

**APPENDIX I**

**LABORATORY ANALYTICAL DATA**

CERTIFICATE OF ANALYSIS

Client: Brinkerhoff Environmental Services Inc. 1805 Atlantic Avenue Manasquan NJ 08736	Report Date: 6/15/2016 Report No.: 511426 - Lead Water Project: Burlington Campus Project No.: 14BR141G
Client: BRI493	

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:5949313                      Location:Room 102 Staff Bathroom/FD, 6-4-16    Result(ppb):4.4  
 Client No.:BU-10A

Lab No.:5949314                      Location:Room 102 Staff Bathroom/FL, 6-4-16    Result(ppb):<2.0  
 Client No.:BU-10B

Lab No.:5949315                      Location:Room 107 Bathroom/FD, 6-4-16        Result(ppb):3.5  
 Client No.:BU-11A

Lab No.:5949316                      Location:Room 107 Bathroom/FL, 6-4-16        Result(ppb):<2.0  
 Client No.:BU-11B

Lab No.:5949317                      Location:Food Services Left Side/FD, 6-4-16    Result(ppb):2.4  
 Client No.:BU-12A

Lab No.:5949318                      Location:Food Services Left Side/FL, 6-4-16    Result(ppb):<2.0  
 Client No.:BU-12B


Lab No.:5949319                      Location:Staff Room Bathroom/FD, 6-4-16        Result(ppb):2.2  
 Client No.:BU-13A

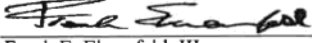
Lab No.:5949320                      Location:Staff Room Bathroom/FL, 6-4-16        Result(ppb):<2.0  
 Client No.:BU-13B

Lab No.:5949321                      Location:Room 115 Left Side Bathroom/FD, 6-4-16    Result(ppb):8.8  
 Client No.:BU-14A

Lab No.:5949322                      Location:Room 115 Left Side Bathroom/FL, 6-4-16    Result(ppb):2.0  
 Client No.:BU-14B

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 6/7/2016  
 Date Analyzed: 6/15/2016 12:00:00 AM  
 Signature:   
 Analyst: Chad Shaffer

Approved By:   
 Frank E. Ehrenfeld, III  
 Laboratory Director



9000 Commerce Parkway Suite B  
Mt. Laurel, New Jersey 08054  
Telephone: 856-231-9449  
Email: customerservice@iatl.com


CERTIFICATE OF ANALYSIS

Client: Brinkerhoff Environmental Services Inc.  
1805 Atlantic Avenue  
Manasquan NJ 08736  
Client: BRI493  
Report Date: 6/15/2016  
Report No.: 511426 - Lead Water  
Project: Burlington Campus  
Project No.: 14BRI41G

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:5949323 Client No.:BU-15A	Location:Room 108 Bathroom/FD, 6-4-16	Result(ppb):12
Lab No.:5949324 Client No.:BU-15B	Location:Room 108 Bathroom/FL, 6-4-16	Result(ppb):<2.0
Lab No.:5949325 Client No.:BU-16A	Location:Room 112 Left Side Bathroom/FD, 6-4-16	Result(ppb):8.4
Lab No.:5949326 Client No.:BU-16B	Location:Room 112 Left Side Bathroom/FL, 6-4-16	Result(ppb):<2.0
Lab No.:5949327 Client No.:BU-17A	Location:Room 112 Right Side Bathroom/FD, 6-4-16	Result(ppb):8.0
Lab No.:5949328 Client No.:BU-17B	Location:Room 112 Right Side Bathroom/FL, 6-4-16	Result(ppb):<2.0
Lab No.:5949329 Client No.:BU-18A	Location:Room 111 Bathroom/FD, 6-4-16	Result(ppb):5.6
Lab No.:5949330 Client No.:BU-18B	Location:Room 111 Bathroom/FL, 6-4-16	Result(ppb):<2.0
Lab No.:5949331 Client No.:BU-19	Location:Field Blank, 6-4-16	Result(ppb):<2.0

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 6/7/2016  
Date Analyzed: 6/15/2016 12:00:00 AM  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



9000 Commerce Parkway Suite B  
Mt. Laurel, New Jersey 08054  
Telephone: 856-231-9449  
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Brinkerhoff Environmental Services Inc. 1805 Atlantic Avenue Manasquan NJ 08736	Report Date: 6/15/2016 Report No.: 511426 - Lead Water Project: Burlington Campus Project No.: 14BR141G
Client: BRI493	

### Appendix to Analytical Report:

**Customer:** Brinkerhoff Environmental Services Inc.  
**Address:** 1805 Atlantic Avenue  
**Customer Contact:** Jason Hooper  
**Analysis:** AAS-GF - ASTM D3559-08D, USEPA 40CFR 141.11B, 2010

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

**iATL Customer Service:** customerservice@iatl.com  
**iATL Office Manager:** cdavis@iatl.com  
**iATL Account Representative:** Pete Lesniak  
**Sample Login Notes:** See Batch Sheet Attached  
**Sample Matrix:** Water  
**Exceptions Noted:** See Following Pages

#### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at [www.iATL.com](http://www.iATL.com) and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

#### Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:  
- ASTM D3559-08D, USEPA 40CFR 141.11B, 2010  
- USEPA 200.9Pb, AAS-GF, RL <2 ppb/sample  
- USEPA SW 846-7000B:7421 - Pb(AAS-GF, RL <2 ppb/sample)

Certification:  
- NYS-DOH No. 11021  
- NJDEP No. 03863

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 2.0 PPB

#### Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at [customerservice@iatl.com](mailto:customerservice@iatl.com).

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

Dated : 6/17/2016 7:54:19

Page 3 of 3



9000 Commerce Parkway, Suite B • Mount Laurel, NJ-08054  
 Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

## Chain of Custody

<b>Contact Information</b>	
Client Company: <u>BRINKERHOFF (BES)</u>	Project Number: <u>46R1416</u>
Office Address: <u>1805 ATLANTIC AVENUE</u>	Project Name: <u>BURLINGTON CAMPUS</u>
City, State, Zip: <u>MANASQUAN, NJ 08736</u>	Primary Contact: <u>JOE SERIO</u>
Fax Number: _____	Office Phone: <u>(732) 223-2225</u>
Email Address: <u>JSERIO@BRINKENV.COM</u>	Cell Phone: <u>(908) 330-8560</u>

<b>Matrix:</b>	
Air <input type="checkbox"/>	Soil <input type="checkbox"/>
Water <input checked="" type="checkbox"/>	Paint <input type="checkbox"/>
	Surface Dust / Wipe <input type="checkbox"/>
	Bulk <input type="checkbox"/>
	Other <input type="checkbox"/>

**E-MAILED**  
6/16/16 AD

<b>Analysis Method:</b>	
<input type="checkbox"/> PCM: NIOSH 7400	<input type="checkbox"/> PLM Use Bulk Asbestos Sample Log
<input type="checkbox"/> PCM: OSHA	<input type="checkbox"/> PLM: Bulk Asbestos EPA 600
<input type="checkbox"/> PCM: TWA	<input type="checkbox"/> PLM: Point Counting 198.1
<input type="checkbox"/> Total Dust: NIOSH 0500	<input type="checkbox"/> PLM: NOB via 198.6 (PLM only)
<input type="checkbox"/> Total Dust: NIOSH 0600	<input type="checkbox"/> If <1% by PLM, to TEM via 198.4 2
<input type="checkbox"/> AAS: Lead in Air	<b>IAQ Use Mold Sample Log</b>
<input checked="" type="checkbox"/> AAS: Lead in Water	<input type="checkbox"/> IAQ: I Bioaersol Fungal Spore Trap <sub>3</sub>
<input type="checkbox"/> AAS: Lead in Paint	<input type="checkbox"/> IAQ: II Bioaersol Fungal Spore
<input type="checkbox"/> AAS: Lead Dust/Wipe <sub>1</sub>	<input type="checkbox"/> IAQ: Tape, Bulk, Misc. Qualitative <sub>3</sub>
<input type="checkbox"/> AAS: Lead in Soil	<input type="checkbox"/> IAQ: Tape, Bulk, Misc. Quantitative <sub>3</sub>
<input type="checkbox"/> AAS: TCLP	<input type="checkbox"/> IAQ: Other Culturable ID <sub>2</sub>
<input type="checkbox"/> AAS: Metals [Cd, Zn, Cr-circle]	<input type="checkbox"/> TEM: AHERA
	<input type="checkbox"/> TEM: NIOSH 7402
	<input type="checkbox"/> TEM: ISO 10312
	<input type="checkbox"/> TEM: ISO 13794
	<input type="checkbox"/> TEM: Wipe ASTM 6480
	<input type="checkbox"/> TEM: Microvac ASTM D5755
	<input type="checkbox"/> TEM: Microvac ASTM D5756
	<input type="checkbox"/> TEM: NOB 198.4
	<input type="checkbox"/> TEM: Bulk Analysis
	<input type="checkbox"/> TEM: Potable Water
	<input type="checkbox"/> TEM: Non-Potable Water
	<input type="checkbox"/> TEM: Other _____
	<input type="checkbox"/> Soil: Call for Available Methods

1- Requires ASTM acceptable material 2- Call to confirm TAT 3- Non-culturable 4- With Non-fungal Microscopic Exam

<b>Turnaround Time</b>	
Preliminary Results Requested Date: _____	<input type="checkbox"/> Verbal <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax
	Specific date / time
<input type="checkbox"/> 10 Day <input checked="" type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day* <input type="checkbox"/> 12 Hour** <input type="checkbox"/> 6 Hour** <input type="checkbox"/> RUSH**	
* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***	

<b>Shipping Method</b>	
<input type="checkbox"/> FedEx	<input checked="" type="checkbox"/> UPS
<input type="checkbox"/> USPS	<input type="checkbox"/> Other _____

<b>Chain of Custody</b>	
Relinquished (Name/Organization): <u>JOE SERIO</u>	Date: <u>06/04/2016</u>
Received (Name / iATL): _____	Date: _____
Sample Login (Name / iATL): _____	Date: <u>6/8/16</u>
Analyst (Name(s) / iATL): <u>CAG/SL/ML</u>	Date: <u>6/16/16</u>
QA/QC Review (Name / iATL): _____	Date: _____
Archived / Released: _____	Date: _____
QA/QC InterLAB Use: _____	Date: _____

**RECEIVE**  
1450  
JUN - 7 2016  
IATL BY \_\_\_\_\_

## Sample Log

-Environmental Lead -

Client: FRANKERHOFF (BES) Project: HBRHIG - BURLINGTON CAMPUS

Sampling Date/Time: JUNE 4, 2016

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
BU-10A	5949313	ROOM 102 STAFF BATHROOM / FD			1000	250 mL	
BU-10B	5949314	" / FL			1000		
BU-11A	5949315	ROOM 107 BATH ROOM / FD			1003		
BU-11B	5949316	" / FL			1003		
BU-12A	5949317	FOOD SERVICES LEFT SIDE / FD			1008		
BU-12B	5949318	" / FL			1008		
BU-13A	5949319	STAFF ROOM BATH ROOM / FD			1012		
BU-13B	5949320	" / FL			1012		
BU-14A	5949321	ROOM 115 LEFT SIDE BATHROOM / FD			1016		
BU-14B	5949322	" / FL			1016		
BU-15A	5949323	ROOM 108 BATHROOM / FD			1020		
BU-15B	5949324	" / FL			1020		
BU-16A	5949325	ROOM 112 LEFT SIDE BATHROOM / FD			1024		
BU-16B	5949326	" / FL			1024		

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

## Sample Log

-Environmental Lead -

Client: BANKERHOFF (BES) Project: 14BR141 G - BURLINGTON CAMPUIS

Sampling Date/Time: JUNE 4, 2016

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
BU-17A	5949327	ROOM 112 RIGHT SIDE BATHROOM / FD			1026	250 mL	
BU-17B	5949328	" / FL			1026		
BU-18A	5949329	ROOM 111 BATHROOM / FD			1030		
BU-18B	5949330	" / FL			1030		
BU-19	5949331	FIELD BLANK			1032		
acidified: RM		6/8/16		2:00pm			

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)  
 \*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible  
 FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.  
 These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

**DAILY QUALITY CONTROL DATA****LEAD SAMPLE ANALYSIS**

(DATE: 06 / 16 / 16)

Standard	Total Lead (mg)	Percent Recovery **
Reagent Blank	0.000	< LOQ
Blank Spike	0.500	100
Lab Control Std	1.230	91
Matrix Spike - LBP *	0.24	92
Matrix Spike - Wipe *	0.37	114
Matrix Spike - Soil *	0.350	101
Matrix spike - Air *	0.050	96
2.5 ppm Standard	0.25	96
10.0 ppm Standard	1.0	101
40.0 ppm Standard	4.0	99

**AIHA-LAP, LLC No. 100188****NYSDOH-ELAP No. 11021**Analysis Method: ASTM D3335-85A  
NIOSH 7082  
EPA SW846 3050B 7000B

**Comments:** IATL assumes that all sampling complies with accepted methods.  
All client supplied sampling data is assumed to be correct when calculating results.  
Detection limit based upon 0.2 mg/L reporting limit and sample size.  
\* NIST Traceable.  
\*\* 80-120% acceptable limits.

Analyzed By: R. Chad Shaffer  
R. Chad ShafferDate: 6/16/16Approved By: Frank E. Ehrenfeld, III  
Frank E. Ehrenfeld, III  
Laboratory Director