

1805 Atlantic Avenue Manasquan, New Jersey 08736 Tel: (732) 223-2225 Fax: (732) 223-3666 www.brinkenv.com

June 6, 2016

Mr. Ronald Wybraniec Operations Manager Office of Education New Jersey Department of Children and Families PO Box 710 Trenton, NJ 08625

Re: Lead in Drinking Water Screening Essex Campus 395-97 No. 5<sup>th</sup> Street Newark, New Jersey 07107 Brinkerhoff Project No. 14BR141M

Dear Mr. Wybraniec:

Brinkerhoff Environmental Services, Inc. (Brinkerhoff) was retained to perform a lead in drinking water screening at the New Jersey Department of Children and Families (DCF) Regional School's Essex Campus located at 395-97 North 5<sup>th</sup> Street, Newark, New Jersey 07107. The screening was performed on May 21, 2016. The purpose of the screening was to determine if lead may be present in potable water sources at the subject building and, if applicable, to retest at locations where elevated lead levels were identified during Brinkerhoff's initial lead in drinking water screening conducted on April 16, 2016.

## METHODOLOGY

Samples of potable water were collected from representative locations. During our initial screening, sample locations were selected by Brinkerhoff based on location in the building relative to the water supply source, and were skewed toward sources where consumption is likely (i.e. kitchen, faculty room, water fountains). During Brinkerhoff's May 21, 2016 screening samples were obtained from all accessible faucets not tested during our initial screening and from locations where elevated lead levels were identified during our initial screening. Samples were collected in 250 mL bottles. Two samples were collected at each location. The first sample is a first-draw sample collected from the tap after a minimum six (6) hour resting period. The second is a flush sample collected after running water for 30 seconds.

Samples were delivered under strict chain of custody to IATL International, Inc., 9000 Commerce Parkway Suite B, Mt. Laurel, New Jersey 08054 for analysis by the United States Department of Environmental Protection (DEP) Method 3113B (Standard Methods for the

New Jersey Department of Children & Families Re: Lead in Drinking Water Screening Brinkerhoff Project No. 14BR141M June 6, 2016 Page 2 of 5

Examination of Water and Wastewater, 22<sup>nd</sup> Edition). Precision is a New Jersey Department of Environmental Protection (NJDEP) Certified Drinking Water Laboratory. IATL maintains NJDEP certification #03863.

## **RETEST RESULT COMPARISON**

TABLE 1 COMPARISON OF 4/16/16 RESULTS ABOVE MCL WITH 5/21/16 RETEST RESULTS							
Sample ID	Sample ID Location	4/16/16 Results (ppb)	Sample ID	5/21/16 Retest Results ppb	MCL (15 ppb)		
NE-01A	Kitchen Sink FD	38.7	NE-12A	16	15		
NE-03A	Water Fountain FD	51.4	N/A	Deactivated	15		
NE-05A	Nurse's Office Sink FD	557	NE-20A	24	15		
NE-05B	Nurse's Office Sink FL	32.1	NE-20B	3.2	15		
NE-06A	Room 8 Sink FD	140	NE-29A	8.2	15		
NE-06B	Room 8 Sink FL	29.8	NE-29B	6.5	15		
NE-08A	Gym Fountain FD	24.8	N/A	Deactivated	15		
NE-09A	Voc. Apartment FD	24.8	NE-40A	24	15		
NE-11	Field Blank	ND	NE-50	ND	15		

MCL - Maximum Contaminant Level; ND - None Detected

FD - First Draw; FL - Flush

Bold - indicates lead concentration above the MCL

## **MAY 21, 2016 RESULTS**

TABLE 2 SUMMARY OF LABORATORY ANALYSIS RESULTS – NEW LOCATIONS				
Sample ID	Sample ID Location	Results (ppb)	MCL (15 ppb)	
NE-12A	Kitchen Sink Left Side FD	16	15	
NE-12B	Kitchen Sink Left Side FL	3.5	15	
NE-13A	Kitchen Sink Right Side FD	Kitchen Sink Right Side FD 30		
NE-13B	Kitchen Sink Right Side FL <2.0		15	
NE-14A	Kitchen Wash Sink Left Side FD <2.0		15	
NE-14B	Kitchen Wash Sink Left Side FL	Kitchen Wash Sink Left Side FL <2.0		
NE-15A	Kitchen Wash Sink Right Side FD	<2.0	15	
NE-15B	Kitchen Wash Sink Right Side FL	<2.0	15	
NE-16A	Lobby Bath Sink FD	8.9	15	
NE-16B	Lobby Bath Sink FL	<2.0	15	
NE-17A	Kitchen Bath Sink FD	10	15	

New Jersey Department of Children & Families Re: Lead in Drinking Water Screening Brinkerhoff Project No. 14BR141M June 6, 2016

Page 3 of 5

TABLE 2 (CONTINUED) SUMMARY OF LABORATORY ANALYSIS RESULTS – NEW LOCATIONS				
Sample ID	Sample ID Location	Results (ppb)	MCL (15 ppb)	
NE-17B	Kitchen Bath Sink FL	<2.0	15	
NE-18A	Faculty Men's Sink FD	6.9	15	
NE-18B	Faculty Men's Sink FL	<2.0	15	
NE-19A	Faculty Women's Sink FD	3.6	15	
NE-19B	Faculty Women's Sink FL	<2.0	15	
NE-20A	Nurse Sink FD	24	15	
NE-20B	Nurse Sink FL	3.2	15	
NE-21A	Room 10 Sink FD	12	15	
NE-21B	Room 10 Sink FL	<2.0	15	
NE-22A	Room 10 Left Bath FD	30	15	
NE-22B	Room 10 Left Bath FL	3.8	15	
NE-23A	Room 10 Right Bath FD	21	15	
NE-23B	Room 10 Right Bath FL	2.8	15	
NE-24A	Room 9 Sink FD	9.2	15	
NE-24B	Room 9 Sink FL	14	15	
NE-25A	Room 9 Left Bath FD	72	15	
NE-25B	Room 9 Left Bath FL	3.6	15	
NE-26A	Room 9 Right Bath FD	28	15	
NE-26B	Room 9 Bath FL	<2.0	15	
NE-27A	Room 8 Left Bath FD	120	15	
NE-27B	Room 8 Left Bath FL	7.7	15	
NE-28A	Room 8 Right Bath FD	20	15	
NE-28B	Room 8 Right Bath FL	<2.0	15	
NE-29A	Room 8 Sink FD	8.2	15	
NE-29B	Room 8 Sink FL	6.5	15	
NE-30A	Room 7 Left Bath FD	45	15	
NE-30B	Room 7 Left Bath FL	10	15	
NE-31A	Room 7 Right Bath FD	25	15	
NE-31B	Room 7 Right Bath FL	2.6	15	
NE-32A	Room 5 Sink FD	2.6	15	
NE-32B	Room 5 Sink FL	<2.0	15	
NE-33A	Room 5 Bath FD	20	15	
NE-33B	Room 5 Bath FL	2.8	15	
NE-34A	Room 3 Bath FD	31	15	
NE-34B	Room 3 Bath FL	<2.0	15	
NE-35A	Room 3 Sink FD	3.6	15	
NE-35B	Room 3 Sink FL	<2.0	15	

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New Jersey Department of Children & Families Re: Lead in Drinking Water Screening Brinkerhoff Project No. 14BR141M June 6, 2016

Page 4 of 5

TABLE 2 (CONTINUED) SUMMARY OF LABORATORY ANALYSIS RESULTS – NEW LOCATIONS				
NE-36A Room 6 Sink FD 7.5		15		
NE-36B	Room 6 Sink FL	<2.0	15	
NE-37A	Room 6 Bath FD	12	15	
NE-37B	Room 6 Bath FL	3.9	15	
NE-38A	Room 4 Sink FD	19	15	
NE-38B	Room 4 Sink FL	2.7	15	
NE-39A	Room 4 Bath FD	45	15	
NE-39B	Room 4 Bath FL	<2.0	15	
NE-40A	VOC Apartment LR Sink FD	24	15	
NE-40B	VOC Apartment LR Sink FL	6.4	15	
NE-41A	VOC Apartment Kitchen Sink FD	14	15	
NE-41B	VOC Apartment Kitchen Sink FL	3.5	15	
NE-42A	VOC Apartment DR Vanity Sink FD	2.7	15	
NE-42B	VOC Apartment DR Vanity Sink FL	2.6	15	
NE-43A	VOC Apartment Bathroom Sink FD	61	15	
NE-43B	VOC Apartment Bathroom Sink FL	5.5	15	
NE-44A	Room 2 Left FD			
NE-44B	Room 2 Left FL	31	15	
NE-45A	Room 2 Right FD	49	15	
NE-45B	Room 2 Right FL	4.4	15	
NE-46A	Gym Bath Left FD	89	15	
NE-46B	Gym Bath Left FL	5.9	15	
NE-47A	Gym Bath Right FD	81	15	
NE-47B	Gym Bath Right FL	<2.0	15	
NE-48A	Rear Outdoor FD	17	15	
NE-48B	Rear Outdoor FL	3.7	15	
NE-49A	Front Outdoor FD	23	15	
NE-49B	Front Outdoor FL	4.6	15	
NE-50	Field Blank	<2.0	-15	

MCL - Maximum Contaminant Level; ND - None Detected

FD – First Draw; FL – Flush

**Bold Result** – Indicates lead concentration above the MCL

Certificates of laboratory analysis are presented in Appendix I. A sample location drawing is presented in Appendix II.

## **LIMITATIONS**

The locations of samples collected are determined using our best professional judgement. The

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New Jersey Department of Children & Families Re: Lead in Drinking Water Screening Brinkerhoff Project No. 14BR141M June 6, 2016 Page 5 of 5

findings in this report are reflective of the conditions at the time of the Brinkerhoff inspections. The findings and recommendations are valid as of the date of the report. The conclusions and recommendations are limited based on the site conditions at the time of our inspection and the enclosed analytical results.

Brinkerhoff appreciates the opportunity to provide you this service. Should you have questions or require additional information, please do not hesitate to contact the undersigned at 732-223-2225.

This report was prepared and is respectfully submitted by

BRINKERHOFF ENVIRONMENTAL SERVICES, INC.

Gary W. Fleming

June 6, 2016

Date

Tel: (732) 223-2225 Fax: (732) 223-3666

Senior Manager, Hazardous Materials Division