID: **1701057-19**
Matrix: Drinking Water

Work Order: **1701057**
Description: Laboratory Services
Sampled: 12/28/16 09:30
Sampled By: Kevin Klais
Received: 01/04/17 15:34

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
Copper	0.30	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:55	DSC	1700323
Lead	0.0017	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:55	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services** Work Order: **1701057**
Project: McKenny Center Description: Laboratory Services
Client Sample ID: **RRDWF-P-RedRM Water Fountain** Sampled: 12/28/16 09:32
Lab Sample ID: **1701057-21** Sampled By: Kevin Klais
Matrix: Drinking Water Received: 01/04/17 15:34

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
Copper	0.013	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:56	DSC	1700323
Lead	0.0037	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:56	DSC	1700323



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: McKenny Center
Client Sample ID: **RRKS-P-RedRM Kids sink**
Lab Sample ID: **1701057-23**
Matrix: Drinking Water

Work Order: **1701057**
Description: Laboratory Services
Sampled: 12/28/16 09:34
Sampled By: Kevin Klais
Received: 01/04/17 15:34

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
Copper	0.18	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:57	DSC	1700323
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	01/17/17 08:57	DSC	1700323

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: Copper/USEPA-200.8 Rev. 5.4

QC Batch: 1700323 (Metals Direct Analysis)

Analyzed: 01/17/2017 By: DSC

Method Blank			<0.0010	mg/L					0.0010
Laboratory Control Sample		0.200	0.207	mg/L	104	85-115			0.0010
1701057-01 [YRDWF-P-YLW Drink Water]									
Matrix Spike	0.0279	0.0200	0.0480	mg/L	100	70-130			0.0010
Matrix Spike Duplicate	0.0279	0.0200	0.0476	mg/L	99	70-130	0.8	20	0.0010

Analyte: Lead/USEPA-200.8 Rev. 5.4

QC Batch: 1700323 (Metals Direct Analysis)

Analyzed: 01/17/2017 By: DSC

Method Blank			<0.0010	mg/L					0.0010
Laboratory Control Sample		0.0400	0.0401	mg/L	100	85-115			0.0010
1701057-01 [YRDWF-P-YLW Drink Water]									
Matrix Spike	0.0107	0.0200	0.0311	mg/L	102	70-130			0.0010
Matrix Spike Duplicate	0.0107	0.0200	0.0307	mg/L	100	70-130	1	20	0.0010



PRETREATMENT SUMMARY PAGE

Client: **ATC Group Services**
Project: **McKenny Center**

Pretreatment	Lab Sample ID	Batch	By	Date & Time Prepared
USEPA 600/R-94/173	1701057-01	1700323	JBA	01/12/17 19:03
	1701057-03	1700323	JBA	01/12/17 19:03
	1701057-05	1700323	JBA	01/12/17 19:03
	1701057-07	1700323	JBA	01/12/17 19:03
	1701057-09	1700323	JBA	01/12/17 19:03
	1701057-11	1700323	JBA	01/12/17 19:03
	1701057-13	1700323	JBA	01/12/17 19:03
	1701057-15	1700323	JBA	01/12/17 19:03
	1701057-17	1700323	JBA	01/12/17 19:03
	1701057-19	1700323	JBA	01/12/17 19:03
	1701057-21	1700323	JBA	01/12/17 19:03
	1701057-23	1700323	JBA	01/12/17 19:03



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512

Chain of Custody Record

COC No. 16256

For Lab Use Only

Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Analyses Requested

Pg. 1 of 1

Cart 8

VQA Rack/Tray

Client Name
ATC Group Services

Project Name
McKenny Center

← PRESERVATIVES
A NONE pH=7
B HNO₃ pH<2
C H₂SO₄ pH<2
D 1+1 HCl pH<2
E NaOH pH>12
F ZnAc/NaOH pH>9
G MeOH
H Other (note below)

Receipt Log No.

Address
46555 Humboldt Drive Suite 100

Client Project No. / P.O. No.
188BS167

Container Type (corresponds to Container Packing List)

Project Chemist

City, State Zip
Novi, MI, 48377

Invoice To
☒ Client
☐ Other (comments)

Work Order No.

Phone/Fax 248-669-5140

Contact/Report To

161057

PRIMAFLUSH-F
COPPER-F
COPPER-F

Schedule

Field Sample ID

Cooler ID

Sample Date

Sample Time

Matrix

Number of Containers Submitted

Total

Sample Comments

Matrix Code

Sample Number

1 YR DWF-P-YLW DRINK WATER

12-28-16

0905

DW

X

0

02

2 YR DWF-F-YLW DM DEWATER

12-28

0906

DW

X

0

03

3 YR DS-P-YLW DM DIAPHRAGM

12-28

0907

DW

X

0

02

4 YR DS-F-YLW DM DIAPHRAGM

12-28-16

0908

DW

X

0

03

5 YR KS-P-YLW DM DIAPHRAGM

12-28-16

0909

DW

X

0

02

6 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

7 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

8 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

9 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

10 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

11 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

12 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

13 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

14 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

15 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

16 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

17 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

18 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

19 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

20 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

21 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

22 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

23 YR KS-F-YLW DM DIAPHRAGM

12-28-16

0910

DW

X

0

02

24 YR KS-F-YLW DM DIAPHRAGM

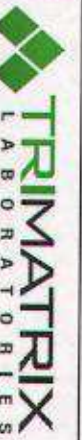
12-28-16

0910

DW

X

0



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512

Chain of Custody Record

COC No. 16257

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Cart 8
Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Analyses Requested

Pg. 2 of 2

Client Name		Project Name						
ATC Group Services		McKenny Center						
Address 46555 Humboldt Drive Suite 100		Client Project No. / P.O. No. 188BS167						
City, State Zip Novi, MI, 48377		Invoice To <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other (comments)						
Phone/Fax 248-669-5140		Contact/Report To KOB SM/TH						
Email		Container Type (corresponds to Container Packing List)						
Receipt Log No. 1235	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Total	Sample Comments
Project Comment	1 BRKS-P-BLUEM KIDS SINK	12-28-16	0912		DW	X	0	
Work Order No. 101057	2 BRKS-F-BLUEM KIDS SINK	12-28-16	0913		DW	X	0	
Schedule	3 BRDWF-P-BLUEM DRINK FOUNTAIN	12-28-16	0914		DW	X	0	
Matrix Code	4 BRDWF-F-BLUEM WATER FOUNTAIN	12-28-16	0915		DW	X	0	
Sample Number	5 BRDS-P-BLUEM BOON DIAPER SINK	12-28-16	0916		DW	X	0	
	6 BRDS-F-BLUEM DIAPER SINK	12-28-16	0917		DW	X	0	
	7						0	
	8						0	
	9						0	
	10						0	

Sampled By (print) Kevin Klais

Sampler's Signature *[Signature]*

Company

How Shipped? Tracking No.

Hand Carrier

1. Requisitioned By *[Signature]* Date 1-4-17 Time 1133

2. Received By *[Signature]* Date 1-4-17 Time 1534

3. Requisitioned By *[Signature]* Date 1-4-17 Time 1534

Comments

PRIMARY-P-Pb
FLUSH-F-Pb
COPPER-P
COPPER-F

PRESERVATIVES

A NONE pH<7
B HNO₃ pH<2
C H₂SO₄ pH<2
D 1+1 HCl pH<2
E NaOH pH>12
F ZnAcOAcOH pH>9
G MeOH
H Other (note below)



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512

Chain of Custody Record

COC No. 16258

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Cart
VOA Rack/Tray
Receipt Log No. 12-35
Project Character
Lab Order No. 1701057

Analyses Requested

Pg. 3 of 3

Client Name	ATC Group Services	Project Name	McKenny Center
Address	46555 Humboldt Drive Suite 100	Client Project No. / P.O. No.	188BS167
City, State, Zip	Novi, MI, 48377	Invoice To	<input checked="" type="checkbox"/> Client <input type="checkbox"/> Other (comments)
Phone/Fax	248-660-5140	Contact/Report To	
Email			

PRIMARY-P-Pb
PRIMARY-F-Pb
COPPER P
COPPER F

- ← PRESERVATIVES
- A NONE pH<7
 - B HNO₃ pH<2
 - C H₂SO₄ pH<2
 - D 1+1 HCl pH<2
 - E NaOH pH>12
 - F ZnAcOH pH>9
 - G MeOH
 - H Other (note below)

Schedule	Main Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	C O R A B	Matrix	Number of Containers Submitted	Total	Sample Comments
03		13	GRDS-F-GRAN DIABEA SINK		12-28-16	0920		DN	X	0	
02		14	GRDS-F-GRAN PM DIABEA SINK		12-28-16	0921		DN	X	0	
03		15	GRDWF-F-GRAN PM DIABEA SINK		12-28-16	0922		DN	X	0	
02		16	GRDWF-F-GRAN DRINK WATER		12-28-16	0923		DN	X	0	
03		17	GRKS-F-GRAN PM DIABEA SINK		12-28-16	0924		DN	X	0	
02		18	GRKS-F-GRAN KIDS SINK		12-28-16	0925		DN	X	0	
		7								0	
		8								0	
		9								0	
		10								0	

Sampled By (print)	Kevin Klais	How Shipped?	Hand	Carrier	Comments
Sampler's Signature	<i>Kevin Klais</i>	Tracking No.			

Company		1. Requested By	<i>Kevin Klais</i>	Date	1-4-17	Time	1133	2. Requested By	<i>Kevin Klais</i>	Date	1-4-17	Time	1534	3. Requested By	<i>Kevin Klais</i>	Date	1-4-17	Time	1534	4. Received for Lab by	<i>Kevin Klais</i>	Date	1-4-17	Time	1534
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Pg. 4 of

Pg. 7 of

SAMPLE RECEIVING / LOG-IN CHECKLIST

Pace Analytical

Client: <u>OTC GROUP</u>	Work Order #: <u>1701057</u>
Receipt Record Page/Line #: <u>12-35</u>	Project Chemist: <u>[Signature]</u> Sample #: <u>01-24</u>

Recorded by (initials/date): <u>SN 1-4-17</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"/> Other (#)	<input type="checkbox"/> See Additional Cooler Information Form
---	--	------------------------	--	---

Cooler #	Time	Cooler #	Time	Cooler #	Time
<u>773784</u>	<u>2033</u>				
Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact	
Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input checked="" type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None	
Coolant Location: Dispersed / Top / Middle / Bottom		Coolant Location: Dispersed / Top / Middle / Bottom		Coolant Location: Dispersed / Top / Middle / Bottom	
Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative	
Observed °C	Correction Factor °C	Actual °C	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			Temp Blank:		
Sample 1:	<u>14.8</u>	<u>0</u>	<u>14.8</u>	Sample 1:	
Sample 2:	<u>14.9</u>	<u>0</u>	<u>14.9</u>	Sample 2:	
Sample 3:	<u>16.1</u>	<u>0</u>	<u>16.1</u>	Sample 3:	
3 Sample Average °C: <u>15.3</u>			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?		

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

Paperwork Received

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

<input checked="" type="checkbox"/> Pace COC <input type="checkbox"/> Other _____ COC ID Numbers: <u>16256, 16257, 16258, 16259</u>
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Check COC for Accuracy

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

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

N/A	Yes	No	<input type="checkbox"/> Temperature Blank OR average sample temperature, ≥6° C? <input checked="" type="checkbox"/> If either is ≥6° C, was thermal preservation required? If "Yes", Project Chemist Approval Initials: _____ If "Yes" Completed Non Con Cooler - Cont Inventory Form? <input checked="" type="checkbox"/> Completed Sample Preservation Verification Form? <input checked="" type="checkbox"/> Samples chemically preserved correctly? If "No", added orange tag? <input checked="" type="checkbox"/> Received pre-preserved VOC soils? <input type="checkbox"/> MeOH <input type="checkbox"/> Na ₂ SO ₄
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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)	AFTER HOURS ONLY: COPIES OF COC TO LAB AREA(S) <input type="checkbox"/> NONE RECEIVED <input checked="" type="checkbox"/> RECEIVED, COCs TO LAB(S)
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Notes

<input type="checkbox"/> Trip Blank received Cooler Received (Date/Time): <u>SN 1-4-17</u>	<input type="checkbox"/> Trip Blank not listed on COC Paperwork Delivered (Date/Time): <u>1-4-17</u>	≤1 Hour Goal Met? Yes / No
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SAMPLE PRESERVATION VERIFICATION FORM

page 1 of 2

Client <u>ATC</u>	Work Order # <u>1701057</u>
Receipt Log # <u>12-35</u>	Completed By (initials/date) <u>DN 1-4-17</u>
Project Chemist <u>[Signature]</u>	

COC ID # <u>16256</u>				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 ₂ SO ₄	H ₂ SO ₄	HNO ₃	HNO ₃						
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"/>	6100615
<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.

Comments

COC ID # <u>16257</u>				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 ₂ SO ₄	H ₂ SO ₄	HNO ₃	HNO ₃						
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 ₂ SO ₄	
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13 H ₂ SO ₄	
500	2.5

Comments

SAMPLE PRESERVATION VERIFICATION FORM

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Client <i>QTC</i>	Work Order # <i>1701057</i>
Receipt Log # <i>1235</i>	Completed By (initials/date) <i>DN 1-4-17</i>
Project Chemist <i>(Signature)</i>	

COC ID # <i>16258</i>				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 ₂ SO ₄	H ₂ SO ₄	HNO ₃	HNO ₃						
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"/> 6100615
<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 # <i>16259</i>				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 ₂ SO ₄	H ₂ SO ₄	HNO ₃	HNO ₃						
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 ₂ SO ₄
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H ₂ SO ₄
500	2.5

Comments