



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

18J1213

Tidewater

Project Name: Frederick County Public Schools

Meneka Rodrigo
6625 Selnick Drive, Suite A
Elkridge, MD 21075

Project / PO Number: Thurmont Primary
Received: 10/23/2018
Reported: 11/21/2018

Analytical Testing Parameters

Table with sample details: Client Sample ID: W01A-01 1039 (DF) TEST POINT, Sample Matrix: Drinking Water, Lab Sample ID: 18J1213-01, Collected By: Cheruka Weerakoon, Collection Date: 10/23/2018 5:35

Table header: Metals, Total by EPA 200 Series Methods, Result, Limit(s), RL, Units, Note, Prepared, Analyzed, Analyst

Method: EPA 200.2/EPA 200.8

Table row: Lead, Result: 1.3, Limit(s): 20.0, RL: 1.0, Units: ppb, Prepared: 10/24/18 1113, Analyzed: 10/24/18 1519, Analyst: LMH

Table with sample details: Client Sample ID: W01A-02 1039 (DF) TEST POINT, Sample Matrix: Drinking Water, Lab Sample ID: 18J1213-02, Collected By: Cheruka Weerakoon, Collection Date: 10/23/2018 5:37

Table header: Metals, Total by EPA 200 Series Methods, Result, Limit(s), RL, Units, Note, Prepared, Analyzed, Analyst

Method: EPA 200.2/EPA 200.8

Table row: Lead, Result: 2.3, Limit(s): 20.0, RL: 1.0, Units: ppb, Prepared: 10/24/18 1113, Analyzed: 10/24/18 1520, Analyst: LMH

Table with sample details: Client Sample ID: W01A-06 1039 (DF) TEST POINT, Sample Matrix: Drinking Water, Lab Sample ID: 18J1213-03, Collected By: Cheruka Weerakoon, Collection Date: 10/23/2018 5:57

Table header: Metals, Total by EPA 200 Series Methods, Result, Limit(s), RL, Units, Note, Prepared, Analyzed, Analyst

Method: EPA 200.2/EPA 200.8

Table row: Lead, Result: <1.0, Limit(s): 20.0, RL: 1.0, Units: ppb, Prepared: 10/24/18 1113, Analyzed: 10/24/18 1521, Analyst: LMH

Table with sample details: Client Sample ID: W01A-05 1039 (DF) TEST POINT, Sample Matrix: Drinking Water, Lab Sample ID: 18J1213-04, Collected By: Cheruka Weerakoon, Collection Date: 10/23/2018 5:55

Table header: Metals, Total by EPA 200 Series Methods, Result, Limit(s), RL, Units, Note, Prepared, Analyzed, Analyst

Method: EPA 200.2/EPA 200.8

Table row: Lead, Result: <1.0, Limit(s): 20.0, RL: 1.0, Units: ppb, Prepared: 10/24/18 1113, Analyzed: 10/24/18 1521, Analyst: LMH



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Client Sample ID: W01A-07 1039 (DF) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:59
Lab Sample ID: 18J1213-05	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	<1.0	20.0	1.0	ppb		10/24/18 1113	10/24/18 1522	LMH

Client Sample ID: W01A-08 1039 (DF) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 6:01
Lab Sample ID: 18J1213-06	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	<1.0	20.0	1.0	ppb		10/24/18 1113	10/24/18 1523	LMH

Client Sample ID: W01A-03 1039 (DF) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:47
Lab Sample ID: 18J1213-07	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	<1.0	20.0	1.0	ppb		10/24/18 1113	10/24/18 1525	LMH

Client Sample ID: W01A-04 1039 (DF) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:49
Lab Sample ID: 18J1213-08	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	<1.0	20.0	1.0	ppb		10/24/18 1113	10/24/18 1529	LMH



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Client Sample ID: K17-02 1039 (IM) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:33
Lab Sample ID: 18J1213-09	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	<1.0	20.0	1.0	ppb		10/24/18 1113	10/24/18 1529	LMH

Client Sample ID: K17-01 1039 (IM) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:41
Lab Sample ID: 18J1213-10	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	<1.0	20.0	1.0	ppb		10/24/18 1113	10/24/18 1530	LMH

Client Sample ID: K31-01 1039 (KS) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:45
Lab Sample ID: 18J1213-11	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	7.2	20.0	1.0	ppb		10/24/18 1113	10/24/18 1531	LMH

Client Sample ID: K31-02 1039 (KS) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:44
Lab Sample ID: 18J1213-12	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	6.6	20.0	1.0	ppb		10/24/18 1113	10/24/18 1532	LMH



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Client Sample ID: K31-03 1039 (KS) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:39
Lab Sample ID: 18J1213-13	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	7.1	20.0	1.0	ppb		10/24/18 1113	10/24/18 1533	LMH

Client Sample ID: S23-01 1039 (NO) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:31
Lab Sample ID: 18J1213-14	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	3.9	20.0	1.0	ppb		10/24/18 1113	10/24/18 1533	LMH

Client Sample ID: S23-02 1039 (TL) TEST POINT	Collected By: Cheruka Weerakoon
Sample Matrix: Drinking Water	Collection Date: 10/23/2018 5:52
Lab Sample ID: 18J1213-15	

Metals, Total by EPA 200 Series Methods	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.2/EPA 200.8								
Lead	1.8	20.0	1.0	ppb		10/24/18 1113	10/24/18 1534	LMH

Results in **bold** have exceeded a limit defined for this project. Limits are provided for reference but as regulatory limits change frequently, Microbac Laboratories, Inc. advises the recipient of this report to confirm such limits and units of concentration with the appropriate Federal, state or local authorities before acting on the data.

Definitions

RL: Reporting Limit

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 13.2°C

Cooler Inspection Checklist

Custody Seals Intact	Yes	Containers Intact	Yes
Received on ice or not required.	Yes	Radiation Scan Acceptable or not required.	Yes
COC Present	Yes	COC/Containers Agree	Yes
Correct Preservation	No	Correct Number of Containers Received	Yes
Sufficient Sample Volume	Yes	Proper Condition	Yes

Project Requested Certification(s)

Microbac Laboratories, Inc. - Baltimore
109

State of Maryland (Drinking Water)



Microbac Laboratories, Inc. - Baltimore

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Report Comments

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included.

Reviewed and Approved By:

A handwritten signature in black ink, appearing to read "Isang Isang", is written over a light gray rectangular background.

Isang Isang

Client Relations

Reported: 11/21/2018 15:41

Microbac Laboratories, Inc.

2101 Van Deman Street | Baltimore, MD 21224 | 410.633.1800 p | www.microbac.com

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Reviewed By: II
 Date: 10/23/18

18J1213

Multiple Sample COC

Site: **Thurmont Primary: 7989 Rocky Ridge Road, Thurmont, MD 21788, Office Ph.: 240-236-2800**

Date Sampled: **Tuesday, October 23, 2018**

Row	Area Number/Room/Space	From Item Description	Sample Name:	Date/Time Sampled (ex: 03/01/2018 13:28)	Sampler's Name
1	Across R-417	Drinking Fountain, Refrigerated	X W01A-01 1039 (DF) Test Point	10/23/2018 5:35 am	Cheruka Weerakoon
2	Across R-417	Drinking Fountain, Refrigerated	X W01A-02 1039 (DF) Test Point	10/23/2018 5:37 am	Cheruka Weerakoon
3	By R-111	Drinking Fountain, Refrigerated	X W01A-06 1039 (DF) Test Point	10/23/2018 5:57 am	Cheruka Weerakoon
4	By R-207	Drinking Fountain, Refrigerated	X W01A-05 1039 (DF) Test Point	10/23/2018 5:55 am	Cheruka Weerakoon
5	By R-503	Drinking Fountain, Refrigerated	X W01A-07 1039 (DF) Test Point	10/23/2018 5:59 am	Cheruka Weerakoon
6	By R-503	Drinking Fountain, Refrigerated	X W01A-08 1039 (DF) Test Point	10/23/2018 6:01 am	Cheruka Weerakoon
7	Gym	Drinking Fountain, Refrigerated	X W01A-03 1039 (DF) Test Point	10/23/2018 5:47 am	Cheruka Weerakoon
8	Gym	Drinking Fountain, Refrigerated	X W01A-04 1039 (DF) Test Point	10/23/2018 5:49 am	Cheruka Weerakoon
9	health room	Ice Machine	X K17-02 1039 (IM) Test Point	10/23/2018 5:33 am	Cheruka Weerakoon
10	Kitchen	Ice Machine	X K17-01 1039 (IM) Test Point	10/23/2018 5:41 am	Cheruka Weerakoon
11	Kitchen	Sink, Kitchen	X K31-01 1039 (KS) Test Point	10/23/2018 5:45 am	Cheruka Weerakoon
12	Kitchen	Sink, Kitchen	X K31-02 1039 (KS) Test Point	10/23/2018 5:44 am	Cheruka Weerakoon
13	Kitchen	Sink, Kitchen	X K31-03 1039 (KS) Test Point	10/23/2018 5:39 am	Cheruka Weerakoon
14		0 Non-Kitchen lavatory/Sink	X S23-01 1039 (NO) Test Point	10/23/2018 5:31 am	Cheruka Weerakoon
15		0 Non-Kitchen lavatory/Sink	X S23-02 1039 (TL) Test Point	10/23/2018 5:52 am	Cheruka Weerakoon
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-



Samples Relinquished By: Cheruka Weerakoon
 Samples Received By: Evelyn S. Metz 10/23/18 9:55
 Temp: _____

13.2 on ice

Cooler Receipt Form / Sample Acceptance & Noncompliance Form

Microbac Laboratories, Inc., Baltimore Division
Control # 606-03
Effective Date: 11/30/2016
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Number of Coolers Received: 1
Client: Yarmount Primary
Form Completed By: Evelyn Shinds Matry
Shipper:
Custody Tape Intact:
Containers Intact:
Sample Received on Ice or refrigerated:

Chain of Custody Present with shipment:
Sample Bottle IDs agree with COC:
Preservation requirements met:
Correct Number of Containers / Sample Volume:
Headspace in container:
Type of Sample:

Receipt Date / Time: 10/23/18 7:55
Work Order # 1851213

 Microbac Client UPS FedEx
YES / NO / NA
YES / NO
YES / NO / NA
Infrared (IR) Temperature: 13.2 °C
YES / NO
YES / NO
YES / NO / Not Checked
YES / NO (If No, contact client immediately)
YES / NO / NA
Water Soil Wipes Oil Filter Solid
Sludge Food Swab Other

Container Type / Quantity:

A - <u>15</u> Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid:	If preserved pH <2	pH >10
B - Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
C - Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
D - Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
E - Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
H - Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
K - Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
L - Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
M - Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
P - <u>15</u> Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
W - Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
V - Unpreserved	HCl	HCl / Ascorbic Acid	HCl / NaTHIO	(Checked at time of Analysis)			
F - Unpreserved	NaTHIO (Checked at time of Analysis)						
S - Unpreserved	NaTHIO (Checked at time of Analysis)						
SN - Unpreserved	NaTHIO NaTHIO/EDTA (Checked at time of Analysis)						
Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10
Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2	pH >10

Describe preservation requirements not met:
All Acid preserved <2 pH NaOH preserved >12 pH All others >2 and <10 (usually 4-8)
 Sample ID: All bottles H₂SO₄ HNO₃ NaOH 1 mls added to preserve for analysis as requested.
 Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added
 Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added
 Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added
H₂SO₄ - Sulfuric Acid, HNO₃ - Nitric Acid, NaOH - Sodium Hydroxide, ASC - Ascorbic Acid, NaTHIO - Sodium Thiosulfate

Describe Anomalies: _____

Contact information / Summary of Actions:
 Date / Time: _____ Contact: _____ Contact By: _____
 Comments: _____
