



Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J6D0239

Binghamton University

Project Name: BU Pb 2016

Kelly Donovan  
440 Vestal Parkway  
Binghamton, NY 13902

Project / PO Number: N/A  
Received: 04/01/2016 11:00  
Reported: 04/12/2016 17:25

Analytical Testing Parameters

Client Sample ID: ICD-01  
Lab Sample ID: J6D0239-01  
Sample Type:

Collected By: JMW  
Collection Date: 03/29/16  
Collection Time: 06:12

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

200.8- ICP-MS	Result	PQL	Units	Note	Prepared	Analyzed
Method: 200.8 Lead	<0.001	0.001	mg/L		04/06/16 1013	04/07/16 2106

Analytical Testing Parameters

Client Sample ID: ICD-02  
Lab Sample ID: J6D0239-02  
Sample Type:

Collected By: JMW  
Collection Date: 03/29/16  
Collection Time: 06:16

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

200.8- ICP-MS	Result	PQL	Units	Note	Prepared	Analyzed
Method: 200.8 Lead	<0.001	0.001	mg/L		04/06/16 1013	04/07/16 2117

Analytical Testing Parameters

Client Sample ID: ICD-03  
Lab Sample ID: J6D0239-03  
Sample Type:

Collected By: JMW  
Collection Date: 03/29/16  
Collection Time: 06:19

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

200.8- ICP-MS	Result	PQL	Units	Note	Prepared	Analyzed
Method: 200.8 Lead	0.0015	0.001	mg/L		04/06/16 1013	04/07/16 2121



Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J6D0239

Analytical Testing Parameters

Client Sample ID: ICD-04
Lab Sample ID: J6D0239-04
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 06:22

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2125

Analytical Testing Parameters

Client Sample ID: CPS-01
Lab Sample ID: J6D0239-05
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 06:30

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2128

Analytical Testing Parameters

Client Sample ID: CPS-02
Lab Sample ID: J6D0239-06
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 06:34

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2132



Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J6D0239

Analytical Testing Parameters

Client Sample ID: CPS-03
Lab Sample ID: J6D0239-07
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 06:40

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2143

Analytical Testing Parameters

Client Sample ID: CPS-4
Lab Sample ID: J6D0239-08
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 06:44

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, 0.0016, 0.001, mg/L, 04/06/16 1013, 04/07/16 2147

Analytical Testing Parameters

Client Sample ID: EGY-01
Lab Sample ID: J6D0239-09
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 06:52

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2151



Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J6D0239

Analytical Testing Parameters

Client Sample ID: EGY-02
Lab Sample ID: J6D0239-10
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 06:56

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2154

Analytical Testing Parameters

Client Sample ID: EGY-03
Lab Sample ID: J6D0239-11
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:03

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2158

Analytical Testing Parameters

Client Sample ID: EGY-04
Lab Sample ID: J6D0239-12
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:08

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2205



Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J6D0239

Analytical Testing Parameters

Client Sample ID: WGY-01
Lab Sample ID: J6D0239-13
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:18

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2209.

Analytical Testing Parameters

Client Sample ID: WGY-02
Lab Sample ID: J6D0239-14
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:24

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, 0.0011, 0.001, mg/L, 04/06/16 1013, 04/07/16 2213.

Analytical Testing Parameters

Client Sample ID: WGY-03
Lab Sample ID: J6D0239-15
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:29

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2217.



Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J6D0239

Analytical Testing Parameters

Client Sample ID: WGY-04
Lab Sample ID: J6D0239-16
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:33

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1013, 04/07/16 2228

Analytical Testing Parameters

Client Sample ID: RAF-01
Lab Sample ID: J6D0239-17
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:45

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, 0.0014, 0.001, mg/L, 04/06/16 1013, 04/07/16 2231

Analytical Testing Parameters

Client Sample ID: RAF-02
Lab Sample ID: J6D0239-18
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:49

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, <0.001, 0.001, mg/L, 04/06/16 1025, 04/07/16 2235



Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J6D0239

Analytical Testing Parameters

Client Sample ID: RAF-03
Lab Sample ID: J6D0239-19
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:55

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, 0.011, 0.001, mg/L, 04/06/16 1025, 04/07/16 2239

Analytical Testing Parameters

Client Sample ID: RAF-04
Lab Sample ID: J6D0239-20
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 07:59

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, 0.0011, 0.001, mg/L, 04/06/16 1025, 04/07/16 2242

Analytical Testing Parameters

Client Sample ID: C4D-01
Lab Sample ID: J6D0239-21
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 08:16

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result, PQL, Units, Note, Prepared, Analyzed. Row 2: Method: 200.8, Lead, 0.0019, 0.001, mg/L, 04/06/16 1025, 04/07/16 1827



Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J6D0239

Analytical Testing Parameters

Client Sample ID: C4D-02
Lab Sample ID: J6D0239-22
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 08:19

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result: 0.001, PQL: 0.001, Units: mg/L, Prepared: 04/07/16 1200, Analyzed: 04/08/16 1054.

Analytical Testing Parameters

Client Sample ID: C4D-03
Lab Sample ID: J6D0239-23
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 08:25

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result: <0.001, PQL: 0.001, Units: mg/L, Prepared: 04/06/16 1025, Analyzed: 04/07/16 1839.

Analytical Testing Parameters

Client Sample ID: C4D-04
Lab Sample ID: J6D0239-24
Sample Type:

Collected By: JMW
Collection Date: 03/29/16
Collection Time: 08:29

Analyses Subcontracted to: Microbac Laboratories, Inc. Dayville (NY 11549)

Table with 7 columns: Method, Result, PQL, Units, Note, Prepared, Analyzed. Row 1: 200.8- ICP-MS, Result: <0.001, PQL: 0.001, Units: mg/L, Prepared: 04/06/16 1025, Analyzed: 04/07/16 1842.

Laboratory

NY: Microbac Laboratories, Inc., New York Division

Definitions

AL: Action Level
PQL: Practical Quantitation Limit

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 16.0°C





Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J6D0239

Cooler Inspection Checklist

Custody Seals Intact and/or No Evidence of Tampering	Yes	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Correct (or not required)	Yes
Received on Ice (or not required)	Yes		

Project Requested Certification(s)

Microbac Laboratories, Inc. Dayville (NY 11549)  
NY Lab ID No: 11549

New York State Department of Health

Report Comments

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

Reviewed and Approved By:

Michael Fifield  
Division Manager  
04/12/2016 17:25

**Go Green:** Contact Michael Fifield to set up email reporting and invoicing options.

*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. For any feedback concerning our services, please contact Michael Fifield, Project Manager at michael.fifield@microbac.com. You may also contact Michael Fifield, Managing Director at michael.fifield@microbac.com or Robert Crookston, President at robert.crookston@microbac.com.*

3821 Buck Drive  
 Cortland NY 13045  
 Phone:(607)753-3403 Fax:(607)753-3415  
 NY #10795, EPA #NY00935

**Microbac Laboratories, Inc.**  
**CHAIN OF CUSTODY**

Samples must be returned on ice  
 MNY Workorder #

Client Information			Billing/Invoice:			
Name:	Binghamton University		Date:	3/29/16	Time:	6:17a
Address:	Physical Plant, PO Box 6000 Binghamton, NY 13902-6000		Date:		Time:	6:16a
Contact:	Kelly Donovan		Date:		Time:	6:14a
Phone:	607-777-4018		Date:		Time:	6:22a
Project:	BU Pb 2016		Date:		Time:	6:30a
Quote ID:	PO#:		Date:		Time:	6:34a
Rush TAT Bus. Days: <2 2-5 5-7 7-10			Date Req.:			
Carbon Copy: Yes			Date Req.:			
Email Results: Yes			Date Req.:			
Fax Results: Yes			Date Req.:			

Sample Information			Analysis Requested		
Description/Location	Date	Time	Matrix Type	Number of Containers for Analysis Requested	Comments/Field Data
1 ICD - 01	3/29/16	6:17a	Gr/DW	1	
2 ICD - 02		6:16a			
3 ICD - 03		6:14a			
4 ICD - 04		6:22a			
5 CPS - 01		6:30a			
6 CPS - 02		6:34a			
7 CPS - 03		6:40a			
8 CPS - 04		6:44a			
9 EGY - 01		6:52a			
10 EGY - 02		6:56a			
11 EGY - 03		7:03a			
12 EGY - 04		7:08a			
13 W64 - 01		7:16a			
14 W64 - 02		7:21a			
15 W64 - 03		7:29a			

Receiving Info (Lab Use Only)	
Ice:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Cooler:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Sample Temp:	16.0
Cooler Seal:	YES NO
Pickup:	YES NO
Dropoff:	C W
Accepted?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Container Material	
Container Size(in Mi)	
Preservative	

Total Lead (DW) (EPA 200.8)	
Plastic	
250 ml	
HNO3	


  

Print Name and Company	
Sampled:	Stephen Endros BU
Received:	Pete R. J. / m c
Received:	

Date/Time	
4/1/16	9:23
4/1/16	11:00



J6D0239

Microbac Laboratories (MNY) may be unable to perform a portion of the requested testing in which case we will subcontract the analysis to another accredited laboratory. By signing this document you are attesting that you have been informed by MNY of the intent to subcontract and are in agreement with this action.

# Microbac Laboratories, Inc. CHAIN OF CUSTODY

Samples must be returned on ice  
 MNY Workorder #

Client Information		Billing/Invoice:	
Name:	Binghamton University		
Address:	Physical Plant, PO Box 6000 Binghamton, NY 13902-6000		
Contact:	Kelly Donovan		
Phone:	607-777-4018		
Project:	BU Pb 2016	PO#:	
Quote ID:		Date Req.:	
Rush TAT Bus. Days: <2 2-5 5-7 7-10			
Carbon Copy:	Yes		
Email Results:	Yes		
Fax Results:	Yes		

Sample Information			Analysis Requested		Receiving Info (Lab Use Only)	
Description/Location	Date	Time	Matrix Type	Total Lead (DW) (EPA 200.8)	Number of Containers for Analysis Requested	Comments/Field Data
1	3/29/16	7:33a	Gr/DW	Plastic	1	
2		7:45a		250 ml		
3		7:49a		EN03		
4		7:55a				
5		7:57a				
6		8:16a				
7		8:19a				
8		8:25a				
9		8:29a				
10						
11						
12						
13						
14						
15						


  

Accepted?	YES NO
Container Material	
Container Size(In ml)	
Preservative	

Ice:	YES NO
Cooler:	YES NO
Sample Temp:	
Cooler Seal:	YES NO
Pickup:	YES NO
Dropoff:	C W



J6D0239

Print Name and Company	Date/Time	Comments
Stephen Endres BU	4/1/16	
Deke Rodol Inc	4/1/16 9:23	