

Via E-Mail

May 15, 2020

Mr. John Simmons
Guilford County Schools
712 N. Eugene Street
Greensboro, NC 27401

Re: Potable Water Sampling Letter Report (Phase 3)
Guilford County Schools
H&H Job No. GCS-001

Dear John:

Hart & Hickman, PC (H&H) has prepared this letter report to document the results of potable water sampling activities conducted at 10 schools within the Guilford County School (GCS) system in North Carolina. The 10 schools discussed in this report include: Alderman Elementary, Bluford Elementary, Fairview Elementary, Jamestown Elementary, Johnson Elementary, Northwood Elementary, Pilot Elementary, Shadybrook Elementary, Southwest Elementary, and Triangle Lake Montessori School. Water samples were collected at each of the 10 schools for analysis of lead and copper from locations designated by GCS as likely to be used for potable water (e.g., water coolers, kitchen sinks, drinking stations, ice makers). Samples were predominantly collected by ECS Southeast, LLP (ECS), but select follow-up samples were collected by H&H, as discussed below. Information regarding ECS's sampling activities and analytical results were provided to H&H by GCS for preparation of this report. Details regarding the sampling activities and analytical results are provided in the following sections.

1.0 Water Sampling Protocol

Sampling activities were conducted in general accordance with the US Environmental Protection Agency (EPA) Office of Groundwater and Drinking Water *3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities (Revised October 2018)* document.

A GCS employee notified ECS or H&H, as appropriate, of the last time water was used at each school on the day preceding sample collection. A stagnation period of eight (8) to eighteen (18) hours then began, during which water at the school was not permitted to be used. Following the stagnation period, first-draw water samples were collected directly into laboratory-supplied sample containers at each sample location. The first-draw sample is intended to be representative of water that may be consumed at the beginning of a school day or after infrequent use – in an effort to identify potential lead or copper levels in water, which may indicate a source of metals in the fixture or other component of the water delivery system.

When first-draw water sampling analysis indicated exceedances of action thresholds established by GCS for lead or copper, as discussed in Section 2.0, GCS bagged and took out of service the designated fixture so it would not be used for potable water until additional measures could be implemented. Follow-up flush samples were then collected to help identify potential lead or copper source(s) in the interior plumbing components behind the fixture. Following a stagnation period of eight (8) to eighteen (18) hours, follow-up flush samples were collected by flushing water from the sample location for approximately one minute and then collecting the flush sample directly into a laboratory-supplied sample container. Flush samples that did not exceed action levels were interpreted as an indication that the respective fixture was a likely source for the elevated lead or copper in the first-draw sample at that respective location.

GCS implemented mitigation measures such as fixture replacement or abandonment when first-draw water sampling analysis indicated exceedances of action thresholds established by GCS for lead or copper. Where fixtures were replaced, subsequent first-draw water samples were collected by ECS or H&H directly into laboratory-supplied sample containers following a stagnation period of eight (8) to eighteen (18) hours. The subsequent first-draw water samples were collected to confirm effectiveness of the mitigation measure.

During each sampling event, the water samples were collected into dedicated laboratory-supplied sample bottles, labeled with sample identification, date, and requested analysis, and placed in a laboratory-supplied box or cooler. The water samples were delivered to a North Carolina certified laboratory under standard chain of custody protocols for analysis of lead and copper by EPA Method 200.8. The water samples collected by ECS were analyzed by Pace Analytical Services, LLC and the water samples collected by H&H were analyzed by Prism Laboratories, Inc.

2.0 Water Sampling Results and Remediation

Analytical results from each school were provided to GCS on an “as-available” rolling basis throughout the project duration; and, on a similar rolling basis, GCS cut off service when results showed exceedances over action levels, and worked with ECS or H&H regarding follow-up testing and other remediation measures, as more specifically shown in the attached Appendices referenced below. GCS was also provided summaries indicating detected lead and copper concentrations in relation to action thresholds, and the subsequent actions taken by GCS, ECS, and H&H. Laboratory analytical reports and results summaries for each of the 10 schools discussed in this report are included at Appendix A through Appendix J. A table summarizing chronological activities completed at each of the 10 schools is provided as Table 1.

The school buildings are each serviced by public water provided by the local public water system (PWS). The US EPA recommended action levels for drinking water for PWS are 15 ppb (parts per billion) for lead and 1.3 parts per million (ppm) for copper. Based on conversations with GCS, ECS and H&H conservatively used 10 ppb as the action threshold for lead and 1.3 ppm as the action threshold for copper.

At schools indicating no exceedances of the GCS-established action thresholds for lead and copper in first-draw water samples, the daily flushing protocol the school had in place was discontinued and no additional sampling was conducted. First-draw water samples collected

from the following schools did not indicate exceedances of the GCS-established action thresholds for lead or copper:

- Bluford Elementary
- Fairview Elementary
- Jamestown Elementary
- Northwood Elementary
- Pilot Elementary
- Southwest Elementary
- Triangle Lake Montessori School

At least one sample location indicated a concentration of lead that exceeded the GCS-established action threshold during first-draw water sampling activities at Alderman Elementary, Johnson Elementary, and Shadybrook Elementary. Specific information regarding exceedances at each of these schools is provided below.

Alderman Elementary

First-draw water samples were collected at Alderman Elementary on August 20, 2019; analytical results for these samples were received from the laboratory on August 29, 2019, and indicated:

- A lead concentration of 12.4 ppb was detected in the sample collected at water cooler #010 in the hall at the gang bathroom.
- A lead concentration of 21.2 ppb was detected in the sample collected at water cooler #015 in the cafeteria.

GCS bagged and took out of service the two respective fixtures on August 29, 2019, and follow-up flush samples were collected by ECS on August 30, 2019. The analytical results of the follow-up flush sample collected at water cooler #010 did not indicate concentrations of lead or

copper that exceed the GCS-established action thresholds. However, a lead concentration of 147 ppb was detected in the follow-up flush sample collected at water cooler #015 in the cafeteria.

GCS replaced both fixtures with new double water coolers (left-hand side and right-hand side) on September 10, 2019. On September 11, 2019, ECS collected subsequent first-draw water samples from left-hand side and right-hand side water coolers #010 and #015, for a total of four samples. The analytical results did not indicate concentrations of lead or copper that exceed the GCS-established action thresholds on left-hand side water cooler #015. However, lead concentrations of 50.7 ppb, 167 ppb, and 54.9 ppb were identified in right-hand side water cooler #010, left-hand side water cooler #010, and right-hand side water cooler #015, respectively.

GCS contracted H&H to collect subsequent first-draw water samples from double water coolers #010 and #015. H&H conducted the subsequent first-draw water sampling on November 20, 2019, and results did not indicate concentrations of lead or copper that exceed the GCS-established action thresholds. The fixtures were placed back in service on December 12, 2019.

Johnson Elementary

First-draw water samples were collected at Johnson Elementary on August 27, 2019; analytical results for these samples were received from the laboratory on September 10, 2019, and indicated:

- A lead concentration of 33.8 ppb was detected in the sample collected at drinking station #033 located in room 15.

GCS bagged and took out of service the designated fixture on September 10, 2019, and ECS collected a follow-up flush sample on September 11, 2019. The analytical results of the follow-up flush sample did not indicate exceedances of the GCS-established action thresholds. However, per the Guilford County Health Department, drinking stations on sinks may not be

replaced. Therefore, GCS permanently removed drinking station #033 in room 15 on September 19, 2019.

Shadybrook Elementary

First-draw water samples were collected at Shadybrook Elementary on August 23, 2019; analytical results for these samples were received from the laboratory on August 29, 2019, and indicated:

- A lead concentration of 151 ppb was detected in the sample collected at kitchen sink faucet #001.
- A lead concentration of 67.7 ppb was detected in the sample collected at kitchen sink faucet #003.
- A lead concentration of 24.6 ppb was detected in the sample collected at kitchen sink faucet #004.
- A lead concentration of 26.6 ppb was detected in the sample collected at kitchen sink faucet #005.

The four respective fixtures were bagged and taken out of service by GCS on August 29, 2019. Follow-up flush samples were collected from locations #001, #003, #004, and #005 on August 30, 2019. The analytical results of the follow-up flush samples did not indicate concentrations of lead or copper that exceed the GCS-established action thresholds. The fixtures were replaced on September 4, 2019, and subsequent first-draw samples were collected on September 5, 2019. The analytical results of the subsequent first-draw samples at kitchen sink faucets #003, #004, and #005 did not indicate concentrations of lead or copper that exceed the GCS-established action thresholds, and the fixtures were placed back in service on September 11, 2019. However, a lead concentration of 442 ppb was detected in the subsequent first-draw sample collected from kitchen sink faucet #001. GCS replaced sink faucet #001 again on September 11, 2019. ECS collected subsequent first-draw and follow-up flush samples from kitchen sink faucet #001 on September 12, 2019. A lead concentration of 17 ppb was detected in the subsequent first-draw

sample, but the flush sample did not indicate a concentration of lead above the laboratory reporting limit.

GCS contracted H&H to collect another subsequent first-draw sample from the kitchen sink faucet. H&H collected the sample on November 20, 2019, and results did not indicate exceedances of the GCS-established action thresholds for lead or copper. GCS placed the fixture back in service on December 12, 2019.

3.0 Additional Considerations

As stated above, water samples were collected from locations designated by GCS as likely to be used for potable water. Specific information regarding logistical deviations from the sampling plan was not provided to H&H, but potential reasons for deviations include inoperable (“dead”/out-of-service) fixtures, access issues, observations during the sampling event indicating the designated fixture did not exist and was marked in error, or identification of fixtures during sampling that were not previously marked by GCS.

4.0 Conclusions

On behalf of GCS, H&H has prepared this letter report to document the collection of water samples from 10 schools for analysis of lead and copper. Laboratory analytical results of first-draw water samples did not indicate exceedances of GCS-established action thresholds at seven of the schools (Bluford Elementary, Fairview Elementary, Jamestown Elementary, Northwood Elementary, Pilot Elementary, Southwest Elementary, and Triangle Lake Montessori School). Lead exceedances were observed in first-draw water samples collected from Alderman Elementary, Johnson Elementary, and Shadybrook Elementary. When first-draw water sampling indicated exceedances, fixture replacement or abandonment was conducted. Where fixtures were replaced, subsequent sampling at the designated fixtures did not indicate additional exceedances. Once sampling and mitigation activities were complete, the daily flushing protocol each school had in place was discontinued.

Mr. John Simmons
May 15, 2020
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H&H appreciates the opportunity to work with you on this project. Please feel free to contact us if you have questions or need additional information.

Sincerely,

Hart & Hickman, PC



Christine E. Schaefer
Senior Project Environmental Scientist



Genna Olson, PG
Principal Geologist

Attachments

TABLE

Table 1
Lead and Copper Sampling Results Summary
Guilford County Schools
H&H Job No. GCS-001

School	First-Draw Sample Date	First-Draw Sample Exceedances	Follow-Up Flush Sample Date	Follow-up Flush Sample Exceedances	Actions taken	Subsequent First-Draw Sample Date	Subsequent First-Draw Exceedances	Actions taken	Second Subsequent First-Draw Sample Date	Second Subsequent First-Draw Exceedances	Actions taken	Third Subsequent First-Draw Sample Date	Third Subsequent First-Draw Exceedances	Actions taken
Shadybrook	8/23/2019 (ECS)	#001 (sink in kitchen)	8/30/2019 (ECS)	None	Sink was replaced on 9/4/19	9/5/2019 (ECS)	Yes	Sink was replaced again on 9/11/2019	9/12/2019 (ECS)	Yes	Resampling performed	11/20/2019 (H&H)	None	GCS indicated in 12/12/19 email that the sink was put in service 12/12/19
		#003 (sink in kitchen)			Sink was replaced on 9/4/19		None	--	--	--	--	--	--	Replacement sink was put in service 9/11/19
		#004 (sink in kitchen)			Sink was replaced on 9/4/19		None	--	--	--	--	--	--	Replacement sink was put in service 9/11/19
		#005 (sink in kitchen)			Sink was replaced on 9/4/19		None	--	--	--	--	--	--	Replacement sink was put in service 9/11/19
Alderman	8/20/2019 (ECS)	#010 (water cooler in hall at gang bathroom)	8/30/2019 (ECS)	None	Water cooler replaced with two ADA high/low water fountains (right hand-RH and left hand-LH) on 9/10/19	9/11/2019 (ECS)	RH: Yes LH: Yes	Resampling performed	11/20/2019 (H&H)	None	--	--	--	GCS indicated in 12/12/19 email that the water coolers were put in service 12/12/19
		#015 (water cooler in cafeteria)	8/30/2019 (ECS)	Yes	Water cooler replaced with two ADA high/low water fountains (right hand-RH and left hand-LH) on 9/10/19	9/11/2019 (ECS)	RH: Yes LH: None	Resampling performed	11/20/2019 (H&H)	None	--	--	--	GCS indicated in 12/12/19 email that the water coolers were put in service 12/12/19
Johnson	8/27/2019 (ECS)	#033 (drinking station in room 15)	9/11/2019 (ECS)	None	Drinking station was removed 9/19/19	--	--	--	--	--	--	--	--	--
Bluford	8/28/2019 (ECS)	None	--	--	--	--	--	--	--	--	--	--	--	--
Fairview	8/23/2019 (ECS)	None	--	--	--	--	--	--	--	--	--	--	--	--
Jamestown	8/20/2019 (ECS)	None	--	--	--	--	--	--	--	--	--	--	--	--
Northwood	8/27/2019 (ECS)	None	--	--	--	--	--	--	--	--	--	--	--	--
Pilot	8/21/2019 (ECS)	None	--	--	--	--	--	--	--	--	--	--	--	--
Southwest	8/21/2019 (ECS)	None	--	--	--	--	--	--	--	--	--	--	--	--
Triangle Lake Montessori	8/28/2019 (ECS)	None	--	--	--	--	--	--	--	--	--	--	--	--

APPENDIX A

ALDERMAN ELEMENTARY RESULTS

School Name: Alderman Elementary		Report Date(s): 12/16/2019	
Date Test Conducted: 8/20/2019		Date Results Received: 12/6/2019	
Number of Faucets Tested: 19			
Lead Results		Copper Results	
Results 15 ppb and above:	1	Results 1.3 ppm and above:	0
Results 10 ppb to below 15 ppb:	1	Detectable results below 1.3 ppm:	18
Detectable results below 10 ppb:	0	Results below detection level:	1
Results below detection level:	17		
Number of Faucets Requiring Remedial Action: 2			
Location of Faucet		Action Taken	Date:
Sample ID: AES-010, AES-015		<input checked="" type="checkbox"/> Temporarily taken out of service:	8/29/2019
Location Description:		<input type="checkbox"/> Permanently taken out of service:	
AES-010: water cooler in hall at gang bathroom		<input checked="" type="checkbox"/> Flush tested:	8/30/2019
AES-015: water cooler in cafeteria		Flush test result: AES-10 no exceedances AES-15: lead exceedance	
		<input checked="" type="checkbox"/> Replaced: with double water coolers	9/10/2019
		<input checked="" type="checkbox"/> Retest:	9/11/2019
		Retest result:	
		AES-10 (LH & RH): lead exceedances	
		AES-15 (RH): lead exceedance	
		AES-15 (LH): no exceedance	
		<input checked="" type="checkbox"/> Retest:	11/20/2019
		Retest result: no exceedances	
		Other: _____	
		<input checked="" type="checkbox"/> Placed back in service on:	12/12/2019
Daily School-Wide Flushing:			
<input type="checkbox"/> Continue with protocol <input checked="" type="checkbox"/> Discontinue flushing protocol (date): 12/16/19 <input type="checkbox"/> Other (Describe:)			
This is a summary report prepared by Hart & Hickman, PC (H&H). H&H suggests that the full report be referred to with regard to findings, recommendations, and technical limitations for this sampling event.			

<u>SAMPLE LOCATION CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
001		Kitchen	2 Department Sink (LH)	T&S	10	1
002		Kitchen	2 Department Sink (RH)	T&S	10	1
003		Kitchen	3 Department Sink (LH)	T&S	15	1
004		Kitchen	3 Department Sink (C)	T&S	15	1
005		Kitchen	3 Department Sink (RH)	T&S	15	1
006						
007						
008		Kitchen	Ice Maker	Manitowac	8	1
009		Hall at ACES Office	Water Cooler	H.Taylor	20	1
010		Hall at Gang Bathroom	Water Cooler (LH)	H.Taylor	30	1
011		Hall at Gang Bathroom	Water Cooler (RH)	H.Taylor	30	1
012		Hall at Gang Bathroom	Water Cooler (LH)	H.Taylor	30	1
013		Hall at Gang Bathroom	Water Cooler (RH)	H.Taylor	30	1
014		Hall near Room 17	Water Cooler	H.Taylor	40	1
015		Cafeteria	Water Cooler	H.Taylor	30	1
016		Mobile Unit #1	Water Cooler	H.Taylor	25	1
017		Mobile Unit #2	Water Cooler	Oasis	25	1
018		Mobile Unit #3	Water Cooler	Oasis	25	1
019		Mobile Unit #4	Water Cooler	Oasis	25	1
020		Mobile Unit #5	Water Cooler	Oasis	25	1
021		Hall at Room 5	Water Cooler	H.Taylor	20	1

TOTAL NUMBER OF FIXTURES

19

August 29, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: LEAD AND COPPER - ALDERMAN
Pace Project No.: 92442349

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

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SAMPLE ANALYTE COUNT

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92442349001	AES-001	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442349002	AES-002	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442349003	AES-003	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442349004	AES-004	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442349005	AES-005	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442349006	AES-008	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442349007	AES-009	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349008	AES-010	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349009	AES-011	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349010	AES-012	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349011	AES-013	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349012	AES-014	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349013	AES-015	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349014	AES-016	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349015	AES-017	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349016	AES-018	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349017	AES-019	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349018	AES-020	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442349019	AES-021	EPA 200.8 Rev 5.4	JOR	2	PASI-A

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ANALYTICAL RESULTS

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

Sample: AES-001		Lab ID: 92442349001	Collected: 08/20/19 06:45	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	30.8	ug/L	5.0	1		08/28/19 22:50	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:50	7439-92-1	

Sample: AES-002		Lab ID: 92442349002		Collected: 08/20/19 06:45	Received: 08/21/19 10:50	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	58.3	ug/L	5.0	1		08/28/19 22:53	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:53	7439-92-1	

Sample: AES-003		Lab ID: 92442349003		Collected: 08/20/19 06:46	Received: 08/21/19 10:50	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	36.9	ug/L	5.0	1		08/28/19 22:55	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:55	7439-92-1	

Sample: AES-004		Lab ID: 92442349004		Collected: 08/20/19 06:46	Received: 08/21/19 10:50	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	39.9	ug/L	5.0	1		08/28/19 22:58	7440-50-8	
Lead	ND	ug/L	6.0	2		08/28/19 23:42	7439-92-1	D3

Sample: AES-005		Lab ID: 92442349005		Collected: 08/20/19 06:46	Received: 08/21/19 10:50	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	38.1	ug/L	5.0	1		08/28/19 23:10	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 23:10	7439-92-1	

Sample: AES-008		Lab ID: 92442349006		Collected: 08/20/19 06:40	Received: 08/21/19 10:50	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	ND	ug/L	5.0	1		08/28/19 23:13	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

Sample: AES-008		Lab ID: 92442349006	Collected: 08/20/19 06:40		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		08/28/19 23:13	7439-92-1	
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Sample: AES-009		Lab ID: 92442349007	Collected: 08/20/19 06:57		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	79.2	ug/L	5.0	1		08/29/19 00:39	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 00:39	7439-92-1	

Sample: AES-010		Lab ID: 92442349008	Collected: 08/20/19 06:55		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.5	ug/L	5.0	1		08/29/19 00:48	7440-50-8	
Lead	12.4	ug/L	3.0	1		08/29/19 00:48	7439-92-1	

Sample: AES-011		Lab ID: 92442349009	Collected: 08/20/19 06:55		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	27.5	ug/L	5.0	1		08/29/19 00:51	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 00:51	7439-92-1	

Sample: AES-012		Lab ID: 92442349010	Collected: 08/20/19 06:59		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	63.9	ug/L	5.0	1		08/29/19 00:54	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 00:54	7439-92-1	

Sample: AES-013		Lab ID: 92442349011	Collected: 08/20/19 06:54		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	59.7	ug/L	5.0	1		08/29/19 00:57	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 00:57	7439-92-1	

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ANALYTICAL RESULTS

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

Sample: AES-014		Lab ID: 92442349012	Collected: 08/20/19 07:01	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	113	ug/L	5.0	1		08/29/19 01:06	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 01:06	7439-92-1	

Sample: AES-015		Lab ID: 92442349013	Collected: 08/20/19 06:50	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	37.4	ug/L	5.0	1		08/29/19 01:08	7440-50-8	
Lead	21.2	ug/L	3.0	1		08/29/19 01:08	7439-92-1	

Sample: AES-016		Lab ID: 92442349014	Collected: 08/20/19 07:01	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	40.8	ug/L	5.0	1		08/29/19 01:11	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 01:11	7439-92-1	

Sample: AES-017		Lab ID: 92442349015	Collected: 08/20/19 07:07	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	67.0	ug/L	5.0	1		08/29/19 01:14	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 01:14	7439-92-1	

Sample: AES-018		Lab ID: 92442349016	Collected: 08/20/19 07:12	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	62.4	ug/L	5.0	1		08/29/19 01:17	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 01:17	7439-92-1	

Sample: AES-019		Lab ID: 92442349017	Collected: 08/20/19 07:09	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	64.0	ug/L	5.0	1		08/29/19 01:20	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

Sample: AES-019		Lab ID: 92442349017		Collected: 08/20/19 07:09		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		08/29/19 01:20	7439-92-1
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Sample: AES-020		Lab ID: 92442349018		Collected: 08/20/19 07:14		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	75.5	ug/L	5.0	1		08/29/19 01:29	7440-50-8
Lead	ND	ug/L	3.0	1		08/29/19 01:29	7439-92-1

Sample: AES-021		Lab ID: 92442349019		Collected: 08/20/19 06:53		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.1	ug/L	5.0	1		08/29/19 01:32	7440-50-8
Lead	ND	ug/L	3.0	1		08/29/19 01:32	7439-92-1

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

QC Batch: 494799 Analysis Method: EPA 200.8 Rev 5.4
QC Batch Method: EPA 200.8 Rev 5.4 Analysis Description: 200.8 MET Drinking Water, No Prep
Associated Lab Samples: 92442349001, 92442349002, 92442349003, 92442349004, 92442349005, 92442349006

METHOD BLANK: 2666264 Matrix: Water
Associated Lab Samples: 92442349001, 92442349002, 92442349003, 92442349004, 92442349005, 92442349006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/28/19 21:37	
Lead	ug/L	ND	3.0	08/28/19 21:37	

LABORATORY CONTROL SAMPLE: 2666265

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.7	99	85-115	
Lead	ug/L	50	49.2	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666266 2666267

Parameter	Units	92442346018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	72.1	50	50	119	119	94	94	70-130	0	
Lead	ug/L	ND	50	50	48.9	49.3	98	98	70-130	1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666268 2666269

Parameter	Units	92442346028 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	78.5	50	50	128	127	99	97	70-130	1	
Lead	ug/L	ND	50	50	50.9	49.3	102	99	70-130	3	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

QC Batch:	494800	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92442349007, 92442349008, 92442349009, 92442349010, 92442349011, 92442349012, 92442349013, 92442349014, 92442349015, 92442349016, 92442349017, 92442349018, 92442349019		

METHOD BLANK:	2666270	Matrix:	Water
Associated Lab Samples:	92442349007, 92442349008, 92442349009, 92442349010, 92442349011, 92442349012, 92442349013, 92442349014, 92442349015, 92442349016, 92442349017, 92442349018, 92442349019		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/29/19 00:34	
Lead	ug/L	ND	3.0	08/29/19 00:34	

LABORATORY CONTROL SAMPLE: 2666271

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	46.3	93	85-115	
Lead	ug/L	50	45.9	92	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666272 2666273

Parameter	Units	92442349007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	79.2	50	50	124	127	90	95	70-130	2	
Lead	ug/L	ND	50	50	46.1	47.2	90	92	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666274 2666275

Parameter	Units	92442349017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	64.0	50	50	109	107	89	87	70-130	1	
Lead	ug/L	ND	50	50	46.1	45.2	92	90	70-130	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92442349

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92442349001	AES-001	EPA 200.8 Rev 5.4	494799		
92442349002	AES-002	EPA 200.8 Rev 5.4	494799		
92442349003	AES-003	EPA 200.8 Rev 5.4	494799		
92442349004	AES-004	EPA 200.8 Rev 5.4	494799		
92442349005	AES-005	EPA 200.8 Rev 5.4	494799		
92442349006	AES-008	EPA 200.8 Rev 5.4	494799		
92442349007	AES-009	EPA 200.8 Rev 5.4	494800		
92442349008	AES-010	EPA 200.8 Rev 5.4	494800		
92442349009	AES-011	EPA 200.8 Rev 5.4	494800		
92442349010	AES-012	EPA 200.8 Rev 5.4	494800		
92442349011	AES-013	EPA 200.8 Rev 5.4	494800		
92442349012	AES-014	EPA 200.8 Rev 5.4	494800		
92442349013	AES-015	EPA 200.8 Rev 5.4	494800		
92442349014	AES-016	EPA 200.8 Rev 5.4	494800		
92442349015	AES-017	EPA 200.8 Rev 5.4	494800		
92442349016	AES-018	EPA 200.8 Rev 5.4	494800		
92442349017	AES-019	EPA 200.8 Rev 5.4	494800		
92442349018	AES-020	EPA 200.8 Rev 5.4	494800		
92442349019	AES-021	EPA 200.8 Rev 5.4	494800		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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Sample Condition Upon Receipt
 Client Name: EC8 Greenup
 Project #: **MO#: 92442349**
 Barcode: 
 Project #: **92442349**
 Date/Initials Person Examining Contents: MA 8/21/17
 Laboratory receiving samples:
☐ Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville
 Issuing Authority: Pace Carolinas Quality Office
 Document No.: F-CAR-CS-033-Rev.06
 Sample Condition Upon Receipt: EC8 Greenup

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Other: _____
 Custody Seal Present? ☐ Yes ☐ No ☐ Seals Intact? ☐ Yes ☐ No

Packaging Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____
 Thermometer: 92T048 IR Gun ID: _____
 Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp (°C): 28.1 Correction Factor: Add/Subtract (°C) 0.0
 Cooler Temp Corrected (°C): 28.1
 Temp should be above freezing to 6°C ☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
 Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No
 Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

1.	Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
2.	Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
3.	Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4.	Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
5.	Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6.	Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6.	-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
7.	Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.	Dissolved analysis: Samples Field Filtered?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
9.	Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	-Includes Date/Time/ID/Analysis Matrix: <u>MT</u>	
10.	Headspace in VOA Vials (>5-6mm)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
11.	Trip Blank Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

CLIENT NOTIFICATION/RESOLUTION
 Lot ID of optic containers: _____
 Person contacted: _____
 Date/Time: _____

Project Manager SCURF Review: _____
 Project Manager SRF Review: _____

Date: 8/22
 Date: 8/22

Due Date: 08/30/19

MO# : 92442349

Project #

[illegible]

pH Adjustment Log for Preserved Samples

pH Adjustment Log for Preserved Samples						
Sample ID	Type of preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

***Bottom half of box is to list number of bottle

M0#: 92442349

PM: PTE

CLIENT: 92-ECS GBORO

[illegible]

pH Adjustment Log for Preserved Samples

pH Adjustment Log for Preserved Samples						
Lot #	Type of Preservative added	Date preservation adjusted	pH upon receipt	Time preservation adjusted	Amount of Preservative added	Sample ID

Out of hold, incorrect preservative, out of temp, incorrect containers.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company:	ECS Greensboro
Address:	4811 Koger Blvd Greensboro, NC 27407
Email:	ecslabs@paceanalytical.com
Phone:	
Fax:	
Requested Due Date:	

Section B

Report Project Information:

Report To:	Abrahamson, Ryan
Copy To:	
Purchase Order #:	
Project Name:	Lead and Copper - Abrahamsen
Project #:	413-8282-3

Section C

Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	taylor.ezell@pacelabs.com
Pace Profile #:	1834-5

NC

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Sample Ids must be unique	MATRIX Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DW WT WW P SL OL WP AR OT TS	COLLECTED		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	Preservatives							Analyses Test	Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
				DATE	TIME	DATE	TIME		Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol			Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
RELINQUISHED BY / AFFILIATION	8/21/19	10:50	RELINQUISHED BY / AFFILIATION	8/21/19	10:52	
RELINQUISHED BY / AFFILIATION	8/21	1600	RELINQUISHED BY / AFFILIATION	8/21/19	1600	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Section A

Required Client Information:

Company: ECS Greensboro
Address: 4811 Koger Blvd
Greensboro, NC 27407
Email: RABraham@ecsinc.com
Phone: [336-512-1111](tel:3365121111)
Fax: [336-512-1111](tel:3365121111)
Requested Due Date: 4/9/2013

Section B

Required Project Information:

Report To: Abrahamson, Ryan
Copy To:
Purchase Order #:
Project Name: Lead and Copper - Alderbrook
Project #: 49-8287-13

Section C

Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: Taylor, ezell@pacelabs.com
Pace Profile #: 1834-5

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 OF 1

Regulatory Agency

State / Location

NC

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Sample ids must be unique	MATRIX Drinking Water Water Waste Water Product Soil/solid Oil Wipe Air Other Tissue	CODE DW WT WW P SL OL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	Preservatives								Analyses Test	Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	NC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
						START	END	DATE	TIME		DATE	TIME	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3			Methanol	Other	Lead and Copper																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
RCS	8/21/14	10:00	RCS	8/21	1050	
RCS	8/21	1600	RCS	8/21/14	1400	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE OF SAMPLER:

DATE Signed:

TEMP in C
Received on Ice (Y/N)
Custody Sealed Cooler (Y/N)
Samples Intact (Y/N)

September 10, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: Lead and Copper Alderman
Pace Project No.: 92443683

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 30, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Lead and Copper Alderman

Pace Project No.: 92443683

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Lead and Copper Alderman

Pace Project No.: 92443683

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443683001	AES-010-R1	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443683002	AES-015-R1	EPA 200.8 Rev 5.4	SER	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper Alderman

Pace Project No.: 92443683

Sample: AES-010-R1		Lab ID: 92443683001		Collected: 08/30/19 07:10		Received: 08/30/19 13:30		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	44.7	ug/L	5.0	1		09/09/19 23:17	7440-50-8		
Lead	6.6	ug/L	3.0	1		09/09/19 23:17	7439-92-1		

Sample: AES-015-R1		Lab ID: 92443683002		Collected: 08/30/19 07:12		Received: 08/30/19 13:30		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	178	ug/L	5.0	1		09/09/19 23:19	7440-50-8		
Lead	147	ug/L	3.0	1		09/09/19 23:19	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper Alderman

Pace Project No.: 92443683

QC Batch: 496668

Analysis Method: EPA 200.8 Rev 5.4

QC Batch Method: EPA 200.8 Rev 5.4

Analysis Description: 200.8 MET Drinking Water, No Prep

Associated Lab Samples: 92443683001, 92443683002

METHOD BLANK: 2674697

Matrix: Water

Associated Lab Samples: 92443683001, 92443683002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 22:27	
Lead	ug/L	ND	3.0	09/09/19 22:27	

LABORATORY CONTROL SAMPLE: 2674698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	53.2	106	85-115	
Lead	ug/L	50	51.7	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674699 2674700

Parameter	Units	92443525039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	37.3	50	50	89.2	89.3	104	104	70-130	0	
Lead	ug/L	ND	50	50	52.3	52.1	104	104	70-130	0	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674701 2674702

Parameter	Units	92443525049 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	40.7	50	50	92.0	92.5	103	104	70-130	1	
Lead	ug/L	ND	50	50	52.0	52.1	104	104	70-130	0	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Lead and Copper Alderman

Pace Project No.: 92443683

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: Lead and Copper Alderman

Pace Project No.: 92443683

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92443683001	AES-010-R1	EPA 200.8 Rev 5.4	496668		
92443683002	AES-015-R1	EPA 200.8 Rev 5.4	496668		

REPORT OF LABORATORY ANALYSIS

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	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition
Upon Receipt

Client Name:

ECS Greensboro

Project #:

W0# : 92443683



92443683

Date/Initials Person Examining Contents: DB 8/30/19

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client

☐ Commercial

☒ Pace

☐ Other: _____

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other

Thermometer:

☒ IR Gun ID: 92T049

Type of Ice: ☐ Wet ☐ Blue ☒ None

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Cooler Temp (°C): 25.9 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 25.9

Temp should be above freezing to 6°C

☒ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

Comments/Discrepancy:			
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Out of Temp 25.9°C

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review:

(Signature)


Date:

9/3

Project Manager SRF Review:

Date:

9/3

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.:	Issuing Authority:
	F-CAR-CS-033-Rev.06	Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO# : 92443683

PM: PTE

Due Date: 09/11/19

CLIENT: 92-ECS GBORO

	Item#	
	BP4U-125 mL Plastic	Unpreserved (N/A) (Cl-)
	BP3U-250 mL Plastic	Unpreserved (N/A)
	BP2U-500 mL Plastic	Unpreserved (N/A)
	BP1U-1 liter Plastic	Unpreserved (N/A)
	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	
	BP3N-250 mL plastic HNO3 (pH < 2)	
	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	
	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	
	WGFU-Wide-mouthed Glass jar	Unpreserved
	AG1U-1 liter Amber	Unpreserved (N/A) (Cl-)
	AG1H-1 liter Amber HCl (pH < 2)	
	AG3U-250 mL Amber	Unpreserved (N/A) (Cl-)
	AG1S-1 liter Amber H2SO4 (pH < 2)	
	AG3S-250 mL Amber H2SO4 (pH < 2)	
	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	
	DG9H-40 mL VOA HC	(N/A)
	VG9T-40 mL VOA Na2S2O3	(N/A)
	VG9U-40 mL VOA Unp	(N/A)
	DG9P-40 mL VOA H3PO4	(N/A)
	VOAK (6 vials per kit)-S035 kit	(N/A)
	V/GK (3 vials per kit)-VPH/Gas kit	(N/A)
	SP5T-125 mL Sterile Plastic	(N/A – lab)
	SP2T-250 mL Sterile Plastic	(N/A – lab)
	BP3A-250 mL Plastic	NH2/2SO4 (9.3-9.7)
	AGOU-100 mL Amber	Unpreserved vials (N/A)
	VSGU-20 mL Scintillation vials	(N/A)
	DG9U-40 mL Amber	Unpreserved vials (N/A)

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

September 18, 2019

Ryan Abrahamson
ECS Southeast, LLP

RE: Project: LEAD AND COPPER - ALDERMAN
Pace Project No.: 92445054

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on September 11, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92445054

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92445054

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92445054001	AES-010A	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92445054002	AES-010B	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92445054003	AES-015A	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92445054004	AES-015B	EPA 200.8 Rev 5.4	JOR	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92445054

Sample: AES-010A		Lab ID: 92445054001		Collected: 09/11/19 07:34		Received: 09/11/19 14:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	231	ug/L	5.0	1		09/17/19 16:39	7440-50-8		
Lead	50.7	ug/L	3.0	1		09/17/19 16:39	7439-92-1		

Sample: AES-010B		Lab ID: 92445054002		Collected: 09/11/19 07:34		Received: 09/11/19 14:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	386	ug/L	5.0	1		09/17/19 16:42	7440-50-8		
Lead	167	ug/L	3.0	1		09/17/19 16:42	7439-92-1		

Sample: AES-015A		Lab ID: 92445054003		Collected: 09/11/19 07:35		Received: 09/11/19 14:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	54.4	ug/L	5.0	1		09/17/19 16:45	7440-50-8		
Lead	54.9	ug/L	3.0	1		09/17/19 16:45	7439-92-1		

Sample: AES-015B		Lab ID: 92445054004		Collected: 09/11/19 07:35		Received: 09/11/19 14:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	51.8	ug/L	5.0	1		09/17/19 16:48	7440-50-8		
Lead	ND	ug/L	3.0	1		09/17/19 16:48	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92445054

QC Batch: 498098 Analysis Method: EPA 200.8 Rev 5.4
QC Batch Method: EPA 200.8 Rev 5.4 Analysis Description: 200.8 MET Drinking Water, No Prep
Associated Lab Samples: 92445054001, 92445054002, 92445054003, 92445054004

METHOD BLANK: 2681931 Matrix: Water
Associated Lab Samples: 92445054001, 92445054002, 92445054003, 92445054004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/17/19 15:32	
Lead	ug/L	ND	3.0	09/17/19 15:32	

LABORATORY CONTROL SAMPLE: 2681932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.7	99	85-115	
Lead	ug/L	50	47.5	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2681933 2681934

Parameter	Units	92444862001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	0.036	50	50	82.9	82.2	93	92	70-130	1	
Lead	ug/L	ND	50	50	47.8	48.1	95	96	70-130	1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2681935 2681936

Parameter	Units	92444972001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	41.5	50	50	87.4	87.5	92	92	70-130	0	
Lead	ug/L	ND	50	50	47.4	48.1	94	95	70-130	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92445054

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: LEAD AND COPPER - ALDERMAN

Pace Project No.: 92445054

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92445054001	AES-010A	EPA 200.8 Rev 5.4	498098		
92445054002	AES-010B	EPA 200.8 Rev 5.4	498098		
92445054003	AES-015A	EPA 200.8 Rev 5.4	498098		
92445054004	AES-015B	EPA 200.8 Rev 5.4	498098		

REPORT OF LABORATORY ANALYSIS

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	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition
Upon Receipt

Client Name:

Project #:

WO# : 92445054

ECS Greensboro

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☐ Pace ☐ Other:



Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Date/Initials Person Examining Contents: 9-11-19 AD

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other

Thermometer:

☒ IR Gun ID: 92T049

Type of Ice: ☒ Wet ☐ Blue ☐ None

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Cooler Temp (°C): 2.3 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review:

TE

Date:

9/12

Project Manager SRF Review:

TE

Date:

9/12



Document Name:
Sample Condition Upon Receipt(SCUR)
Document No.:
F-CAR-CS-033-Rev.06

Document Revised: February 7, 2018
Page 1 of 2
Issuing Authority:
Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project # **W0# : 92445054**

PM: PTE

Due Date: 09/20/19

CLIENT: 92-ECS GBORO

	Item#	
1	BP4U-125 mL Plastic	Unpreserved (N/A) (Cl-)
2	BP3U-250 mL Plastic	Unpreserved (N/A)
3	BP2U-500 mL Plastic	Unpreserved (N/A)
4	BP1U-1 liter Plastic	Unpreserved (N/A)
5	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	
6	BP3N-250 mL plastic HNO3 (pH < 2)	
7	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	
8	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	
9	WGFU-Wide-mouthed Glass jar	Unpreserved
10	AG1U-1 liter Amber	Unpreserved (N/A) (Cl-)
11	AG1H-1 liter Amber HCl (pH < 2)	
12	AG3U-250 mL Amber	Unpreserved (N/A) (Cl-)
	AG1S-1 liter Amber H2SO4 (pH < 2)	
	AG3S-250 mL Amber H2SO4 (pH < 2)	
	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	
	DG9H-40 mL VOA HCl (N/A)	
	VG9T-40 mL VOA Na2S2O3 (N/A)	
	VG9U-40 mL VOA Unp (N/A)	
	DG9P-40 mL VOA H3PO4 (N/A)	
	VOAK (6 vials per kit) 5035 kit (N/A)	
	V/GK (3 vials per kit) - /PH/Gas kit (N/A)	
	SP5T-125 mL Sterile Plastic (N/A – lab)	
	SP2T-250 mL Sterile Plastic (N/A – lab)	
	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	
	AG0U-100 mL Amber	Unpreserved vials (N/A)
	VSGU-20 mL Scintillation vials (N/A)	
	DG9U-40 mL Amber	Unpreserved vials (N/A)

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

Hart & Hickman (Charlotte)
Christine Schaefer
2923 South Tryon St. Ste 100
Charlotte, NC 28203

Project: GCS-001 - Alderman Elementary

Lab Submittal Date: 12/03/2019

Prism Work Order: 9120016

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

Please call if you have any questions relating to this analytical report.

Respectfully,

PRISM LABORATORIES, INC.



Angela D. Overcash

VP Laboratory Services



Reviewed By Terri W. Cole For Angela D. Overcash

Project Manager

Data Qualifiers Key Reference:

BRL Below Reporting Limit

MDL Method Detection Limit

RPD Relative Percent Difference

* Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

Client Sample ID	Lab Sample ID	Matrix	Date/Time Sampled	Date/Time Received
ALD-001-010A-LHWC-P	9120016-01	Drinking Water	11/20/19 5:37	12/03/19 11:30
ALD-001-010B-RHWC-P	9120016-02	Drinking Water	11/20/19 5:37	12/03/19 11:30
ALD-001-015A-LHWC-P	9120016-03	Drinking Water	11/20/19 5:40	12/03/19 11:30
ALD-001-015B-RHWC-P	9120016-04	Drinking Water	11/20/19 5:40	12/03/19 11:30

Samples were received in good condition at 2.6 degrees C unless otherwise noted.

Prism ID	Client ID	Parameter	Method	Result	Units
9120016-01	ALD-001-010A-LHWC-P	Copper	*200.8	0.072	mg/L
9120016-01	ALD-001-010A-LHWC-P	Lead	*200.8	0.0043	mg/L
9120016-02	ALD-001-010B-RHWC-P	Copper	*200.8	0.078	mg/L
9120016-02	ALD-001-010B-RHWC-P	Lead	*200.8	0.0035	mg/L
9120016-03	ALD-001-015A-LHWC-P	Copper	*200.8	0.078	mg/L
9120016-03	ALD-001-015A-LHWC-P	Lead	*200.8	0.0042	mg/L
9120016-04	ALD-001-015B-RHWC-P	Copper	*200.8	0.077	mg/L
9120016-04	ALD-001-015B-RHWC-P	Lead	*200.8	0.0023	mg/L

Hart & Hickman (Charlotte)
Attn: Christine Schaefer
2923 South Tryon St. Ste 100
Charlotte, NC 28203

Project: GCS-001 - Alderman
Elementary

Sample Matrix: Drinking Water

Client Sample ID: ALD-001-010A-LHWC-P
Prism Sample ID: 9120016-01
Prism Work Order: 9120016
Time Collected: 11/20/19 05:37
Time Submitted: 12/03/19 11:30

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Total Metals									
Copper	0.072	mg/L	0.0020	0.00094	1	*200.8	12/5/19 15:13	MMR	P9L0080
Lead	0.0043	mg/L	0.0020	0.00082	1	*200.8	12/5/19 15:13	MMR	P9L0080

Hart & Hickman (Charlotte)
Attn: Christine Schaefer
2923 South Tryon St. Ste 100
Charlotte, NC 28203

Project: GCS-001 - Alderman
Elementary

Sample Matrix: Drinking Water

Client Sample ID: ALD-001-010B-RHWC-P
Prism Sample ID: 9120016-02
Prism Work Order: 9120016
Time Collected: 11/20/19 05:37
Time Submitted: 12/03/19 11:30

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Total Metals									
Copper	0.078	mg/L	0.0020	0.00094	1	*200.8	12/5/19 15:16	MMR	P9L0080
Lead	0.0035	mg/L	0.0020	0.00082	1	*200.8	12/5/19 15:16	MMR	P9L0080

Hart & Hickman (Charlotte)
Attn: Christine Schaefer
2923 South Tryon St. Ste 100
Charlotte, NC 28203

Project: GCS-001 - Alderman
Elementary

Sample Matrix: Drinking Water

Client Sample ID: ALD-001-015A-LHWC-P
Prism Sample ID: 9120016-03
Prism Work Order: 9120016
Time Collected: 11/20/19 05:40
Time Submitted: 12/03/19 11:30

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Total Metals									
Copper	0.078	mg/L	0.0020	0.00094	1	*200.8	12/5/19 15:20	MMR	P9L0080
Lead	0.0042	mg/L	0.0020	0.00082	1	*200.8	12/5/19 15:20	MMR	P9L0080

Hart & Hickman (Charlotte)
Attn: Christine Schaefer
2923 South Tryon St. Ste 100
Charlotte, NC 28203

Project: GCS-001 - Alderman
Elementary

Sample Matrix: Drinking Water

Client Sample ID: ALD-001-015B-RHWC-P
Prism Sample ID: 9120016-04
Prism Work Order: 9120016
Time Collected: 11/20/19 05:40
Time Submitted: 12/03/19 11:30

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Total Metals									
Copper	0.077	mg/L	0.0020	0.00094	1	*200.8	12/5/19 15:34	MMR	P9L0080
Lead	0.0023	mg/L	0.0020	0.00082	1	*200.8	12/5/19 15:34	MMR	P9L0080

Hart & Hickman (Charlotte)
Attn: Christine Schaefer
2923 South Tryon St. Ste 100
Charlotte, NC 28203

Project: GCS-001 - Alderman
Elementary

Prism Work Order: 9120016
Time Submitted: 12/3/2019 11:30:00AM

Total Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9L0080 - 200.8										
Blank (P9L0080-BLK1)				Prepared: 12/04/19 Analyzed: 12/05/19						
Copper	BRL	0.0020	mg/L							
Lead	BRL	0.0020	mg/L							
LCS (P9L0080-BS1)				Prepared: 12/04/19 Analyzed: 12/05/19						
Copper	0.0987	0.0020	mg/L	0.1000		99	85-115			
Lead	0.101	0.0020	mg/L	0.1000		101	85-115			
Matrix Spike (P9L0080-MS2)				Source: 9120016-03		Prepared: 12/04/19 Analyzed: 12/05/19				
Copper	0.169	0.0020	mg/L	0.1000	0.0776	92	70-130			
Lead	0.102	0.0020	mg/L	0.1000	0.00420	98	70-130			

Sample Extraction Data

Prep Method: 200.8

Lab Number	Batch	Initial	Final	Date/Time
9120016-01	P9L0080	50 mL	50 mL	12/04/19 14:29
9120016-02	P9L0080	50 mL	50 mL	12/04/19 14:29
9120016-03	P9L0080	50 mL	50 mL	12/04/19 14:29
9120016-04	P9L0080	50 mL	50 mL	12/04/19 14:29



Full Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

Client Company Name: Hart & Hickman

Report To/Contact Name: Christine Schaefer

Reporting Address: 2923 S Tryon St #100
Charlotte, NC 28203

Phone: 704/529-6364 Fax (Yes) (No):

Email (Y/N) Email Address: cschaefer@hart-hickman.com

EDD Type: PDF Excel Other

Site Location Name: Alderman Elementary

Site Location Physical Address: Greensboro, NC

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # TO ENSURE PROPER BILLING:

Project Name: GCS-001 Alderman Elementary

Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)

*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements

Invoice To: accounts@prism-lab.com

Samples INTACT upon arrival?	YES	NO	N/A
Received ON WET ICE? Temp _____			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

Purchase Order No./Billing Reference: GCS-001

Requested Due Date: 1 Day 2 Days 3 Days 4 Days 5 Days

"Working Days" 6-9 Days Standard 10 days

Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC USACE FL NC ✓

Water Chlorinated: YES NO

Sample Iced Upon Collection: YES NO ✓

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER		PRESERVATIVES	ANALYSES REQUESTED		REMARKS	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE				
ALD-001-010A-LHWC-F	11/20/19	0537	Water	P	1	125ml	HNO3	✓		01
ALD-001-010B-RHWC-F	11/20/19	0537	Water	P	1	125ml	HNO3	✓		02
ALD-001-015A-LHWC-F	11/20/19	0540	Water	P	1	125ml	HNO3	✓		03
ALD-001-015B-FHWC-F	11/20/19	0540	Water	P	1	125ml	HNO3	✓		04
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		

Sampler's Signature: *Jayna Sennamore* Sampled By (Print Name): Jayna Sennamore Affiliation: HHH

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By (Signature):

Received By (Signature):

Date: 12-02-19 Military Hours: 0846

Additional Comments:

Relinquished By (Signature):

Received By (Signature):

Date: 12-02-19 Military Hours: 1542

Relinquished By (Signature):

Received By (Signature):

Date: 12-3-19 Military Hours: 1040

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH HEADS TODAY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST CQC UNTIL RECEIVED AT THE LABORATORY.

Fed Ex UPS

Hand-delivered

Prism Field Service

Other

NPDES: UST: GROUNDWATER: DRINKING WATER: SOLID WASTE: RCRA: CERCLA: LANDFILL: OTHER:

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

PRISM USE ONLY

Site Arrival Time:

Site Departure Time:

Field Tech Fee:

Mileage:

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

12-3-19 @ 1130

APPENDIX B

BLUFORD ELEMENTARY RESULTS

School Name: Bluford Elementary		Report Date (s): 9/10/2019	
Date Test Conducted: 8/28/19		Date Results Received: 9/10/2019	
Number of Faucets Tested: 18 (all GCS identified faucets used for drinking/food preparation)			
Lead Results		Copper Results	
Results 15 ppb and above: 0		Results 1.3 ppm and above: 0	
Results 10 ppb to below 15 ppb: 0		Detectable results below 1.3 ppm: 17	
Detectable results below 10 ppb: 0		Results below detection level: 1	
Results below detection level: 18			
Number of Faucets Requiring Remedial Action: 0			
Daily School-Wide Flushing: <div style="margin-left: 100px;"> <input type="checkbox"/> Continue with protocol <input type="checkbox"/> Discontinue flushing protocol: mm/dd/yyyy <input checked="" type="checkbox"/> Other (Describe: Perform Periodic Flushing) </div>			
This is a summary report prepared by ECS. ECS suggests that the full report be referred to with regards to findings, recommendations, and technical limitations for this sampling event.			

Version _____
Date _____

<u>SAMPLE LOCATION</u> <u>CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
001		Kitchen	3 Department Sink (LH)	T&S	10	1
002		Kitchen	3 Department Sink (RH)	T&S	10	1
003		Kitchen	2 Department Sink	T&S	15	1
004		Kitchen	Ice Maker	Ice-O-Matic	5	1
005						
006		Cafeteria	Water Cooler	Oasis	42	1
007	004		Water Cooler	Oasis	35	1
008		Hall across from Room 403	Water Cooler (LH)	Elkay	2	1
009		Hall across from Room 403	Water Cooler (RH)	Elkay	2	1
010		Hall at Room 205	Water Cooler (LH)	Elkay	2	1
011		Hall at Room 205	Water Cooler (RH)	Elkay	2	1
012		Hall at Room 209	Water Cooler (LH)	Elkay	2	1
013		Hall at Room 209	Water Cooler (RH)	Elkay	2	1
014		Hall at Office	Water Cooler (LH)	Elkay	2	1
015		Hall at Office	Water Cooler (RH)	Elkay	2	1
016		Hall at Room 610	Water Cooler (LH)	Elkay	2	1
017		Hall at Room 610	Water Cooler (RH)	Elkay	2	1
018		Hall at Room 117	Water Cooler (LH)	Elkay	2	1
019		Hall at Room 117	Water Cooler (RH)	Elkay	2	1

TOTAL NUMBER OF FIXTURES

18

September 10, 2019

Ryan Abrahamson
ECS Southeast, LLP

RE: Project: Lead and Copper-Bluford
Pace Project No.: 92443497

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443497001	BES-001	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497002	BES-002	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497003	BES-003	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497004	BES-004	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443497005	BES-006	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497006	BES-007	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497007	BES-008	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497008	BES-009	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497009	BES-010	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497010	BES-011	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497011	BES-012	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497012	BES-013	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497013	BES-014	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497014	BES-015	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497015	BES-016	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497016	BES-017	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497017	BES-018	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443497018	BES-019	EPA 200.8 Rev 5.4	JOR	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

Sample: BES-001		Lab ID: 92443497001	Collected: 08/28/19 06:42	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	53.7	ug/L	5.0	1		09/09/19 12:47	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 12:47	7439-92-1	

Sample: BES-002		Lab ID: 92443497002		Collected: 08/28/19 06:42	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	22.2	ug/L	5.0	1		09/09/19 12:50	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 12:50	7439-92-1	

Sample: BES-003		Lab ID: 92443497003		Collected: 08/28/19 06:43	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	15.5	ug/L	5.0	1		09/09/19 12:52	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 12:52	7439-92-1	

Sample: BES-004		Lab ID: 92443497004	Collected: 08/28/19 06:41	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS Drinking Water Analytical Method: EPA 200.8 Rev 5.4 Preparation Method: EPA 200.8 Rev 5.4

Copper	ND	ug/L	5.0	1	09/06/19 16:51	09/09/19 19:01	7440-50-8	
Lead	ND	ug/L	3.0	1	09/06/19 16:51	09/09/19 19:01	7439-92-1	

Sample: BES-006		Lab ID: 92443497005	Collected: 08/28/19 06:44	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	40.8	ug/L	5.0	1		09/09/19 12:55	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 12:55	7439-92-1	

Sample: BES-007		Lab ID: 92443497006	Collected: 08/28/19 06:47	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	28.3	ug/L	5.0	1		09/09/19 12:58	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

Sample: BES-007		Lab ID: 92443497006		Collected: 08/28/19 06:47	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/09/19 12:58	7439-92-1	
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Sample: BES-008		Lab ID: 92443497007		Collected: 08/28/19 06:52	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.2	ug/L	5.0	1		09/09/19 13:01	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 13:01	7439-92-1	

Sample: BES-009		Lab ID: 92443497008		Collected: 08/28/19 06:52	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	38.8	ug/L	5.0	1		09/09/19 13:10	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 13:10	7439-92-1	

Sample: BES-010		Lab ID: 92443497009		Collected: 08/28/19 06:55	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.1	ug/L	5.0	1		09/09/19 13:13	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 13:13	7439-92-1	

Sample: BES-011		Lab ID: 92443497010		Collected: 08/28/19 06:55	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	34.0	ug/L	5.0	1		09/09/19 13:22	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 13:22	7439-92-1	

Sample: BES-012		Lab ID: 92443497011		Collected: 08/28/19 06:56	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	42.5	ug/L	5.0	1		09/09/19 13:25	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 13:25	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

Sample: BES-013		Lab ID: 92443497012	Collected: 08/28/19 06:56	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	48.4	ug/L	5.0	1		09/09/19 13:28	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 13:28	7439-92-1	

Sample: BES-014		Lab ID: 92443497013	Collected: 08/28/19 06:58	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.2	ug/L	5.0	1		09/09/19 13:30	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 13:30	7439-92-1	

Sample: BES-015		Lab ID: 92443497014	Collected: 08/28/19 06:58	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	33.4	ug/L	5.0	1		09/09/19 13:33	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 13:33	7439-92-1	

Sample: BES-016		Lab ID: 92443497015	Collected: 08/28/19 07:00	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	45.7	ug/L	5.0	1		09/09/19 13:45	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 13:45	7439-92-1	

Sample: BES-017		Lab ID: 92443497016	Collected: 08/28/19 07:00	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	48.4	ug/L	5.0	1		09/09/19 14:00	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 14:00	7439-92-1	

Sample: BES-018		Lab ID: 92443497017	Collected: 08/28/19 06:50	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	33.8	ug/L	5.0	1		09/09/19 14:03	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

Sample: BES-018		Lab ID: 92443497017		Collected: 08/28/19 06:50		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Lead	ND	ug/L	3.0	1		09/09/19 14:03	7439-92-1		

Sample: BES-019		Lab ID: 92443497018		Collected: 08/28/19 06:50		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	34.1	ug/L	5.0	1		09/09/19 14:06	7440-50-8		
Lead	ND	ug/L	3.0	1		09/09/19 14:06	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

QC Batch:	496527	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443497001, 92443497002, 92443497003, 92443497005, 92443497006, 92443497007, 92443497008, 92443497009, 92443497010, 92443497011, 92443497012, 92443497013, 92443497014		

METHOD BLANK:	2674075	Matrix:	Water
Associated Lab Samples:	92443497001, 92443497002, 92443497003, 92443497005, 92443497006, 92443497007, 92443497008, 92443497009, 92443497010, 92443497011, 92443497012, 92443497013, 92443497014		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 12:15	
Lead	ug/L	ND	3.0	09/09/19 12:15	

LABORATORY CONTROL SAMPLE: 2674076

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	52.9	106	85-115	
Lead	ug/L	50	51.1	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674077 2674078

Parameter	Units	92443354048 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	73.5	50	50	122	123	97	100	70-130	1	
Lead	ug/L	ND	50	50	50.8	52.1	101	104	70-130	3	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674079 2674080

Parameter	Units	92443497007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	26.2	50	50	80.9	77.8	109	103	70-130	4	
Lead	ug/L	ND	50	50	53.7	51.6	107	103	70-130	4	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

QC Batch: 496629 Analysis Method: EPA 200.8 Rev 5.4
QC Batch Method: EPA 200.8 Rev 5.4 Analysis Description: 200.8 MET Drinking Water, No Prep
Associated Lab Samples: 92443497015, 92443497016, 92443497017, 92443497018

METHOD BLANK: 2674636 Matrix: Water
Associated Lab Samples: 92443497015, 92443497016, 92443497017, 92443497018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 13:39	
Lead	ug/L	ND	3.0	09/09/19 13:39	

LABORATORY CONTROL SAMPLE: 2674637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	53.8	108	85-115	
Lead	ug/L	50	52.0	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674638 2674639

Parameter	Units	92443497015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	45.7	50	50	98.1	97.9	105	104	70-130	0	
Lead	ug/L	ND	50	50	53.7	52.7	107	105	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674640 2674641

Parameter	Units	92443515007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	53.5	50	50	105	104	104	101	70-130	1	
Lead	ug/L	ND	50	50	54.4	53.6	105	103	70-130	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

QC Batch:	496537	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water
Associated Lab Samples:	92443497004		

METHOD BLANK: 2674136 Matrix: Water

Associated Lab Samples: 92443497004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 18:55	
Lead	ug/L	ND	3.0	09/09/19 18:55	

LABORATORY CONTROL SAMPLE: 2674137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	53.1	106	85-115	
Lead	ug/L	50	51.2	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674138 2674139

Parameter	Units	92443497004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	ND	50	50	52.6	52.6	104	105	70-130	0	
Lead	ug/L	ND	50	50	51.3	50.9	103	102	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Lead and Copper-Bluford

Pace Project No.: 92443497

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: Lead and Copper-Bluford

Pace Project No.: 92443497

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92443497004	BES-004	EPA 200.8 Rev 5.4	496537	EPA 200.8 Rev 5.4	496555
92443497001	BES-001	EPA 200.8 Rev 5.4	496527		
92443497002	BES-002	EPA 200.8 Rev 5.4	496527		
92443497003	BES-003	EPA 200.8 Rev 5.4	496527		
92443497005	BES-006	EPA 200.8 Rev 5.4	496527		
92443497006	BES-007	EPA 200.8 Rev 5.4	496527		
92443497007	BES-008	EPA 200.8 Rev 5.4	496527		
92443497008	BES-009	EPA 200.8 Rev 5.4	496527		
92443497009	BES-010	EPA 200.8 Rev 5.4	496527		
92443497010	BES-011	EPA 200.8 Rev 5.4	496527		
92443497011	BES-012	EPA 200.8 Rev 5.4	496527		
92443497012	BES-013	EPA 200.8 Rev 5.4	496527		
92443497013	BES-014	EPA 200.8 Rev 5.4	496527		
92443497014	BES-015	EPA 200.8 Rev 5.4	496527		
92443497015	BES-016	EPA 200.8 Rev 5.4	496629		
92443497016	BES-017	EPA 200.8 Rev 5.4	496629		
92443497017	BES-018	EPA 200.8 Rev 5.4	496629		
92443497018	BES-019	EPA 200.8 Rev 5.4	496629		

REPORT OF LABORATORY ANALYSIS

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	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition
Upon Receipt

Client Name:

ECS Greensboro

Project #:

WO# : 92443497



92443497

Date/Initials Person Examining Contents: EH 8-29-19

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☒ Pace ☐ Other: _____

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other

Thermometer: ☐ IR Gun ID: 92T049
Type of Ice: ☐ Wet ☐ Blue ☒ None

Biological Tissue Frozen?
☐ Yes ☐ No ☒ N/A

Cooler Temp (°C): 21.9 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): _____

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review:

TE
PD


Date:

8/30

Project Manager SRF Review:

Date:

8/30

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Colliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO# : 92443497

PM: PTE

Due Date: 09/10/19


CLIENT: 92-ECS GBORO

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO#: 92443497

PM: PTE

Due Date: 09/10/19

CLIENT: 92-ECS GBORO

792

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-S035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:

Company: ECS Greensboro
Address: 4811 Koger Blvd
Greensboro, NC 27407
Phone: 336-666-4444
Fax: 336-666-4444
Requested Due Date:

Section B
Required Project Information:

Report To: Abrahamson, Ryan
Copy To:
Purchase Order #:
Project Name: Lead and Copper - Blueford
Project #: 49-8287-B

Section C
Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: taylor.ezell@pacelabs.com
Pace Profile #: 1834-5

Regulatory Agency

State / Location: NC

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique	MATRIX Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DW WT WW P SL OL WP AR OT TS	COLLECTED		START		END		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Preservatives		Analyses Test		Residual Chlorine (Y/N)	
				DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
1	BES-001			8/28/19	6:42														
2	BES-002			8/28/19	6:43														
3	BES-003			8/28/19	6:44														
4	BES-004			8/28/19	6:44														
5	BES-006			8/28/19	6:47														
6	BES-007			8/28/19	6:52														
7	BES-008			8/28/19	6:52														
8	BES-009			8/28/19	6:55														
9	BES-010			8/28/19	6:55														
10	BES-011			8/28/19	6:56														
11	BES-012			8/28/19	6:58														
12	BES-013			8/28/19	6:58														
ADDITIONAL COMMENTS				RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS			
				Kevin A. Perry		8/28/19		10:00		J. A. Perry		8/28/19		12:00					
				J. A. Perry		8/28/19		12:00		J. A. Perry		8/28/19		12:00					

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jacob L. Fort
SIGNATURE of SAMPLER: [Signature]
DATE Signed: 8/28/19

TEMP in C
Received on Ice (Y/N)
Custody Sealed Cooler (Y/N)
Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

e 17 of 17

Section A		Section B		Section C		Section D	
Required Client Information:		Required Project Information:		Invoice Information:		Page : 1 Of 1	
Company:	ECS Greensboro	Report To:	Abrahamson, Ryan	Attention:			
Address:	4811 Koger Blvd	Copy To:		Company Name:			
	Greensboro, NC 27407			Address:			
Email:	Rabrahamson@ECSInc.com	Purchase Order #:		Price Quote:			
Phone:		Project Name:	Lead and Copper - Blue Lead	Price Project Manager:	taylor.ezell@paceelabs.com		
	Fax	Project #:	49-8287-13	Price Profile #:	1834-5		
Requested Due Date:							
						Regulatory Agency	
						State / Location	
						NC	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP IN C
				START	END								
1	BES-014	DW	G			8/29/19	6:58						
2	BES-015	WT	G										
3	BES-016	WW	G										
4	BES-017	P	G										
5	BES-018	SL	G										
6	BES-019	WP	G										
7		AR	G										
8		OT	G										
9		TS	G										
10													
11													
12													

SAMPLER NAME AND SIGNATURE		PRINT Name of SAMPLER:		SIGNATURE of SAMPLER:		DATE Signed:	
		Jared L. Evans		[Signature]		8/28/19	

REQUISITIONED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
Kari Avery		8/29/19		1000		Jude Par		8/29/19		1000			
Jude Par		8/29/19											

APPENDIX C
FAIRVIEW ELEMENTARY RESULTS

School Name: Fairview		Report Date (s): 9/9/2019	
Date Test Conducted: 8/23/19		Date Results Received: 9/9/2019	
Number of Faucets Tested: 52 (all GCS identified faucets used for drinking/food preparation)			
Lead Results		Copper Results	
Results 15 ppb and above: 0		Results 1.3 ppm and above: 0	
Results 10 ppb to below 15 ppb: 0		Detectable results below 1.3 ppm: 51	
Detectable results below 10 ppb: 7		Results below detection level: 1	
Results below detection level: 45			
Number of Faucets Requiring Remedial Action: 0			
Daily School-Wide Flushing: <div style="margin-left: 100px;"> <input type="checkbox"/> Continue with protocol <input type="checkbox"/> Discontinue flushing protocol: mm/dd/yyyy <input checked="" type="checkbox"/> Other (Describe: Perform Periodic Flushing) </div>			
This is a summary report prepared by ECS. ECS suggests that the full report be referred to with regards to findings, recommendations, and technical limitations for this sampling event.			

Version _____
Date _____

<u>SAMPLE LOCATION</u>						
<u>CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
001		Kitchen	2 Department Sink	T&S	20	1
002		Kitchen	3 Department Sink (LH)	T&S	20	1
003		Kitchen	3 Department Sink (RH)	T&S	20	1
004						
005		Kitchen	Ice Maker	Manitowac	5	1
006	106		Drinking Station	Elkay	10	1
007		Hall across from Room 106	Water Cooler	Oasis	20	1
008	107		Drinking Station	Just	20	1
009	108		Drinking Station	Just	20	1
010	109		Drinking Station	Just	20	1
011	110		Drinking Station	Central	15	1
012	111		Drinking Station	Just	20	1
013	112		Drinking Station	Just	20	1
014	113		Drinking Station	Just	20	1
015	114		Drinking Station	Just	20	1
016		Hall across from Room 115	Water Cooler	Oasis	20	1
017	116		Drinking Station	Just	20	1
018	117		Drinking Station	Just	20	1
019	118		Drinking Station	Just	20	1
020	119		Drinking Station	Just	20	1
021	120		Drinking Station	Just	20	1
022	121		Drinking Station	Just	20	1
023	124		Drinking Station	Just	20	1
024	126		Drinking Station	Just	20	1
025	128		Drinking Station	Just	20	1
026		Hall across from Room 126	Water Cooler (LH)	Oasis	20	1
027		Hall across from Room 126	Water Cooler (RH)	H.Taylor	15	1
028	202		Drinking Station	Just	20	1
029	203		Drinking Station	Just	20	1
030	204		Drinking Station	Just	20	1
031	205		Drinking Station	Just	20	1
032	206		Drinking Station	Central	10	1
033	207		Drinking Station	Just	20	1
034	208		Drinking Station	Just	20	1
035	209		Drinking Station	Just	20	1
036	210		Drinking Station	Just	20	1
037	211		Drinking Station	Just	20	1
038	212		Drinking Station	Central	10	1
039	213		Drinking Station	Just	20	1
040	214		Drinking Station	Just	20	1
041	215		Drinking Station	Just	20	1
042		Hall across from Room 216	Water Cooler	Oasis	20	1
043	218		Drinking Station	Just	20	1
044	219		Drinking Station	Just	20	1

<u>SAMPLE LOCATION CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
045	220		Drinking Station	Just	20	1
046	221		Drinking Station	Just	20	1
047	222		Drinking Station	Just	20	1
048	224		Drinking Station	Just	20	1
049	226		Drinking Station	Just	20	1
050		Hall at T7 & T8	Water Cooler (LH)	H.Taylor	10	1
051		Hall at T7 & T8	Water Cooler (RH)	H.Taylor	10	1
052	228		Drinking Station	Just	20	1
053		Hall at Room 200A	Water Cooler	Oasis	20	1

TOTAL NUMBER OF FIXTURES

52

September 09, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: Lead and Copper - Fairview
Pace Project No.: 92443354

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443354001	FES-001	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354002	FES-002	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354003	FES-003	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354004	FES-005	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354005	FES-006	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354006	FES-007	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354007	FES-008	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354008	FES-009	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354009	FES-010	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354010	FES-011	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354011	FES-012	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354012	FES-013	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354013	FES-014	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354014	FES-015	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354015	FES-016	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354016	FES-017	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354017	FES-019	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354018	FES-021	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354019	FES-022	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354020	FES-023	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354021	FES-024	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354022	FES-025	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354023	FES-026	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354024	FES-027	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354025	FES-028	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354026	FES-030	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354027	FES-031	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354028	FES-032	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354029	FES-033	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354030	FES-034	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354031	FES-035	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354032	FES-036	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354033	FES-037	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354034	FES-038	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354035	FES-039	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354036	FES-040	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354037	FES-041	EPA 200.8 Rev 5.4	JOR	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443354038	FES-042	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354039	FES-043	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354040	FES-044	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354041	FES-045	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354042	FES-046	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354043	FES-047	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354044	FES-048	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354045	FES-049	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354046	FES-050	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354047	FES-051	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354048	FES-052	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354049	FES-053	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354050	FES-054	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354051	FES-055	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443354052	FES-056	EPA 200.8 Rev 5.4	JOR	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-001		Lab ID: 92443354001	Collected: 08/23/19 06:39	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.9	ug/L	5.0	1		09/06/19 02:22	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 02:22	7439-92-1	

Sample: FES-002		Lab ID: 92443354002	Collected: 08/23/19 06:40	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.9	ug/L	5.0	1		09/06/19 02:33	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 02:33	7439-92-1	

Sample: FES-003		Lab ID: 92443354003	Collected: 08/23/19 06:40	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.0	ug/L	5.0	1		09/06/19 02:36	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 02:36	7439-92-1	

Sample: FES-005		Lab ID: 92443354004	Collected: 08/23/19 06:38	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	ND	ug/L	5.0	1		09/06/19 02:40	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 02:40	7439-92-1	

Sample: FES-006		Lab ID: 92443354005	Collected: 08/23/19 07:04	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	19.1	ug/L	5.0	1		09/06/19 02:43	7440-50-8	
Lead	3.0	ug/L	3.0	1		09/06/19 02:43	7439-92-1	

Sample: FES-007		Lab ID: 92443354006	Collected: 08/23/19 07:05	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	46.0	ug/L	5.0	1		09/06/19 02:47	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-007		Lab ID: 92443354006	Collected: 08/23/19 07:05	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/06/19 02:47	7439-92-1
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Sample: FES-008		Lab ID: 92443354007	Collected: 08/23/19 07:02	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	27.4	ug/L	5.0	1		09/06/19 02:50	7440-50-8
Lead	3.6	ug/L	3.0	1		09/06/19 02:50	7439-92-1

Sample: FES-009		Lab ID: 92443354008	Collected: 08/23/19 07:03	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	23.1	ug/L	5.0	1		09/06/19 03:01	7440-50-8
Lead	6.3	ug/L	3.0	1		09/06/19 03:01	7439-92-1

Sample: FES-010		Lab ID: 92443354009	Collected: 08/23/19 07:01	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	25.4	ug/L	5.0	1		09/06/19 03:18	7440-50-8
Lead	3.0	ug/L	3.0	1		09/06/19 03:18	7439-92-1

Sample: FES-011		Lab ID: 92443354010	Collected: 08/23/19 07:00	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	73.8	ug/L	5.0	1		09/06/19 03:21	7440-50-8
Lead	ND	ug/L	3.0	1		09/06/19 03:21	7439-92-1

Sample: FES-012		Lab ID: 92443354011	Collected: 08/23/19 06:58	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	29.6	ug/L	5.0	1		09/06/19 03:25	7440-50-8
Lead	ND	ug/L	3.0	1		09/06/19 03:25	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-013		Lab ID: 92443354012	Collected: 08/23/19 06:59	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	37.0	ug/L	5.0	1		09/06/19 03:28	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 03:28	7439-92-1	

Sample: FES-014		Lab ID: 92443354013	Collected: 08/23/19 06:57	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	29.2	ug/L	5.0	1		09/06/19 03:32	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 03:32	7439-92-1	

Sample: FES-015		Lab ID: 92443354014	Collected: 08/23/19 06:56	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	22.9	ug/L	5.0	1		09/06/19 03:35	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 03:35	7439-92-1	

Sample: FES-016		Lab ID: 92443354015	Collected: 08/23/19 06:54	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	42.4	ug/L	5.0	1		09/06/19 03:39	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 03:39	7439-92-1	

Sample: FES-017		Lab ID: 92443354016	Collected: 08/23/19 06:55	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	50.3	ug/L	5.0	1		09/06/19 03:42	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 03:42	7439-92-1	

Sample: FES-019		Lab ID: 92443354017	Collected: 08/23/19 06:51	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	67.5	ug/L	5.0	1		09/06/19 03:46	7440-50-8	
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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-019		Lab ID: 92443354017	Collected: 08/23/19 06:51	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1	09/06/19 03:46	7439-92-1
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Sample: FES-021		Lab ID: 92443354018		Collected: 08/23/19 06:49	Received: 08/28/19 10:30	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	79.4	ug/L	5.0	1	09/06/19 03:56	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 03:56	7439-92-1

Sample: FES-022		Lab ID: 92443354019		Collected: 08/23/19 06:48	Received: 08/28/19 10:30	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	57.0	ug/L	5.0	1	09/06/19 04:07	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 04:07	7439-92-1

Sample: FES-023		Lab ID: 92443354020		Collected: 08/23/19 06:42	Received: 08/28/19 10:30	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	60.2	ug/L	5.0	1	09/06/19 04:10	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 04:10	7439-92-1

Sample: FES-024		Lab ID: 92443354021	Collected: 08/23/19 06:43	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	46.4	ug/L	5.0	1	09/06/19 04:14	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 04:14	7439-92-1

Sample: FES-025		Lab ID: 92443354022	Collected: 08/23/19 06:44	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	66.5	ug/L	5.0	1	09/06/19 04:17	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 04:17	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-026		Lab ID: 92443354023	Collected: 08/23/19 06:47	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	68.8	ug/L	5.0	1		09/06/19 04:21	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 04:21	7439-92-1	

Sample: FES-027		Lab ID: 92443354024	Collected: 08/23/19 06:47	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.9	ug/L	5.0	1		09/06/19 04:24	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 04:24	7439-92-1	

Sample: FES-028		Lab ID: 92443354025	Collected: 08/23/19 07:08	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	52.3	ug/L	5.0	1		09/06/19 04:28	7440-50-8	
Lead	7.6	ug/L	3.0	1		09/06/19 04:28	7439-92-1	

Sample: FES-030		Lab ID: 92443354026	Collected: 08/23/19 07:11	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	33.4	ug/L	5.0	1		09/06/19 04:38	7440-50-8	
Lead	3.7	ug/L	3.0	1		09/06/19 04:38	7439-92-1	

Sample: FES-031		Lab ID: 92443354027	Collected: 08/23/19 07:09	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	61.6	ug/L	5.0	1		09/06/19 04:42	7440-50-8	
Lead	4.0	ug/L	3.0	1		09/06/19 04:42	7439-92-1	

Sample: FES-032		Lab ID: 92443354028	Collected: 08/23/19 07:12	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	22.2	ug/L	5.0	1		09/06/19 04:52	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-032		Lab ID: 92443354028	Collected: 08/23/19 07:12	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1	09/06/19 04:52	7439-92-1
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Sample: FES-033		Lab ID: 92443354029	Collected: 08/23/19 07:13	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	34.9	ug/L	5.0	1	09/06/19 05:03	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 05:03	7439-92-1

Sample: FES-034		Lab ID: 92443354030	Collected: 08/23/19 07:15	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	21.3	ug/L	5.0	1	09/06/19 05:06	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 05:06	7439-92-1

Sample: FES-035		Lab ID: 92443354031	Collected: 08/23/19 07:14	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.7	ug/L	5.0	1	09/06/19 05:10	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 05:10	7439-92-1

Sample: FES-036		Lab ID: 92443354032	Collected: 08/23/19 07:17	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	36.9	ug/L	5.0	1	09/06/19 05:20	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 05:20	7439-92-1

Sample: FES-037		Lab ID: 92443354033	Collected: 08/23/19 07:18	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	38.9	ug/L	5.0	1	09/06/19 05:24	7440-50-8
Lead	ND	ug/L	3.0	1	09/06/19 05:24	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-038		Lab ID: 92443354034	Collected: 08/23/19 07:21	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.6	ug/L	5.0	1		09/06/19 05:27	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 05:27	7439-92-1	

Sample: FES-039		Lab ID: 92443354035	Collected: 08/23/19 07:20	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	49.5	ug/L	5.0	1		09/06/19 05:31	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 05:31	7439-92-1	

Sample: FES-040		Lab ID: 92443354036	Collected: 08/23/19 07:22	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	19.8	ug/L	5.0	1		09/06/19 05:34	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 05:34	7439-92-1	

Sample: FES-041		Lab ID: 92443354037	Collected: 08/23/19 07:24	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	36.8	ug/L	5.0	1		09/06/19 05:38	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 05:38	7439-92-1	

Sample: FES-042		Lab ID: 92443354038	Collected: 08/23/19 07:25	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	124	ug/L	5.0	1		09/06/19 05:41	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 05:41	7439-92-1	

Sample: FES-043		Lab ID: 92443354039	Collected: 08/23/19 07:26	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	71.2	ug/L	5.0	1		09/06/19 05:52	7440-50-8	
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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-043		Lab ID: 92443354039	Collected: 08/23/19 07:26	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/06/19 05:52	7439-92-1
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Sample: FES-044		Lab ID: 92443354040	Collected: 08/23/19 07:27	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	60.9	ug/L	5.0	1		09/06/19 06:02	7440-50-8
Lead	ND	ug/L	3.0	1		09/06/19 06:02	7439-92-1

Sample: FES-045		Lab ID: 92443354041	Collected: 08/23/19 07:29	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	65.3	ug/L	5.0	1		09/06/19 06:06	7440-50-8
Lead	ND	ug/L	3.0	1		09/06/19 06:06	7439-92-1

Sample: FES-046		Lab ID: 92443354042	Collected: 08/23/19 07:30	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	68.6	ug/L	5.0	1		09/06/19 06:09	7440-50-8
Lead	ND	ug/L	3.0	1		09/06/19 06:09	7439-92-1

Sample: FES-047		Lab ID: 92443354043	Collected: 08/23/19 07:31	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	79.3	ug/L	5.0	1		09/06/19 06:13	7440-50-8
Lead	ND	ug/L	3.0	1		09/06/19 06:13	7439-92-1

Sample: FES-048		Lab ID: 92443354044	Collected: 08/23/19 07:30	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	57.6	ug/L	5.0	1		09/06/19 06:16	7440-50-8
Lead	ND	ug/L	3.0	1		09/06/19 06:16	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-049		Lab ID: 92443354045	Collected: 08/23/19 07:34	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	76.4	ug/L	5.0	1		09/06/19 06:20	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 06:20	7439-92-1	

Sample: FES-050		Lab ID: 92443354046	Collected: 08/23/19 07:35	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	30.0	ug/L	5.0	1		09/06/19 06:23	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 06:23	7439-92-1	

Sample: FES-051		Lab ID: 92443354047	Collected: 08/23/19 07:35	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.3	ug/L	5.0	1		09/06/19 06:26	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 06:26	7439-92-1	

Sample: FES-052		Lab ID: 92443354048	Collected: 08/23/19 07:36	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	73.5	ug/L	5.0	1		09/09/19 12:20	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 12:20	7439-92-1	

Sample: FES-053		Lab ID: 92443354049	Collected: 08/23/19 07:07	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	38.8	ug/L	5.0	1		09/09/19 12:29	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 12:29	7439-92-1	

Sample: FES-054		Lab ID: 92443354050	Collected: 08/23/19 06:45	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	75.5	ug/L	5.0	1		09/09/19 12:32	7440-50-8	
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ANALYTICAL RESULTS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Sample: FES-054		Lab ID: 92443354050		Collected: 08/23/19 06:45		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/09/19 12:32	7439-92-1
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Sample: FES-055		Lab ID: 92443354051		Collected: 08/23/19 06:52		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	73.7	ug/L	5.0	1		09/09/19 12:35	7440-50-8
Lead	ND	ug/L	3.0	1		09/09/19 12:35	7439-92-1

Sample: FES-056		Lab ID: 92443354052		Collected: 08/23/19 07:37		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	55.2	ug/L	5.0	1		09/09/19 12:38	7440-50-8
Lead	ND	ug/L	3.0	1		09/09/19 12:38	7439-92-1

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

QC Batch:	496336	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443354001, 92443354002, 92443354003, 92443354004, 92443354005, 92443354006, 92443354007		

METHOD BLANK:	2673222	Matrix:	Water
Associated Lab Samples:	92443354001, 92443354002, 92443354003, 92443354004, 92443354005, 92443354006, 92443354007		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/06/19 01:09	
Lead	ug/L	ND	3.0	09/06/19 01:09	

LABORATORY CONTROL SAMPLE: 2673223

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.6	99	85-115	
Lead	ug/L	50	49.0	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673224 2673225

Parameter	Units	92443340029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	22.8	50	50	76.3	78.0	107	111	70-130	2	
Lead	ug/L	ND	50	50	51.8	53.1	102	105	70-130	3	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673226 2673227

Parameter	Units	92443340039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	30.1	50	50	83.0	83.6	106	107	70-130	1	
Lead	ug/L	ND	50	50	51.0	51.9	102	103	70-130	2	

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QUALITY CONTROL DATA

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

QC Batch:	496337	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443354008, 92443354009, 92443354010, 92443354011, 92443354012, 92443354013, 92443354014, 92443354015, 92443354016, 92443354017, 92443354018, 92443354019, 92443354020, 92443354021, 92443354022, 92443354023, 92443354024, 92443354025, 92443354026, 92443354027		

METHOD BLANK: 2673228

Matrix: Water

Associated Lab Samples: 92443354008, 92443354009, 92443354010, 92443354011, 92443354012, 92443354013, 92443354014, 92443354015, 92443354016, 92443354017, 92443354018, 92443354019, 92443354020, 92443354021, 92443354022, 92443354023, 92443354024, 92443354025, 92443354026, 92443354027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/06/19 02:54	
Lead	ug/L	ND	3.0	09/06/19 02:54	

LABORATORY CONTROL SAMPLE: 2673229

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	50.1	100	85-115	
Lead	ug/L	50	49.5	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673230 2673231

Parameter	Units	92443354008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	23.1	50	50	76.4	77.5	107	109	70-130	1	
Lead	ug/L	6.3	50	50	57.7	58.9	103	105	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673232 2673233

Parameter	Units	92443354018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	79.4	50	50	136	137	112	115	70-130	1	
Lead	ug/L	ND	50	50	51.7	52.8	103	105	70-130	2	

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QUALITY CONTROL DATA

Project: Lead and Copper - Fairview

Project No.: 92443354

QC Batch:	496340	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443354028, 92443354029, 92443354030, 92443354031, 92443354032, 92443354033, 92443354034, 92443354035, 92443354036, 92443354037, 92443354038, 92443354039, 92443354040, 92443354041, 92443354042, 92443354043, 92443354044, 92443354045, 92443354046, 92443354047		

METHOD BLANK: 2673236

Matrix: Water

Associated Lab Samples: 92443354028, 92443354029, 92443354030, 92443354031, 92443354032, 92443354033, 92443354034, 92443354035, 92443354036, 92443354037, 92443354038, 92443354039, 92443354040, 92443354041, 92443354042, 92443354043, 92443354044, 92443354045, 92443354046, 92443354047

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/06/19 04:45	
Lead	ug/L	ND	3.0	09/06/19 04:45	

LABORATORY CONTROL SAMPLE: 2673237

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	50.7	101	85-115	
Lead	ug/L	50	50.8	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673238 2673239

Parameter	Units	92443354028 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	22.2	50	50	76.8	77.5	109	111	70-130	1	
Lead	ug/L	ND	50	50	52.5	53.4	103	104	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673240 2673241

Parameter	Units	92443354038 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	124	50	50	180	184	113	121	70-130	2	
Lead	ug/L	ND	50	50	52.2	53.4	104	107	70-130	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

QC Batch: 496527 Analysis Method: EPA 200.8 Rev 5.4
QC Batch Method: EPA 200.8 Rev 5.4 Analysis Description: 200.8 MET Drinking Water, No Prep
Associated Lab Samples: 92443354048, 92443354049, 92443354050, 92443354051, 92443354052

METHOD BLANK: 2674075 Matrix: Water
Associated Lab Samples: 92443354048, 92443354049, 92443354050, 92443354051, 92443354052

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 12:15	
Lead	ug/L	ND	3.0	09/09/19 12:15	

LABORATORY CONTROL SAMPLE: 2674076

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	52.9	106	85-115	
Lead	ug/L	50	51.1	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674077 2674078

Parameter	Units	92443354048 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	73.5	50	50	122	123	97	100	70-130	1	
Lead	ug/L	ND	50	50	50.8	52.1	101	104	70-130	3	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674079 2674080

Parameter	Units	92443497007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	26.2	50	50	80.9	77.8	109	103	70-130	4	
Lead	ug/L	ND	50	50	53.7	51.6	107	103	70-130	4	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92443354001	FES-001	EPA 200.8 Rev 5.4	496336		
92443354002	FES-002	EPA 200.8 Rev 5.4	496336		
92443354003	FES-003	EPA 200.8 Rev 5.4	496336		
92443354004	FES-005	EPA 200.8 Rev 5.4	496336		
92443354005	FES-006	EPA 200.8 Rev 5.4	496336		
92443354006	FES-007	EPA 200.8 Rev 5.4	496336		
92443354007	FES-008	EPA 200.8 Rev 5.4	496336		
92443354008	FES-009	EPA 200.8 Rev 5.4	496337		
92443354009	FES-010	EPA 200.8 Rev 5.4	496337		
92443354010	FES-011	EPA 200.8 Rev 5.4	496337		
92443354011	FES-012	EPA 200.8 Rev 5.4	496337		
92443354012	FES-013	EPA 200.8 Rev 5.4	496337		
92443354013	FES-014	EPA 200.8 Rev 5.4	496337		
92443354014	FES-015	EPA 200.8 Rev 5.4	496337		
92443354015	FES-016	EPA 200.8 Rev 5.4	496337		
92443354016	FES-017	EPA 200.8 Rev 5.4	496337		
92443354017	FES-019	EPA 200.8 Rev 5.4	496337		
92443354018	FES-021	EPA 200.8 Rev 5.4	496337		
92443354019	FES-022	EPA 200.8 Rev 5.4	496337		
92443354020	FES-023	EPA 200.8 Rev 5.4	496337		
92443354021	FES-024	EPA 200.8 Rev 5.4	496337		
92443354022	FES-025	EPA 200.8 Rev 5.4	496337		
92443354023	FES-026	EPA 200.8 Rev 5.4	496337		
92443354024	FES-027	EPA 200.8 Rev 5.4	496337		
92443354025	FES-028	EPA 200.8 Rev 5.4	496337		
92443354026	FES-030	EPA 200.8 Rev 5.4	496337		
92443354027	FES-031	EPA 200.8 Rev 5.4	496337		
92443354028	FES-032	EPA 200.8 Rev 5.4	496340		
92443354029	FES-033	EPA 200.8 Rev 5.4	496340		
92443354030	FES-034	EPA 200.8 Rev 5.4	496340		
92443354031	FES-035	EPA 200.8 Rev 5.4	496340		
92443354032	FES-036	EPA 200.8 Rev 5.4	496340		
92443354033	FES-037	EPA 200.8 Rev 5.4	496340		
92443354034	FES-038	EPA 200.8 Rev 5.4	496340		
92443354035	FES-039	EPA 200.8 Rev 5.4	496340		
92443354036	FES-040	EPA 200.8 Rev 5.4	496340		
92443354037	FES-041	EPA 200.8 Rev 5.4	496340		
92443354038	FES-042	EPA 200.8 Rev 5.4	496340		
92443354039	FES-043	EPA 200.8 Rev 5.4	496340		
92443354040	FES-044	EPA 200.8 Rev 5.4	496340		
92443354041	FES-045	EPA 200.8 Rev 5.4	496340		
92443354042	FES-046	EPA 200.8 Rev 5.4	496340		
92443354043	FES-047	EPA 200.8 Rev 5.4	496340		
92443354044	FES-048	EPA 200.8 Rev 5.4	496340		
92443354045	FES-049	EPA 200.8 Rev 5.4	496340		
92443354046	FES-050	EPA 200.8 Rev 5.4	496340		
92443354047	FES-051	EPA 200.8 Rev 5.4	496340		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: Lead and Copper - Fairview

Pace Project No.: 92443354

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92443354048	FES-052	EPA 200.8 Rev 5.4	496527		
92443354049	FES-053	EPA 200.8 Rev 5.4	496527		
92443354050	FES-054	EPA 200.8 Rev 5.4	496527		
92443354051	FES-055	EPA 200.8 Rev 5.4	496527		
92443354052	FES-056	EPA 200.8 Rev 5.4	496527		

REPORT OF LABORATORY ANALYSIS

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	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐

Eden ☐

Greenwood ☐

Huntersville ☒

Raleigh ☐

Mechanicsville ☐

Sample Condition Upon Receipt

Client Name:

ELS Greensboro

Project #:

WO#: 92443354



92443354

Date/Initials Person Examining Contents: EF 8/20/19

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client

☐ Commercial ☒ Pace ☐ Other: _____

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other

Thermometer:

☒ IR Gun ID: 92T049

Type of Ice: ☐ Wet ☐ Blue ☒ None

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Cooler Temp (°C): 22.6 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 22.6

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

Field Data Required? ☐ Yes ☒ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION


Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____

Date: 8/30

Project Manager SRF Review: _____

Date: 8/30

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.:	Issuing Authority:
	F-CAR-CS-033-Rev.06	Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO# : 92443354

PM: PTE

Due Date: 09/09/19


CLIENT: 92-ECS GBORO

Item#																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

W0# : 92443354

PM: PTE

Due Date: 09/09/19


CLIENT: 92-ECS GBOR0

Item#	BP4U-125 mL Plastic	BP3U-250 mL Plastic	BP2U-500 mL Plastic	BP1U-1 liter Plastic	BP4S-125 mL Plastic	BP3N-250 mL plastic	BP4Z-125 mL Plastic	BP4C-125 mL Plastic	WGFU-Wide-mouthed	AG1U-1 liter Amber	AG1H-1 liter Amber	AG3U-250 mL Amber	AG1S-1 liter Amber	AG3S-250 mL Amber	AG3A(DG3A)-250 mL	DG9H-40 mL VOA	VG9T-40 mL VOA	VG9U-40 mL VOA	DG9P-40 mL VOA	VOAK (6 vials per kit)	V/GK (3 vials per kit)	SP5T-125 mL Sterile Plastic	SP2T-250 mL Sterile Plastic	BP3A-250 mL Plastic	AG0U-100 mL Amber	V5GU-20 mL Scintillation	DG9U-40 mL Amber
1																											
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8																											
9																											
10																											
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pH Adjustment Log for Preserved Samples

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Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project # **WO# : 92443354**

PM: PTE

Due Date: 09/09/19


CLIENT: 92-ECS GBORO

	Item#																												
	BP4U-125 mL Plastic																												Unpreserved (N/A) (Cl-)
	BP3U-250 mL Plastic																												Unpreserved (N/A)
	BP2U-500 mL Plastic																												Unpreserved (N/A)
	BP1U-1 liter Plastic																												Unpreserved (N/A)
	BP4S-125 mL Plastic #2504 (pH < 2) (Cl-)																												
	BP3N-250 mL plastic																												HNO3 (pH < 2)
	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)																												
	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)																												
	WGFU-Wide-mouthed Glass jar																												Unpreserved
	AG1U-1 liter Amber																												Unpreserved (N/A) (Cl-)
	AG1H-1 liter Amber HCl (pH < 2)																												
	AG3U-250 mL Amber																												Unpreserved (N/A) (Cl-)
	AG1S-1 liter Amber H2SO4 (pH < 2)																												
	AG3S-250 mL Amber #2504 (pH < 2)																												
	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)																												
	DG9H-40 mL VOA HCl (N/A)																												
	VG9T-40 mL VOA Na2S2O3 (N/A)																												
	VG9U-40 mL VOA Unp (N/A)																												
	DG9P-40 mL VOA H3PO4 (N/A)																												
	VOAK (6 vials per kit)-5035 kit (N/A)																												
	V/GK (3 vials per kit)-VPH/Gas kit (N/A)																												
	SP5T-125 mL Sterile Plastic (N/A – lab)																												
	SP2T-250 mL Sterile Plastic (N/A – lab)																												
	BP3A-250 mL Plastic (NH4)2SO4 (9.3-9.7)																												
	AG0U-100 mL Amber Unpreserved vials (N/A)																												
	V5GU-20 mL Scintillation vials (N/A)																												
	DG9U-40 mL Amber Unpreserved vials (N/A)																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottle**


Project #

	Item#																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			</
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

	Item#	
	BP4U-125 mL Plastic	Unpreserved (N/A) (Cl-)
	BP3U-250 mL Plastic	Unpreserved (N/A)
	BP2U-500 mL Plastic	Unpreserved (N/A)
	BP1U-1 liter Plastic	Unpreserved (N/A)
	BP4S-125 mL Plastic	H2SO4 (pH < 2) (Cl-)
	BP3N-250 mL plastic	HNO3 (pH < 2)
	BP4Z-125 mL Plastic	ZN Acetate & NaOH (>9)
	BP4C-125 mL Plastic	NaOH (pH > 12) (Cl-)
	WGfU-Wide-mouthed Glass jar	Unpreserved
	AG1U-1 liter Amber	Unpreserved (N/A) (Cl-)
	AG1H-1 liter Amber	HCl (pH < 2)
	AG3U-250 mL Amber	Unpreserved (N/A) (Cl-)
	AG1S-1 liter Amber	H2SO4 (pH < 2)
	AG3S-250 mL Amber	H2SO4 (pH < 2)
	AG3A(DG3A)-250 mL	Amber NH4Cl (N/A)(Cl-)
	DG9H-40 mL VOA Hd1	(N/A)
	VG9T-40 mL VOA Na2S2O3	(N/A)
	VG9U-40 mL VOA Urip	(N/A)
	DG9P-40 mL VOA H3PO4	(N/A)
	VOAK (6 vials per kit)	5035 kit (N/A)
	V/GK (3 vials per kit)	-VPH/Gas kit (N/A)
	SP5T-125 mL Sterile	Plastic (N/A – lab)
	SP2T-250 mL Sterile	Plastic (N/A – lab)
	BP3A-250 mL Plastic	NH2)2SO4 (9.3-9.7)
	AG0U-100 mL Amber	Unpreserved vials (N/A)
	VSGU-20 mL Scintillation	vials (N/A)
	DG9U-40 mL Amber	Unpreserved vials (N/A)

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: ECS Greensboro
Address: 4811 Koger Blvd
City: Greensboro, NC 27407
Phone: 336-235-1100
Fax: 336-235-1101
Email: info@paceanalytical.com

Required Project Information:

Report To: Abrahamson, Ryan
Copy To:
Purchase Order #:
Project Name: Lead and Copper - Fairview
Project #: 49-8287-8

Invoice Information:

Attention:
Company Name:
Address:
City:
State:
Zip:
Phone:
Fax:
Email: taylor.azell@paceanalytical.com

Regulatory Agency

Agency Name:
Address:
City:
State: NC
Zip:
Phone:
Fax:
Email:
Project Profile #: 1894-5

State / Location:
City:
Zip:
County:
Project Profile #: 1894-5

SAMPLE ID
One Character per box.
(A-Z, 0-9 /, -,)
Sample IDs must be unique

MATRIX
Drinking Water
Water
Waste Water
Product
Soil/Solid
Oil
Wipe
Air
Other
Tissue

CODE
DW
WT
WW
P
SL
OL
WP
AR
OT
TS

MATRIX CODE (see valid codes to left)
SAMPLE TYPE (G=GRAB C=COMP)

DATE TIME DATE TIME
START END
SAMPLE TEMP AT COLLECTION

OF CONTAINERS
Unpreserved
H2SO4
HNO3
HCl
NaOH
Na2S2O3
Methanol
Other

Analyses Test Y/N
Lead and Copper

Requested Analysis Filtered (Y/N)

Residual Chlorine (Y/N)

92443350

1	FE5-001	0				6:40	1																	001
2	FE5-002	1				6:40	1																	002
3	FE5-003	1				6:40	1																	003
4	FE5-005	1				6:38	1																	005
5	FE5-006	1				7:04	1																	006
6	FE5-007	1				7:05	1																	007
7	FE5-008	1				7:02	1																	008
8	FE5-009	1				7:03	1																	009
9	FE5-010	1				7:01	1																	010
10	FE5-011	1				7:00	1																	011
11	FE5-012	1				6:38	1																	012
12	FE5-013	1				6:39	1																	
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS										

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

Don't know
Greenwood
8/28/19 10:30

8/28/19 10:30
Greenwood
8/28/19 10:30

8/28/19 10:30
Greenwood
8/28/19 10:30

8/28/19 10:30
Greenwood
8/28/19 10:30

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jacob L. Fox

SIGNATURE of SAMPLER: Jacob L. Fox

DATE Signed: 8/23/19

TEMP in C
Received on ice (Y/N)
Custody Sealed Cooler (Y/N)
Samples Intact (Y/N)



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section B

Required Project Information:

Company:	ECS Greensboro	Report To:	Abrahamson, Ryan
Address:	4811 Koger Blvd	Copy To:	
City:	Greensboro, NC 27407	Purchase Order #:	
State:	NC	Project Name:	Lead and Copper - Fairview
Zip:	27407	Project #:	49-8282-B
Requested Due Date:			

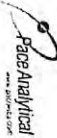
Section C

Invoice Information:

Attention:		Company Name:	
Address:		Address:	
City:		City:	
State:		State:	
Zip:		Zip:	
Requested Analysis Filtered (Y/N)		Requested Analysis Filtered (Y/N)	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Sample IDs must be unique	MATRIX Drinking Water Waste Water Surface Water Soil Sludge Other Tissue	CODE DW WW SW S SL M O T	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyses Test	Y/N	Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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SAMPLER NAME AND SIGNATURE		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
PRINT Name of SAMPLER:		8/23/19		1030		Drew L. Evans		8/24/19		1030		N	
SIGNATURE of SAMPLER:		8/23/19		1548		Drew L. Evans		8/24/19		1548		N	
TEMP in C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)							



CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Client Information:

Company: ECS Greensboro
Address: 4811 Koger Blvd
Greensboro, NC 27407
Phone: 866-444-5600
Fax: 336-333-1111
Email: info@ecs-labs.com

Section B

Required Project Information:

Report To: Abrahamson, Ryan
Copy To:
Purchase Order #:
Project Name: Lead and Copper - Fairview
Project #: 44-3287-B

Section C

Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: taylor.ezell@pace-labs.com
Pace Profile #: 1834.5

Regulatory Agency

State / Location
NC

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -,) Sample IDs must be unique	MATRIX Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DW WT WW P SL OL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		START		END		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Preservatives		Analyses Test	Y/N	Lead and Copper	Residual Chlorine (Y/N)	SAMPLE CONDITIONS
						DATE	TIME	DATE	TIME	DATE	TIME	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3					
1	FEES-028																					
2	FEES-030																					
3	FEES-031																					
4	FEES-032																					
5	FEES-033																					
6	FEES-034																					
7	FEES-035																					
8	FEES-036																					
9	FEES-037																					
10	FEES-038																					
11	FEES-039																					
12	FEES-040																					
ADDITIONAL COMMENTS				RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME								
Joni Grey				James Dunlop		8/28/19		1030		James Dunlop		8/29/19		1030								
James Dunlop				James Dunlop		8/29/19		1548		James Dunlop		8/29/19		1548								

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

Signed

DATE Signed:

TEMP in C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

Page : 1 Of 1

Section A		Section B		Section C		Page : 1 of 1	
Required Client Information:		Required Project Information:		Invoice Information:			
company:	ECS Greensboro	Report To:	Abrahamson, Ryan	Attention:			
address:	4811 Koger Blvd	Copy To:		Company Name:		Regulatory Agency	
greensboro, NC 27407				Address:			
mail: KAB@ecs.hillman.com	ECS Hillman, Yr. cont.	Purchase Order #:		Pace Dupe:		State / Location	
Home:		Project Name:	Lead and Copper - ENV. V.I.C.W.	Pace Project Manager:	taylor.ezell@paceclabs.com	NC	
Fax:		Project #:	44-8287-13	Pace Profile #:	1834-5		
Requested Due Date:						Requested Analysis Filtered (Y/N)	

[illegible]

Section A

Section B

Report To: _____	_____
Required Project Information:	

Section C

Invoice Information:

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

The Chain-of-Custody is a **LEGAL DOCUMENT**. All relevant fields must be completed accurately

Required Client Information:		Required Project Information:		Section C	
Company:	ECS Greensboro	Report To:	Abrahamson, Ryan	Invoice Information:	
Address:	4811 Koger Blvd	Copy To:		Attention:	
Greensboro, NC 27407				Company Name:	
Email:	R.Abrahamson@ECSInc.com	Purchase Order #:		Address:	
Phone:				Pace Quote:	
Fax:		Project Name:	Leak and Cooper - Fair View	Pace Project Manager:	taylor.ezell@pacelabs.com,
Requested Due Date:		Project #:	44-8287-B	Pace Profile #:	1834.5
			<div> <div>Regulatory Agency</div> <div>State / Location</div> <div>NC</div> </div>		

[illegible]

APPENDIX D

JAMESTOWN ELEMENTARY RESULTS

School Name: Jamestown Elementary		Report Date (s): 08/29/19	
Date Test Conducted: 08/20/19		Date Results Received: 08/29/19	
Number of Faucets Tested: 18 (all GCS identified faucets used for drinking/food preparation)			
Lead Results		Copper Results	
Results 15 ppb and above: 0		Results 1.3 ppm and above: 0	
Results 10 ppb to below 15 ppb: 0		Detectable results below 1.3 ppm: 17	
Detectable results below 10 ppb: 2		Results below detection level: 1	
Results below detection level: 16			
Number of Faucets Requiring Remedial Action: 0			
Daily School-Wide Flushing: <div style="margin-left: 100px;"> <input type="checkbox"/> Continue with protocol <input type="checkbox"/> Discontinue flushing protocol: mm/dd/yyyy <input checked="" type="checkbox"/> Other (Describe: Perform Periodic Flushing) </div>			
This is a summary report prepared by ECS. ECS suggests that the full report be referred to with regards to findings, recommendations, and technical limitations for this sampling event.			

Version _____
Date _____

<u>SAMPLE LOCATION</u> <u>CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
001		Kitchen	2 Department Sink	T&S	20	1
002		Kitchen	2 Department Sink	T&S	20	1
003		Kitchen	Ice Maker	Manitowac	10	1
004						
005						
006		Cafeteria	Water Cooler (LH)	Elkay	20	1
007		Cafeteria	Water Cooler (RH)	H.Taylor	40	1
008		Hall at Room 301	Water Cooler	H.Taylor	40	1
009		Hall at Gang Bathroom	Water Cooler	Oasis	40	1
010		Hall at Gang Bathroom	Water Cooler (LH)	H.Taylor	40	1
011		Hall at Gang Bathroom	Water Cooler (RH)	H.Taylor	40	1
012		Hall at Room 109	Water Cooler (LH)	Elkay	40	1
013		Hall at Room 109	Water Cooler (RH)	Elkay	40	1
014		Hall at Office	Water Cooler (LH)	Elkay	20	1
015		Hall at Office	Water Cooler (RH)	Elkay	20	1
016		Hall at Room 202	Water Cooler	H.Taylor	20	1
017	205		Drinking Station	Central	30	1
018		Mobile Unit #3	Water Cooler	Oasis	30	1
019		Mobile Unit #4	Water Cooler	Oasis	30	1
020		Gym	Water Cooler	H.Taylor	40	1

TOTAL NUMBER OF FIXTURES

18

August 29, 2019

Ryan Abrahamson
ECS Southeast, LLP

RE: Project: Pb&Cu-Jamestown
Pace Project No.: 92442334

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Pb&Cu-Jamestown

Pace Project No.: 92442334

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Pb&Cu-Jamestown

Pace Project No.: 92442334

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92442334001	JTE-001	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334002	JTE-002	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334003	JTE-003	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334004	JTE-006	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334005	JTE-007	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334006	JTE-008	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334007	JTE-009	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334008	JTE-010	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334009	JTE-011	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334010	JTE-012	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334011	JTE-013	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334012	JTE-014	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334013	JTE-015	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334014	JTE-016	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334015	JTE-017	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334016	JTE-018	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334017	JTE-019	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442334018	JTE-020	EPA 200.8 Rev 5.4	SER	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pb&Cu-Jamestown
Pace Project No.: 92442334

Sample: JTE-001		Lab ID: 92442334001		Collected: 08/20/19 06:35	Received: 08/21/19 10:50	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	42.6	ug/L	5.0	1		08/28/19 14:40	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 14:40	7439-92-1	

Sample: JTE-002		Lab ID: 92442334002	Collected: 08/20/19 06:38	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	32.8	ug/L	5.0	1		08/28/19 14:49	7440-50-8	
Lead	3.5	ug/L	3.0	1		08/28/19 14:49	7439-92-1	

Sample: JTE-003		Lab ID: 92442334003	Collected: 08/20/19 06:40	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	ND	ug/L	5.0	1		08/28/19 14:52	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 14:52	7439-92-1	

Sample: JTE-006		Lab ID: 92442334004	Collected: 08/20/19 06:41	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	46.8	ug/L	5.0	1		08/28/19 14:55	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 14:55	7439-92-1	

Sample: JTE-007		Lab ID: 92442334005	Collected: 08/20/19 06:42	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	47.1	ug/L	5.0	1		08/28/19 14:58	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 14:58	7439-92-1	

Sample: JTE-008		Lab ID: 92442334006	Collected: 08/20/19 06:43	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	75.3	ug/L	5.0	1		08/28/19 15:01	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pb&Cu-Jamestown
Pace Project No.: 92442334

Sample: JTE-008		Lab ID: 92442334006	Collected: 08/20/19 06:43	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		08/28/19 15:01	7439-92-1	
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Sample: JTE-009		Lab ID: 92442334007	Collected: 08/20/19 06:44	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	92.8	ug/L	5.0	1		08/28/19 15:04	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:04	7439-92-1	

Sample: JTE-010		Lab ID: 92442334008	Collected: 08/20/19 06:45	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	42.9	ug/L	5.0	1		08/28/19 15:06	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:06	7439-92-1	

Sample: JTE-011		Lab ID: 92442334009	Collected: 08/20/19 06:46	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	46.2	ug/L	5.0	1		08/28/19 15:15	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:15	7439-92-1	

Sample: JTE-012		Lab ID: 92442334010	Collected: 08/20/19 06:47	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	83.3	ug/L	5.0	1		08/28/19 15:18	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:18	7439-92-1	

Sample: JTE-013		Lab ID: 92442334011	Collected: 08/20/19 06:48	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	77.1	ug/L	5.0	1		08/28/19 15:21	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:21	7439-92-1	

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ANALYTICAL RESULTS

Project: Pb&Cu-Jamestown
Pace Project No.: 92442334

Sample: JTE-014		Lab ID: 92442334012	Collected: 08/20/19 06:49	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	73.9	ug/L	5.0	1		08/28/19 15:30	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:30	7439-92-1	

Sample: JTE-015		Lab ID: 92442334013	Collected: 08/20/19 06:49	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	75.8	ug/L	5.0	1		08/28/19 15:33	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:33	7439-92-1	

Sample: JTE-016		Lab ID: 92442334014	Collected: 08/20/19 06:50	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	59.7	ug/L	5.0	1		08/28/19 15:36	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:36	7439-92-1	

Sample: JTE-017		Lab ID: 92442334015	Collected: 08/20/19 06:52	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	41.9	ug/L	5.0	1		08/28/19 15:39	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:39	7439-92-1	

Sample: JTE-018		Lab ID: 92442334016	Collected: 08/20/19 06:56	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	36.7	ug/L	5.0	1		08/28/19 15:41	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:41	7439-92-1	

Sample: JTE-019		Lab ID: 92442334017	Collected: 08/20/19 06:57	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	65.7	ug/L	5.0	1		08/28/19 15:50	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pb&Cu-Jamestown

Pace Project No.: 92442334

Sample: JTE-019		Lab ID: 92442334017		Collected: 08/20/19 06:57		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Lead	ND	ug/L	3.0	1		08/28/19 15:50	7439-92-1		

Sample: JTE-020		Lab ID: 92442334018		Collected: 08/20/19 07:02		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	62.2	ug/L	5.0	1		08/28/19 15:53	7440-50-8		
Lead	3.1	ug/L	3.0	1		08/28/19 15:53	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Pb&Cu-Jamestown

Pace Project No.: 92442334

QC Batch:	494523	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92442334001, 92442334002, 92442334003, 92442334004, 92442334005, 92442334006, 92442334007, 92442334008, 92442334009, 92442334010, 92442334011, 92442334012, 92442334013, 92442334014, 92442334015, 92442334016, 92442334017, 92442334018		

METHOD BLANK:	2664909	Matrix:	Water
Associated Lab Samples:	92442334001, 92442334002, 92442334003, 92442334004, 92442334005, 92442334006, 92442334007, 92442334008, 92442334009, 92442334010, 92442334011, 92442334012, 92442334013, 92442334014, 92442334015, 92442334016, 92442334017, 92442334018		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/28/19 14:17	
Lead	ug/L	ND	3.0	08/28/19 14:17	

LABORATORY CONTROL SAMPLE: 2664910

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	50.1	100	85-115	
Lead	ug/L	50	49.0	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2664911 2664912

Parameter	Units	92442334001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	42.6	50	50	89.6	90.8	94	96	70-130	1	
Lead	ug/L	ND	50	50	49.2	50.6	96	98	70-130	3	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2664913 2664914

Parameter	Units	92442334011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	77.1	50	50	125	124	95	93	70-130	1	
Lead	ug/L	ND	50	50	50.8	50.4	98	98	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Pb&Cu-Jamestown

Pace Project No.: 92442334

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Pb&Cu-Jamestown

Pace Project No.: 92442334

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92442334001	JTE-001	EPA 200.8 Rev 5.4	494523		
92442334002	JTE-002	EPA 200.8 Rev 5.4	494523		
92442334003	JTE-003	EPA 200.8 Rev 5.4	494523		
92442334004	JTE-006	EPA 200.8 Rev 5.4	494523		
92442334005	JTE-007	EPA 200.8 Rev 5.4	494523		
92442334006	JTE-008	EPA 200.8 Rev 5.4	494523		
92442334007	JTE-009	EPA 200.8 Rev 5.4	494523		
92442334008	JTE-010	EPA 200.8 Rev 5.4	494523		
92442334009	JTE-011	EPA 200.8 Rev 5.4	494523		
92442334010	JTE-012	EPA 200.8 Rev 5.4	494523		
92442334011	JTE-013	EPA 200.8 Rev 5.4	494523		
92442334012	JTE-014	EPA 200.8 Rev 5.4	494523		
92442334013	JTE-015	EPA 200.8 Rev 5.4	494523		
92442334014	JTE-016	EPA 200.8 Rev 5.4	494523		
92442334015	JTE-017	EPA 200.8 Rev 5.4	494523		
92442334016	JTE-018	EPA 200.8 Rev 5.4	494523		
92442334017	JTE-019	EPA 200.8 Rev 5.4	494523		
92442334018	JTE-020	EPA 200.8 Rev 5.4	494523		

REPORT OF LABORATORY ANALYSIS

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Sample Location upon receipt: _____
 Document No.: F-CAR-CS-033-Rev.06
 Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples: ☐ Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville

Project #: **MO#: 92442334**


Client Name: EC8 Greenstar
 Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other
 Thermometer: 92T048 in Gun ID: 25.1
 Cooler Temp (°C): 25.1 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 25.1
 Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No
 Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No
 Temp should be above freezing to 6°C ☐ Samples out of temp criteria. Samples on ice, cooling process has begun

1.	Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
2.	Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
3.	Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4.	Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
5.	Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6.	Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6.	-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
7.	Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.	Dissolved analysis: Samples Field Filtered?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
9.	Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	-Includes Date/Time/ID/Analysis Matrix:	<u>MT</u>
10.	Headspace in VOA Vials (>5-6mm)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
11.	Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	Trip Blank Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

COMMENTS/SAMPLE DISCREPANCY
 Field Data Required? ☐ Yes ☐ No

CLIENT NOTIFICATION/RESOLUTION
 Lot ID of split containers: _____

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: 22/8
 Project Manager SRF Review: 22/8

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation

samples.
Exceptions: VDA, Collform, TOC, Oil and Grease, DRO/8015 (water) DOC, LTHg
**Bottom half of box is to list number of bottle

***Bottom half of box is to list number of bottle

PM: PTE
Due Date: 08/30/19
CLIENT: 92-ECS GBORO

MO#: 92442334

Project #

[illegible]

pH Adjustment Log for Preserved Samples

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Out of hold, incorrect preservative, out of temp, incorrect containers.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e.

CLIENT: 92-ECS GBORO
Due Date: 08/30/19

PM: PTE

CLIENT: 92-ECS GBORO

[illegible]

APPENDIX E
JOHNSON ELEMENTARY RESULTS

School Name: Johnson Street Elementary		Report Date (s): 9/23/2019	
Date Test Conducted: 8/27/19		Date Results Received: 9/10/2019, 9/17/19	
Number of Faucets Tested: 38 (all GCS identified faucets used for drinking/food preparation)			
Lead Results		Copper Results	
Results 15 ppb and above: 1		Results 1.3 ppm and above: 0	
Results 10 ppb to below 15 ppb: 0		Detectable results below 1.3 ppm: 37	
Detectable results below 10 ppb: 2		Results below detection level: 1	
Results below detection level: 35			
Number of Faucets Requiring Remedial Action: 1			
Location of Faucet		Action Taken	
Sample ID: JSE-033 Lead Concentration: 33.8 ppb Location description: Drinking Station Room 15		x Temporarily Taken Out of Service: 09/10/2019 x Permanently Taken Out of Service: 9/19/2019 x Flush Tested: 9/11/2019 Flush Test Result: ND (lead) ___ Replaced: mm/dd/yyyy ___ Retest: mm/dd/yyyy Retest Result: #### ___ Other: _____mm/dd/yyyy ___ Placed Back in Service on: mm/dd/yyyy	
Daily School-Wide Flushing: ___ Continue with protocol ___ Discontinue flushing protocol: mm/dd/yyyy x Other (Describe: Perform Periodic Flushing)			
This is a summary report prepared by ECS. ECS suggests that the full report be referred to with regards to findings, recommendations, and technical limitations for this sampling event.			

SAMPLE LOCATION CODE	ROOM	LOCATION	FIXTURE TYPE	BRAND	AGE	COUNT
001		Kitchen	3 Department Sink (LH)	T&S	10	1
002		Kitchen	3 Department Sink (RH)	T&S	10	1
003		Kitchen	2 Department Sink	T&S	10	1
004						
005						
006		Kitchen	Ice Maker	Manitowac	5	1
007		Cafetorium	Water Cooler	H.Taylor	20	1
008	101		Drinking Station	Central	15	1
009	102		Drinking Station	Central	15	1
010	103		Drinking Station	Central	15	1
011	104		Drinking Station	Central	15	1
012		Lower Level Foyer	Water Cooler	H.Taylor	10	1
013		Gym Hall	Drinking Station	H.Taylor	10	1
014	106		Drinking Station	Central	20	1
015	107		Drinking Station	Central	20	1
016	108		Drinking Station	Central	20	1
017		Hall at Room 109	Water Cooler	H.Taylor	20	1
018	109		Drinking Station	Central	20	1
019	110		Drinking Station	Central	20	1
020		Upper Level Foyer	Water Cooler	H.Taylor	15	1
021	201		Drinking Station	Central	20	1
022	202		Drinking Station	Central	20	1
023	203		Drinking Station	Central	20	1
024	204		Drinking Station	Central	20	1
025		Hall at Room 203	Water Cooler	H.Taylor	20	1
026	205		Drinking Station	Central	20	1
027	206		Drinking Station	Central	20	1
028	207		Drinking Station	Central	20	1
029		Hall at Room 208	Water Cooler	H.Taylor	20	1
030	208		Drinking Station	Central	20	1
031	13		Drinking Station	Central	20	1
032	14		Drinking Station	Central	20	1
033	15		Drinking Station	H.Taylor	30	1
034	16		Drinking Station	Central	20	1
035	17		Drinking Station	Central	20	1
036	18		Drinking Station	H.Taylor	30	1
037		Music Mobile Unit	Water Cooler	H.Taylor	10	1
038		Quad Hall	Water Cooler (LH)	Oasis	10	1
039		Quad Hall	Water Cooler (RH)	Oasis	10	1

TOTAL NUMBER OF FIXTURES

37

September 10, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: Lead and Copper-Johnson St
Pace Project No.: 92443515

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443515001	JSE-007	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515002	JSE-001	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515003	JSE-002	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515004	JSE-003	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515005	JSE-006	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515006	JSE-012	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515007	JSE-008	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515008	JSE-009	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515009	JSE-011	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515010	JSE-010	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515011	JSE-040	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515012	JSE-037	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443515013	JSE-038	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515014	JSE-039	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515015	JSE-013	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515016	JSE-019	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515017	JSE-014	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515018	JSE-015	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515019	JSE-016	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515020	JSE-017	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515021	JSE-018	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515022	JSE-021	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515023	JSE-022	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515024	JSE-023	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515025	JSE-026	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515026	JSE-024	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515027	JSE-025	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515028	JSE-027	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515029	JSE-028	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515030	JSE-029	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515031	JSE-030	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515032	JSE-031	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515033	JSE-032	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515034	JSE-033	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515035	JSE-034	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515036	JSE-035	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443515037	JSE-036	EPA 200.8 Rev 5.4	SER	2	PASI-A

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SAMPLE ANALYTE COUNT

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443515038	JSE-020	EPA 200.8 Rev 5.4	SER	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Sample: JSE-007		Lab ID: 92443515001	Collected: 08/27/19 06:35	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	51.8	ug/L	5.0	1		09/09/19 14:08	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 14:08	7439-92-1	

Sample: JSE-001		Lab ID: 92443515002	Collected: 08/27/19 06:37	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	29.0	ug/L	5.0	1		09/09/19 14:11	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 14:11	7439-92-1	

Sample: JSE-002		Lab ID: 92443515003	Collected: 08/27/19 06:37	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	39.5	ug/L	5.0	1		09/09/19 14:14	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 14:14	7439-92-1	

Sample: JSE-003		Lab ID: 92443515004	Collected: 08/27/19 06:38	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	34.1	ug/L	5.0	1		09/09/19 14:17	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 14:17	7439-92-1	

Sample: JSE-006		Lab ID: 92443515005	Collected: 08/27/19 06:38	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	ND	ug/L	5.0	1		09/09/19 14:20	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 14:20	7439-92-1	

Sample: JSE-012		Lab ID: 92443515006	Collected: 08/27/19 06:41	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	41.3	ug/L	5.0	1		09/09/19 14:23	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Sample: JSE-012		Lab ID: 92443515006	Collected: 08/27/19 06:41	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1	09/09/19 14:23	7439-92-1
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Sample: JSE-008		Lab ID: 92443515007		Collected: 08/27/19 06:42	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	53.5	ug/L	5.0	1	09/09/19 14:32	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 14:32	7439-92-1

Sample: JSE-009		Lab ID: 92443515008		Collected: 08/27/19 06:43	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	56.8	ug/L	5.0	1	09/09/19 14:41	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 14:41	7439-92-1

Sample: JSE-011		Lab ID: 92443515009	Collected: 08/27/19 06:43	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	51.0	ug/L	5.0	1	09/09/19 14:44	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 14:44	7439-92-1

Sample: JSE-010		Lab ID: 92443515010		Collected: 08/27/19 06:44	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	48.9	ug/L	5.0	1	09/09/19 14:47	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 14:47	7439-92-1

Sample: JSE-040		Lab ID: 92443515011		Collected: 08/27/19 06:45	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	51.2	ug/L	5.0	1	09/09/19 14:50	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 14:50	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Sample: JSE-037		Lab ID: 92443515012	Collected: 08/27/19 06:47	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	27.6	ug/L	5.0	1		09/09/19 15:34	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 15:34	7439-92-1	

Sample: JSE-038		Lab ID: 92443515013		Collected: 08/27/19 06:48	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	19.9	ug/L	5.0	1		09/09/19 15:42	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 15:42	7439-92-1	

Sample: JSE-039		Lab ID: 92443515014	Collected: 08/27/19 06:49	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	15.4	ug/L	5.0	1		09/09/19 15:45	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 15:45	7439-92-1	

Sample: JSE-013		Lab ID: 92443515015	Collected: 08/27/19 06:51	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	55.0	ug/L	5.0	1		09/09/19 15:48	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 15:48	7439-92-1	

Sample: JSE-019		Lab ID: 92443515016	Collected: 08/27/19 06:52	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	45.1	ug/L	5.0	1		09/09/19 15:51	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 15:51	7439-92-1	

Sample: JSE-014		Lab ID: 92443515017	Collected: 08/27/19 06:53	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	72.2	ug/L	5.0	1		09/09/19 16:00	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Sample: JSE-014		Lab ID: 92443515017		Collected: 08/27/19 06:53	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1	09/09/19 16:00	7439-92-1
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Sample: JSE-015		Lab ID: 92443515018		Collected: 08/27/19 06:54	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	43.8	ug/L	5.0	1	09/09/19 16:09	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 16:09	7439-92-1

Sample: JSE-016		Lab ID: 92443515019		Collected: 08/27/19 06:55	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	58.1	ug/L	5.0	1	09/09/19 16:17	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 16:17	7439-92-1

Sample: JSE-017		Lab ID: 92443515020		Collected: 08/27/19 06:55	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	227	ug/L	5.0	1	09/09/19 16:20	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 16:20	7439-92-1

Sample: JSE-018		Lab ID: 92443515021		Collected: 08/27/19 06:56	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	58.1	ug/L	5.0	1	09/09/19 16:23	7440-50-8
Lead	3.0	ug/L	3.0	1	09/09/19 16:23	7439-92-1

Sample: JSE-021		Lab ID: 92443515022		Collected: 08/27/19 06:59	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	55.7	ug/L	5.0	1	09/09/19 16:26	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 16:26	7439-92-1

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ANALYTICAL RESULTS

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Sample: JSE-022		Lab ID: 92443515023		Collected: 08/27/19 07:00		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	44.2	ug/L	5.0	1		09/09/19 16:29	7440-50-8		
Lead	ND	ug/L	3.0	1		09/09/19 16:29	7439-92-1		

Sample: JSE-023		Lab ID: 92443515024		Collected: 08/27/19 07:00		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	69.8	ug/L	5.0	1		09/09/19 16:32	7440-50-8		
Lead	ND	ug/L	3.0	1		09/09/19 16:32	7439-92-1		

Sample: JSE-026		Lab ID: 92443515025		Collected: 08/27/19 07:00		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	48.5	ug/L	5.0	1		09/09/19 16:35	7440-50-8		
Lead	ND	ug/L	3.0	1		09/09/19 16:35	7439-92-1		

Sample: JSE-024		Lab ID: 92443515026		Collected: 08/27/19 07:01		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	50.7	ug/L	5.0	1		09/09/19 16:38	7440-50-8		
Lead	ND	ug/L	3.0	1		09/09/19 16:38	7439-92-1		

Sample: JSE-025		Lab ID: 92443515027		Collected: 08/27/19 07:03		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	48.2	ug/L	5.0	1		09/09/19 16:41	7440-50-8		
Lead	ND	ug/L	3.0	1		09/09/19 16:41	7439-92-1		

Sample: JSE-027		Lab ID: 92443515028		Collected: 08/27/19 07:04		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	48.8	ug/L	5.0	1		09/09/19 16:56	7440-50-8		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Sample: JSE-027		Lab ID: 92443515028	Collected: 08/27/19 07:04	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1	09/09/19 16:56	7439-92-1
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Sample: JSE-028		Lab ID: 92443515029	Collected: 08/27/19 07:05	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	53.7	ug/L	5.0	1	09/09/19 16:58	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 16:58	7439-92-1

Sample: JSE-029		Lab ID: 92443515030	Collected: 08/27/19 07:06	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	140	ug/L	5.0	1	09/09/19 17:01	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 17:01	7439-92-1

Sample: JSE-030		Lab ID: 92443515031	Collected: 08/27/19 07:07	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	56.3	ug/L	5.0	1	09/09/19 17:04	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 17:04	7439-92-1

Sample: JSE-031		Lab ID: 92443515032	Collected: 08/27/19 07:08	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	72.3	ug/L	5.0	1	09/09/19 17:07	7440-50-8
Lead	4.2	ug/L	3.0	1	09/09/19 17:07	7439-92-1

Sample: JSE-032		Lab ID: 92443515033	Collected: 08/27/19 07:10	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	34.2	ug/L	5.0	1	09/09/19 17:10	7440-50-8
Lead	ND	ug/L	3.0	1	09/09/19 17:10	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Sample: JSE-033		Lab ID: 92443515034	Collected: 08/27/19 07:11	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep

Analytical Method: EPA 200.8 Rev 5.4

Copper	221	ug/L	5.0	1		09/09/19 17:13	7440-50-8	
Lead	33.8	ug/L	3.0	1		09/09/19 17:13	7439-92-1	

Sample: JSE-034		Lab ID: 92443515035	Collected: 08/27/19 07:12	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep

Analytical Method: EPA 200.8 Rev 5.4

Copper	24.7	ug/L	5.0	1		09/09/19 17:16	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 17:16	7439-92-1	

Sample: JSE-035		Lab ID: 92443515036	Collected: 08/27/19 07:12	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep

Analytical Method: EPA 200.8 Rev 5.4

Copper	49.1	ug/L	5.0	1		09/09/19 17:19	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 17:19	7439-92-1	

Sample: JSE-036		Lab ID: 92443515037	Collected: 08/27/19 07:13	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep

Analytical Method: EPA 200.8 Rev 5.4

Copper	45.3	ug/L	5.0	1		09/09/19 20:06	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:06	7439-92-1	

Sample: JSE-020		Lab ID: 92443515038	Collected: 08/27/19 06:58	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep

Analytical Method: EPA 200.8 Rev 5.4

Copper	28.6	ug/L	5.0	1		09/09/19 20:12	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:12	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper-Johnson St
Pace Project No.: 92443515

QC Batch: 496629 Analysis Method: EPA 200.8 Rev 5.4
QC Batch Method: EPA 200.8 Rev 5.4 Analysis Description: 200.8 MET Drinking Water, No Prep
Associated Lab Samples: 92443515001, 92443515002, 92443515003, 92443515004, 92443515005, 92443515006, 92443515007, 92443515008, 92443515009, 92443515010, 92443515011, 92443515012, 92443515013, 92443515014, 92443515015, 92443515016

METHOD BLANK: 2674636 Matrix: Water
Associated Lab Samples: 92443515001, 92443515002, 92443515003, 92443515004, 92443515005, 92443515006, 92443515007, 92443515008, 92443515009, 92443515010, 92443515011, 92443515012, 92443515013, 92443515014, 92443515015, 92443515016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 13:39	
Lead	ug/L	ND	3.0	09/09/19 13:39	

LABORATORY CONTROL SAMPLE: 2674637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	53.8	108	85-115	
Lead	ug/L	50	52.0	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674638 2674639

Parameter	Units	92443497015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	45.7	50	50	98.1	97.9	105	104	70-130	0	
Lead	ug/L	ND	50	50	53.7	52.7	107	105	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674640 2674641

Parameter	Units	92443515007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	53.5	50	50	105	104	104	101	70-130	1	
Lead	ug/L	ND	50	50	54.4	53.6	105	103	70-130	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper-Johnson St
Pace Project No.: 92443515

QC Batch: 496665 Analysis Method: EPA 200.8 Rev 5.4
QC Batch Method: EPA 200.8 Rev 5.4 Analysis Description: 200.8 MET Drinking Water, No Prep
Associated Lab Samples: 92443515017, 92443515018, 92443515019, 92443515020, 92443515021, 92443515022, 92443515023, 92443515024, 92443515025, 92443515026, 92443515027, 92443515028, 92443515029, 92443515030, 92443515031, 92443515032, 92443515033, 92443515034, 92443515035, 92443515036

METHOD BLANK: 2674679 Matrix: Water
Associated Lab Samples: 92443515017, 92443515018, 92443515019, 92443515020, 92443515021, 92443515022, 92443515023, 92443515024, 92443515025, 92443515026, 92443515027, 92443515028, 92443515029, 92443515030, 92443515031, 92443515032, 92443515033, 92443515034, 92443515035, 92443515036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 15:54	
Lead	ug/L	ND	3.0	09/09/19 15:54	

LABORATORY CONTROL SAMPLE: 2674680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	48.2	96	85-115	
Lead	ug/L	50	47.0	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674681 2674682

Parameter	Units	92443515017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	72.2	50	50	120	125	95	106	70-130	4	
Lead	ug/L	ND	50	50	51.5	55.9	98	107	70-130	8	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674683 2674684

Parameter	Units	92443515027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	48.2	50	50	99.0	99.3	102	102	70-130	0	
Lead	ug/L	ND	50	50	51.4	51.9	102	103	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

QC Batch:	496666	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443515037, 92443515038		

METHOD BLANK: 2674685 Matrix: Water

Associated Lab Samples: 92443515037, 92443515038

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 20:01	
Lead	ug/L	ND	3.0	09/09/19 20:01	

LABORATORY CONTROL SAMPLE: 2674686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	53.2	106	85-115	
Lead	ug/L	50	51.6	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674687 2674688

Parameter	Units	92443515037 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	45.3	50	50	96.3	96.5	102	102	70-130	0	
Lead	ug/L	ND	50	50	52.4	52.4	103	103	70-130	0	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674689 2674690

Parameter	Units	92443525009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	28.7	50	50	81.0	81.4	105	105	70-130	0	
Lead	ug/L	ND	50	50	52.1	52.2	104	104	70-130	0	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: Lead and Copper-Johnson St

Pace Project No.: 92443515

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92443515001	JSE-007	EPA 200.8 Rev 5.4	496629		
92443515002	JSE-001	EPA 200.8 Rev 5.4	496629		
92443515003	JSE-002	EPA 200.8 Rev 5.4	496629		
92443515004	JSE-003	EPA 200.8 Rev 5.4	496629		
92443515005	JSE-006	EPA 200.8 Rev 5.4	496629		
92443515006	JSE-012	EPA 200.8 Rev 5.4	496629		
92443515007	JSE-008	EPA 200.8 Rev 5.4	496629		
92443515008	JSE-009	EPA 200.8 Rev 5.4	496629		
92443515009	JSE-011	EPA 200.8 Rev 5.4	496629		
92443515010	JSE-010	EPA 200.8 Rev 5.4	496629		
92443515011	JSE-040	EPA 200.8 Rev 5.4	496629		
92443515012	JSE-037	EPA 200.8 Rev 5.4	496629		
92443515013	JSE-038	EPA 200.8 Rev 5.4	496629		
92443515014	JSE-039	EPA 200.8 Rev 5.4	496629		
92443515015	JSE-013	EPA 200.8 Rev 5.4	496629		
92443515016	JSE-019	EPA 200.8 Rev 5.4	496629		
92443515017	JSE-014	EPA 200.8 Rev 5.4	496665		
92443515018	JSE-015	EPA 200.8 Rev 5.4	496665		
92443515019	JSE-016	EPA 200.8 Rev 5.4	496665		
92443515020	JSE-017	EPA 200.8 Rev 5.4	496665		
92443515021	JSE-018	EPA 200.8 Rev 5.4	496665		
92443515022	JSE-021	EPA 200.8 Rev 5.4	496665		
92443515023	JSE-022	EPA 200.8 Rev 5.4	496665		
92443515024	JSE-023	EPA 200.8 Rev 5.4	496665		
92443515025	JSE-026	EPA 200.8 Rev 5.4	496665		
92443515026	JSE-024	EPA 200.8 Rev 5.4	496665		
92443515027	JSE-025	EPA 200.8 Rev 5.4	496665		
92443515028	JSE-027	EPA 200.8 Rev 5.4	496665		
92443515029	JSE-028	EPA 200.8 Rev 5.4	496665		
92443515030	JSE-029	EPA 200.8 Rev 5.4	496665		
92443515031	JSE-030	EPA 200.8 Rev 5.4	496665		
92443515032	JSE-031	EPA 200.8 Rev 5.4	496665		
92443515033	JSE-032	EPA 200.8 Rev 5.4	496665		
92443515034	JSE-033	EPA 200.8 Rev 5.4	496665		
92443515035	JSE-034	EPA 200.8 Rev 5.4	496665		
92443515036	JSE-035	EPA 200.8 Rev 5.4	496665		
92443515037	JSE-036	EPA 200.8 Rev 5.4	496666		
92443515038	JSE-020	EPA 200.8 Rev 5.4	496666		

REPORT OF LABORATORY ANALYSIS

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	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt: **Client Name:** ECS Greensboro **Project #:** _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other: _____

Custody Seal Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other **Thermometer:** ☒ IR Gun ID: 92T049 **Type of Ice:** ☐ Wet ☐ Blue ☒ None

Cooler Temp (°C): 21.9 **Correction Factor: Add/Subtract (°C)** 0.0

Cooler Temp Corrected (°C): _____

USDA Regulated Soil (☒ N/A, water sample) **Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?** ☐ Yes ☒ No

WO# : 92443515



Date/Initials Person Examining Contents: EH 8-29-19

Temp should be above freezing to 6°C ☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION


Person contacted: _____ **Date/Time:** _____

Project Manager SCURF Review: _____

Project Manager SRF Review: _____

Date: 8/30

Date: 8/30

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO#: 92443515

PM: PTE

Due Date: 09/10/19

CLIENT: 92-ECS GBORO

Pg 1

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-pH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3A-250 mL Plastic NH2/2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

WO# : 92443515

Project # PM: PTE Due Date: 09/10/19
 CLIENT: 92-ECS GBORO

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**
 Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
****Bottom half of box is to list number of bottle**

Pg 2

Bottom half of table

Pg 2

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit -5035 kit (N/A)	V/GK (3 vials per kit -VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AGOU-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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pH Adjustment Log for Preserved Samples							Lot #
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added		

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Colliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO#: 92443515

PM: PTE

Due Date: 09/10/19

CLIENT: 92-ECS GBORO

PG 4

**Bottom half of box is to be discarded
 pg 4

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit) S035 kit (N/A)	V/GK (3 vials per kit) VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

10



CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section B
Required Project Information:

Section C
Invoice Information:

Section D
Regulatory Agency:

Report To: Abrahamsen, Ryan

Attention:

Regulatory Agency:

Copy To:

Company Name:

State / Location:

Purchase Order #:

Address:

NC

Project Name:

Pace Project Manager:

Requested Analysis Filtered (Y/N)

Project #:

Pace Profile #:

Residual Chlorine (Y/N)

Lead and Copper

1834-5

92443515

Lead and Copper

1834-5

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Lead and Copper

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CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	ECS Greensboro	Report To:	Abrahamson, Ryan	Attention:	
Address:	4811 Koper Blvd	Copy To:		Company Name:	
Greensboro, NC 27407		Purchase Order #:		Address:	
Email:	l.h.rahman@ecsintl.com	Project Name:	Lead and Copper Johnson Street	Pace Quote:	
Phone:		Project #:	6257-13	Pace Project Manager:	taylor.razell@pacelabs.com
Requested Due Date:				Pace Profile #:	1834-5
				Regulatory Agency	
				State / Location:	
				NC	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9, -,) Sample IDs must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	Preservatives							Analyses Test	Lead and Copper	Residual Chlorine (Y/N)	TEMP in C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
				START	END	DATE	TIME		DATE	TIME	Unpreserved	H2SO4	HNO3	HCl	NaOH							
1	JSE 026		G			8/27/14	7:00	1 X														
2	JSE 024						7:03															
3	JSE 025						7:04															
4	JSE 027						7:05															
5	JSE 028						7:06															
6	JSE 029						7:07															
7	JSE 030						7:08															
8	JSE 031						7:10															
9	JSE 032						7:11															
10	JSE 033						7:12															
11	JSE 034																					
12	JSE 035																					
ADDITIONAL COMMENTS				RELINQUISHED BY / AFFILIATION				DATE	TIME	ACCEPTED BY / AFFILIATION				DATE	TIME	SAMPLE CONDITIONS						
				Kari Ahn				8/27/14	10:00	J.D. Johnson				8-29-14	12:19	21.9 N N Y						
				T. Johnson				8-29-14	12:19	Pace				8-29-14	12:19							

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Chad Johnson
SIGNATURE of SAMPLER:	[Signature]
DATE Signed:	



Section A

Required Client Information:

Company: ECS Greensboro
Address: 4811 Koger Blvd
Greensboro, NC 27407
Email: RLC@kevin.com
Phone: 828-787-1000
Fax: 828-787-1000
Requested Due Date: 8-28-19

Section B

Required Project Information:

Report To: Abrahamson, Ryan
Copy To: Lead and Copper Johnson Street
Purchase Order #: 8287-18
Project Name: Lead and Copper Johnson Street
Project #: 8287-18

Section C

Invoice Information:

Attention: Company Name:
Address: Company Name:
Pace Quote: Company Name:
Pace Project Manager: taylor.eze@pacelabs.com
Pace Profile #: 1834-5

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 4 of 4

Regulatory Agency

State / Location

NC

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -)	MATRIX Dining Water Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DWT WT WW P SL OL WP AR OT TS	MATRIX CODE (see valid codes to left)		SAMPLE TYPE (G=GRAB C=COMP)		COLLECTED		START		END		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Preservatives		Analyses Test		Requested Analysis Filtered (Y/N)		Residual Chlorine (Y/N)	
								DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Lead and Copper	
1	JSE 036																								
2	JSE 020																								
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ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

Doni J. Avery
JMA
8-29-19 12:49

JMA
8-29-19 12:49

8-29-19 12:49

8-29-19 12:49

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

Chad Hollenhorst

DATE Signed:

TEMP in C
Received on ice (Y/N)
Custody Sealed Cooler (Y/N)
Samples Intact (Y/N)

September 18, 2019

Ryan Abrahamson
ECS Southeast, LLP

RE: Project: LEAD AND COPPER JOHNSON STREET
Pace Project No.: 92445053

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on September 11, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: LEAD AND COPPER JOHNSON STREET

Pace Project No.: 92445053

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: LEAD AND COPPER JOHNSON STREET

Pace Project No.: 92445053

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92445053001	JSE-033-R1	EPA 200.8 Rev 5.4	JOR	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER JOHNSON STREET

Pace Project No.: 92445053

Sample: JSE-033-R1		Lab ID: 92445053001		Collected: 09/11/19 07:30		Received: 09/11/19 14:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	23.4	ug/L	5.0	1		09/17/19 16:30	7440-50-8		
Lead	ND	ug/L	3.0	1		09/17/19 16:30	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER JOHNSON STREET

Pace Project No.: 92445053

QC Batch: 498098

Analysis Method: EPA 200.8 Rev 5.4

QC Batch Method: EPA 200.8 Rev 5.4

Analysis Description: 200.8 MET Drinking Water, No Prep

Associated Lab Samples: 92445053001

METHOD BLANK: 2681931

Matrix: Water

Associated Lab Samples: 92445053001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/17/19 15:32	
Lead	ug/L	ND	3.0	09/17/19 15:32	

LABORATORY CONTROL SAMPLE: 2681932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.7	99	85-115	
Lead	ug/L	50	47.5	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2681933 2681934

Parameter	Units	92444862001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	0.036	50	50	82.9	82.2	93	92	70-130	1	
Lead	ug/L	ND	50	50	47.8	48.1	95	96	70-130	1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2681935 2681936

Parameter	Units	92444972001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	41.5	50	50	87.4	87.5	92	92	70-130	0	
Lead	ug/L	ND	50	50	47.4	48.1	94	95	70-130	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: LEAD AND COPPER JOHNSON STREET
Pace Project No.: 92445053

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: LEAD AND COPPER JOHNSON STREET

Pace Project No.: 92445053

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92445053001	JSE-033-R1	EPA 200.8 Rev 5.4	498098		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

WO#: 92445053



Date/Initials Person Examining Contents: 9-11-19 AB

Sample Condition
Upon Receipt

Client Name:

Project #

ECS Greensboro

Courier:

☐ Fed Ex ☐ UPS ☐ USPS ☐ Client

☐ Commercial

☐ Pace

☐ Other:

Custody Seal Present?

☐ Yes

☒ No

Seals Intact?

☐ Yes

☒ No

Packing Material:

☐ Bubble Wrap

☐ Bubble Bags

☒ None

☐ Other

Thermometer:

☒ IR Gun ID: 92T049

Type of Ice:

☒ Wet

☐ Blue

☐ None

Biological Tissue Frozen?

☐ Yes

☐ No

☒ N/A

Cooler Temp (°C): 2.3

Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes

☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

		Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:


Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHG

**Bottom half of box is to list number of bottle

Project #

WO# : 92445053

PM: PTE

Due Date: 09/20/19

CLIENT: 92-ECS GBORO

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

[illegible]

APPENDIX F

NORTHWOOD ELEMENTARY RESULTS

School Name: Northwood Elementary		Report Date (s): 9/9/2019	
Date Test Conducted: 8/27/19		Date Results Received: 9/9/2019	
Number of Faucets Tested: 41 (all GCS identified faucets used for drinking/food preparation)			
Lead Results		Copper Results	
Results 15 ppb and above: 0		Results 1.3 ppm and above: 0	
Results 10 ppb to below 15 ppb: 0		Detectable results below 1.3 ppm: 40	
Detectable results below 10 ppb: 0		Results below detection level: 1	
Results below detection level: 41			
Number of Faucets Requiring Remedial Action: 0			
Daily School-Wide Flushing: <div style="margin-left: 100px;"> <input type="checkbox"/> Continue with protocol <input type="checkbox"/> Discontinue flushing protocol: mm/dd/yyyy <input checked="" type="checkbox"/> Other (Describe: Perform Periodic Flushing) </div>			
This is a summary report prepared by ECS. ECS suggests that the full report be referred to with regards to findings, recommendations, and technical limitations for this sampling event.			

Version _____
Date _____

<u>SAMPLE LOCATION</u> <u>CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
000		Kitchen	300 Department Sink (LH)	T&S	3	1
000A		Kitchen	3 Department Sink (RH)	T&S	3	1
000B		Kitchen	Ice Maker	Manitowac	3	1
001		Kitchen	1 Department Sink (LH)	T&S	3	1
002		Kitchen	1 Department Sink (RH)	T&S	3	1
003						
004						
005		Cafetorium	Water Cooler	H.Taylor	20	1
006	300		Drinking Station	H.Taylor	40	1
007	301		Drinking Station	Kohler	20	1
008	302		Drinking Station	Central	15	1
009	303		Drinking Station	Central	20	1
010	304		Drinking Station	Kohler	20	1
011	305		Drinking Station	Central	25	1
012	307		Drinking Station	Elkay	25	1
013	500		Drinking Station	H.Taylor	40	1
014	502		Drinking Station	Central	25	1
015	503		Drinking Station	Central	25	1
016		Hall at Room 501	Water Cooler	Sunroc	20	1
017	504		Drinking Station	Central	20	1
018	505		Drinking Station	Central	20	1
019		Hall at Room 601	Water Cooler (LH)	Elkay	15	1
020		Hall at Room 601	Water Cooler (RH)	Elkay	15	1
021	602		Drinking Station	Elkay	15	1
022	603		Drinking Station	Elkay	15	1
023	604		Drinking Station	Elkay	15	1
024	606		Drinking Station	Elkay	15	1
025	607		Drinking Station	Elkay	15	1
026		Hall at Gang Bathroom	Water Cooler (LH)	Oasis	10	1
027		Hall at Gang Bathroom	Water Cooler (RH)	Oasis	10	1
028		The 200 Hall	Water Cooler	H.Taylor	30	1
029	200		Drinking Station	Central	30	1
030	201		Drinking Station	H.Taylor	40	1
031	202		Drinking Station	H.Taylor	40	1
032	203		Drinking Station	H.Taylor	40	1
033	204		Drinking Station	Central	20	1
034		The 400 Hall	Water Cooler	H.Taylor	20	1
035	400		Drinking Station	Central	20	1
036	401		Drinking Station	Kohler	20	1
037	402		Drinking Station	H.Taylor	40	1
038	403		Drinking Station	Kohler	20	1
039		Mobile Unit #1	Water Cooler	Oasis	20	1
040		Mobile Unit #2	Water Cooler	H.Taylor	10	1
041		Mobile Unit #3	Water Cooler	Oasis	30	1

<u>SAMPLE LOCATION CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
042		Quad Hall	Water Cooler (LH)	Oasis	15	1
043		Quad Hall	Water Cooler (RH)	Oasis	15	1
044		Mobile Unit #6	Water Cooler	Westinghouse	25	1
045		Mobile Unit #10	Water Cooler	Oasis	20	1
046		Mobile Unit #14	Water Cooler	Oasis	20	1

TOTAL NUMBER OF FIXTURES

47

September 09, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: Lead and Copper - Northwood
Pace Project No.: 92443340

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443340001	NES-000	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340002	NES-000A	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340003	NES-000B	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340004	NES-001	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340005	NES-002	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340006	NES-005	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340007	NES-006	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340008	NES-007	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340009	NES-008	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340010	NES-009	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340011	NES-010	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340012	NES-011	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340013	NES-012	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340014	NES-013	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340015	NES-014	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340016	NES-015	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340017	NES-016	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340018	NES-018	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340019	NES-019	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340020	NES-020	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340021	NES-021	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340022	NES-023	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340023	NES-024	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340024	NES-025	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340025	NES-026	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340026	NES-027	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340027	NES-028	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340028	NES-029	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340029	NES-030	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340030	NES-031	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340031	NES-032	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340032	NES-033	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340033	NES-034	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340034	NES-035	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340035	NES-036	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340036	NES-037	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340037	NES-038	EPA 200.8 Rev 5.4	JOR	2	PASI-A

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SAMPLE ANALYTE COUNT

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443340038	NES-040	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340039	NES-042	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340040	NES-043	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443340041	NES-045	EPA 200.8 Rev 5.4	JOR	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Sample: NES-000		Lab ID: 92443340001		Collected: 08/27/19 06:41		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	29.5	ug/L	5.0	1		09/04/19 03:24	7440-50-8		
Lead	ND	ug/L	3.0	1		09/04/19 03:24	7439-92-1		

Sample: NES-000A		Lab ID: 92443340002		Collected: 08/27/19 06:41		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	67.9	ug/L	5.0	1		09/04/19 03:26	7440-50-8		
Lead	ND	ug/L	3.0	1		09/04/19 03:26	7439-92-1		

Sample: NES-000B		Lab ID: 92443340003		Collected: 08/27/19 06:38		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	ND	ug/L	5.0	1		09/04/19 03:28	7440-50-8		
Lead	ND	ug/L	3.0	1		09/04/19 03:28	7439-92-1		

Sample: NES-001		Lab ID: 92443340004		Collected: 08/27/19 06:40		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	39.9	ug/L	5.0	1		09/04/19 11:00	7440-50-8		
Lead	ND	ug/L	3.0	1		09/04/19 11:00	7439-92-1		

Sample: NES-002		Lab ID: 92443340005		Collected: 08/27/19 06:40		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	51.3	ug/L	5.0	1		09/04/19 11:04	7440-50-8		
Lead	ND	ug/L	3.0	1		09/04/19 11:04	7439-92-1		

Sample: NES-005		Lab ID: 92443340006		Collected: 08/27/19 06:43		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	32.3	ug/L	5.0	1		09/04/19 11:07	7440-50-8		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Sample: NES-005		Lab ID: 92443340006		Collected: 08/27/19 06:43		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1	09/04/19 11:07	7439-92-1
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Sample: NES-006		Lab ID: 92443340007		Collected: 08/27/19 06:45		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	22.5	ug/L	5.0	1	09/04/19 11:11	7440-50-8
Lead	ND	ug/L	3.0	1	09/04/19 11:11	7439-92-1

Sample: NES-007		Lab ID: 92443340008		Collected: 08/27/19 06:47		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	32.2	ug/L	5.0	1	09/04/19 11:14	7440-50-8
Lead	ND	ug/L	3.0	1	09/04/19 11:14	7439-92-1

Sample: NES-008		Lab ID: 92443340009		Collected: 08/27/19 06:48		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	16.8	ug/L	5.0	1	09/04/19 13:34	7440-50-8
Lead	ND	ug/L	3.0	1	09/04/19 13:34	7439-92-1

Sample: NES-009		Lab ID: 92443340010		Collected: 08/27/19 06:49		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	18.2	ug/L	5.0	1	09/04/19 13:51	7440-50-8
Lead	ND	ug/L	3.0	1	09/04/19 13:51	7439-92-1

Sample: NES-010		Lab ID: 92443340011		Collected: 08/27/19 06:50		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	21.0	ug/L	5.0	1	09/04/19 13:55	7440-50-8
Lead	ND	ug/L	3.0	1	09/04/19 13:55	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Sample: NES-011		Lab ID: 92443340012	Collected: 08/27/19 06:51	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	23.6	ug/L	5.0	1		09/04/19 13:58	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 13:58	7439-92-1	

Sample: NES-012		Lab ID: 92443340013	Collected: 08/27/19 06:52	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.1	ug/L	5.0	1		09/04/19 14:02	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:02	7439-92-1	

Sample: NES-013		Lab ID: 92443340014	Collected: 08/27/19 06:54	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	22.2	ug/L	5.0	1		09/04/19 14:05	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:05	7439-92-1	

Sample: NES-014		Lab ID: 92443340015	Collected: 08/27/19 06:55	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	20.5	ug/L	5.0	1		09/04/19 14:09	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:09	7439-92-1	

Sample: NES-015		Lab ID: 92443340016	Collected: 08/27/19 06:57	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	21.6	ug/L	5.0	1		09/04/19 14:12	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:12	7439-92-1	

Sample: NES-016		Lab ID: 92443340017	Collected: 08/27/19 06:56	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	76.0	ug/L	5.0	1		09/04/19 14:16	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Sample: NES-016		Lab ID: 92443340017	Collected: 08/27/19 06:56	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/04/19 14:16	7439-92-1	
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Sample: NES-018		Lab ID: 92443340018	Collected: 08/27/19 06:59	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	24.0	ug/L	5.0	1		09/04/19 14:19	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:19	7439-92-1	

Sample: NES-019		Lab ID: 92443340019	Collected: 08/27/19 07:01	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	18.1	ug/L	5.0	1		09/04/19 14:30	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:30	7439-92-1	

Sample: NES-020		Lab ID: 92443340020	Collected: 08/27/19 07:01	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	20.3	ug/L	5.0	1		09/04/19 14:40	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:40	7439-92-1	

Sample: NES-021		Lab ID: 92443340021	Collected: 08/27/19 07:03	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	25.6	ug/L	5.0	1		09/04/19 14:44	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:44	7439-92-1	

Sample: NES-023		Lab ID: 92443340022	Collected: 08/27/19 07:04	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	32.6	ug/L	5.0	1		09/04/19 14:47	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:47	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Sample: NES-024		Lab ID: 92443340023	Collected: 08/27/19 07:06	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.0	ug/L	5.0	1		09/04/19 14:51	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:51	7439-92-1	

Sample: NES-025		Lab ID: 92443340024	Collected: 08/27/19 07:07	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.7	ug/L	5.0	1		09/04/19 14:54	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:54	7439-92-1	

Sample: NES-026		Lab ID: 92443340025	Collected: 08/27/19 07:11	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	121	ug/L	5.0	1		09/04/19 14:58	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 14:58	7439-92-1	

Sample: NES-027		Lab ID: 92443340026	Collected: 08/27/19 07:11	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	154	ug/L	5.0	1		09/04/19 15:01	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 15:01	7439-92-1	

Sample: NES-028		Lab ID: 92443340027	Collected: 08/27/19 07:14	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	78.2	ug/L	5.0	1		09/04/19 15:11	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 15:11	7439-92-1	

Sample: NES-029		Lab ID: 92443340028	Collected: 08/27/19 07:15	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.0	ug/L	5.0	1		09/04/19 15:15	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Sample: NES-029		Lab ID: 92443340028	Collected: 08/27/19 07:15	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/04/19 15:15	7439-92-1	
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Sample: NES-030		Lab ID: 92443340029	Collected: 08/27/19 07:16	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	22.8	ug/L	5.0	1		09/06/19 01:16	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 01:16	7439-92-1	

Sample: NES-031		Lab ID: 92443340030	Collected: 08/27/19 07:17	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.0	ug/L	5.0	1		09/06/19 01:26	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 01:26	7439-92-1	

Sample: NES-032		Lab ID: 92443340031	Collected: 08/27/19 07:18	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.7	ug/L	5.0	1		09/06/19 01:30	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 01:30	7439-92-1	

Sample: NES-033		Lab ID: 92443340032	Collected: 08/27/19 07:19	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	23.8	ug/L	5.0	1		09/06/19 01:33	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 01:33	7439-92-1	

Sample: NES-034		Lab ID: 92443340033	Collected: 08/27/19 07:21	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	28.0	ug/L	5.0	1		09/06/19 01:37	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 01:37	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Sample: NES-035		Lab ID: 92443340034	Collected: 08/27/19 07:22	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	25.9	ug/L	5.0	1		09/06/19 01:40	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 01:40	7439-92-1	

Sample: NES-036		Lab ID: 92443340035	Collected: 08/27/19 07:23	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	24.6	ug/L	5.0	1		09/06/19 01:51	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 01:51	7439-92-1	

Sample: NES-037		Lab ID: 92443340036	Collected: 08/27/19 07:24	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.0	ug/L	5.0	1		09/06/19 01:54	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 01:54	7439-92-1	

Sample: NES-038		Lab ID: 92443340037	Collected: 08/27/19 07:25	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	24.5	ug/L	5.0	1		09/06/19 01:58	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 01:58	7439-92-1	

Sample: NES-040		Lab ID: 92443340038	Collected: 08/27/19 07:29	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	20.3	ug/L	5.0	1		09/06/19 02:01	7440-50-8	
Lead	ND	ug/L	3.0	1		09/06/19 02:01	7439-92-1	

Sample: NES-042		Lab ID: 92443340039	Collected: 08/27/19 07:33	Received: 08/28/19 10:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	30.1	ug/L	5.0	1		09/06/19 02:05	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Sample: NES-042		Lab ID: 92443340039		Collected: 08/27/19 07:33		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/06/19 02:05	7439-92-1
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Sample: NES-043		Lab ID: 92443340040		Collected: 08/27/19 07:33		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	23.1	ug/L	5.0	1		09/06/19 02:15	7440-50-8
Lead	ND	ug/L	3.0	1		09/06/19 02:15	7439-92-1

Sample: NES-045		Lab ID: 92443340041		Collected: 08/27/19 07:37		Received: 08/28/19 10:30		Matrix: Drinking Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	41.6	ug/L	5.0	1		09/06/19 02:19	7440-50-8
Lead	ND	ug/L	3.0	1		09/06/19 02:19	7439-92-1

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

QC Batch:	495600	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443340001, 92443340002, 92443340003, 92443340004, 92443340005, 92443340006, 92443340007, 92443340008		

METHOD BLANK:	2669955	Matrix:	Water
Associated Lab Samples:	92443340001, 92443340002, 92443340003, 92443340004, 92443340005, 92443340006, 92443340007, 92443340008		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/04/19 02:37	
Lead	ug/L	ND	3.0	09/04/19 02:37	

LABORATORY CONTROL SAMPLE: 2669956

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	55.4	111	85-115	
Lead	ug/L	50	55.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2669957 2669958

Parameter	Units	92443109001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	0.021 mg/L	50	50	75.3	75.0	109	108	70-130	0	
Lead	ug/L	ND	50	50	52.6	51.5	105	103	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2669959 2669960

Parameter	Units	92442887001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	ND	50	50	56.7	56.6	107	107	70-130	0	
Lead	ug/L	ND	50	50	51.5	52.4	103	105	70-130	2	

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QUALITY CONTROL DATA

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

QC Batch:	495601	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443340009, 92443340010, 92443340011, 92443340012, 92443340013, 92443340014, 92443340015, 92443340016, 92443340017, 92443340018, 92443340019, 92443340020, 92443340021, 92443340022, 92443340023, 92443340024, 92443340025, 92443340026, 92443340027, 92443340028		

METHOD BLANK: 2669961

Matrix: Water

Associated Lab Samples: 92443340009, 92443340010, 92443340011, 92443340012, 92443340013, 92443340014, 92443340015, 92443340016, 92443340017, 92443340018, 92443340019, 92443340020, 92443340021, 92443340022, 92443340023, 92443340024, 92443340025, 92443340026, 92443340027, 92443340028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/04/19 13:27	
Lead	ug/L	ND	3.0	09/04/19 13:27	

LABORATORY CONTROL SAMPLE: 2669962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	51.2	102	85-115	
Lead	ug/L	50	48.0	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2669963 2669964

Parameter	Units	92443340009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	16.8	50	50	71.4	71.1	109	109	70-130	0	
Lead	ug/L	ND	50	50	51.5	51.3	102	102	70-130	0	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2669965 2669966

Parameter	Units	92443340019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	18.1	50	50	69.1	70.9	102	106	70-130	3	
Lead	ug/L	ND	50	50	50.7	50.7	101	101	70-130	0	

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QUALITY CONTROL DATA

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

QC Batch:	496336	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443340029, 92443340030, 92443340031, 92443340032, 92443340033, 92443340034, 92443340035, 92443340036, 92443340037, 92443340038, 92443340039, 92443340040, 92443340041		

METHOD BLANK:	2673222	Matrix:	Water
Associated Lab Samples:	92443340029, 92443340030, 92443340031, 92443340032, 92443340033, 92443340034, 92443340035, 92443340036, 92443340037, 92443340038, 92443340039, 92443340040, 92443340041		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/06/19 01:09	
Lead	ug/L	ND	3.0	09/06/19 01:09	

LABORATORY CONTROL SAMPLE: 2673223

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.6	99	85-115	
Lead	ug/L	50	49.0	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673224 2673225

Parameter	Units	92443340029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	22.8	50	50	76.3	78.0	107	111	70-130	2	
Lead	ug/L	ND	50	50	51.8	53.1	102	105	70-130	3	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673226 2673227

Parameter	Units	92443340039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	30.1	50	50	83.0	83.6	106	107	70-130	1	
Lead	ug/L	ND	50	50	51.0	51.9	102	103	70-130	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Lead and Copper - Northwood

Pace Project No.: 92443340

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: Lead and Copper - Northwood

Pace Project No.: 92443340

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92443340001	NES-000	EPA 200.8 Rev 5.4	495600		
92443340002	NES-000A	EPA 200.8 Rev 5.4	495600		
92443340003	NES-000B	EPA 200.8 Rev 5.4	495600		
92443340004	NES-001	EPA 200.8 Rev 5.4	495600		
92443340005	NES-002	EPA 200.8 Rev 5.4	495600		
92443340006	NES-005	EPA 200.8 Rev 5.4	495600		
92443340007	NES-006	EPA 200.8 Rev 5.4	495600		
92443340008	NES-007	EPA 200.8 Rev 5.4	495600		
92443340009	NES-008	EPA 200.8 Rev 5.4	495601		
92443340010	NES-009	EPA 200.8 Rev 5.4	495601		
92443340011	NES-010	EPA 200.8 Rev 5.4	495601		
92443340012	NES-011	EPA 200.8 Rev 5.4	495601		
92443340013	NES-012	EPA 200.8 Rev 5.4	495601		
92443340014	NES-013	EPA 200.8 Rev 5.4	495601		
92443340015	NES-014	EPA 200.8 Rev 5.4	495601		
92443340016	NES-015	EPA 200.8 Rev 5.4	495601		
92443340017	NES-016	EPA 200.8 Rev 5.4	495601		
92443340018	NES-018	EPA 200.8 Rev 5.4	495601		
92443340019	NES-019	EPA 200.8 Rev 5.4	495601		
92443340020	NES-020	EPA 200.8 Rev 5.4	495601		
92443340021	NES-021	EPA 200.8 Rev 5.4	495601		
92443340022	NES-023	EPA 200.8 Rev 5.4	495601		
92443340023	NES-024	EPA 200.8 Rev 5.4	495601		
92443340024	NES-025	EPA 200.8 Rev 5.4	495601		
92443340025	NES-026	EPA 200.8 Rev 5.4	495601		
92443340026	NES-027	EPA 200.8 Rev 5.4	495601		
92443340027	NES-028	EPA 200.8 Rev 5.4	495601		
92443340028	NES-029	EPA 200.8 Rev 5.4	495601		
92443340029	NES-030	EPA 200.8 Rev 5.4	496336		
92443340030	NES-031	EPA 200.8 Rev 5.4	496336		
92443340031	NES-032	EPA 200.8 Rev 5.4	496336		
92443340032	NES-033	EPA 200.8 Rev 5.4	496336		
92443340033	NES-034	EPA 200.8 Rev 5.4	496336		
92443340034	NES-035	EPA 200.8 Rev 5.4	496336		
92443340035	NES-036	EPA 200.8 Rev 5.4	496336		
92443340036	NES-037	EPA 200.8 Rev 5.4	496336		
92443340037	NES-038	EPA 200.8 Rev 5.4	496336		
92443340038	NES-040	EPA 200.8 Rev 5.4	496336		
92443340039	NES-042	EPA 200.8 Rev 5.4	496336		
92443340040	NES-043	EPA 200.8 Rev 5.4	496336		
92443340041	NES-045	EPA 200.8 Rev 5.4	496336		

REPORT OF LABORATORY ANALYSIS

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	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

Client Name:

Project #:

WO# : 92443340



92443340

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Date/Initials Person Examining Contents: EE 8/28/9

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Thermometer:

☐ IR Gun ID: 92T049

Type of Ice: ☐ Wet ☐ Blue ☒ None

Cooler Temp (°C): 22.6 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 22.6

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION


Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: TF

Date: 8/30

Project Manager SRF Review: TF

Date: 8/30

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.:	Issuing Authority:
	F-CAR-CS-033-Rev.06	Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO# : 92443340

PM: PTE

Due Date: 09/09/19


CLIENT: 92-ECS GBORO

	Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	V5GU-20 mL Scintillation Vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

W0# : 92443340

PM: PTE

Due Date: 09/09/19


CLIENT: 92-ECS GBORO

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
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	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

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Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project # **WO# : 92443340**

PM: PTE

Due Date: 09/09/19

CLIENT: 92-ECS GBCRO

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amiber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation Vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
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Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

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Project #

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
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The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information: Company: ECS Greensboro Address: 4811 Koger Blvd Greensboro, NC 27407 Email: Rairahamson@ECS14111.com Phone: _____ Fax: _____		Required Project Information: Report To: Abrahamson, Ryan Copy To: _____ Purchase Order #: _____ Project Name: Lead and Copper - Northwood Project #: 49-8287-B		Invoice Information: Attention: _____ Company Name: _____ Address: _____ Pace Quote: _____ Pace Project Manager: taylor.ezel@pacelabs.com Pace Profile #: 1834-5	
Regulatory Agency _____ State / Location NC					

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	PRESERVATIVES		Analyses Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
			START	END				DATE	TIME				DATE
1	Drinking Water	DW											
2	Waste Water	WW											
3	Product	P											
4	Soil/Solid	SL											
5	Oil	OL											
6	Sludge	SL											
7	Other	OT											
8	Tissue	TTS											
9													
10													
11													
12													

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
						TEMP in C	Received on
Kari Avery	8/26/19	10:30	Jameson Johnson	8/27/19	10:20		
Jameson Johnson	8/28/19	15:00	like good here	8/28/19	15:00		

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Jacob L. Fave SIGNATURE of SAMPLER: <i>Jacob L. Fave</i>		DATE Signed: 8/27/19
---	--	----------------------



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	ECS Greensboro	Report To:	Abrahamson, Ryan	Attention:	
Address:	4811 Koger Blvd	Copy To:		Company Name:	
Greensboro, NC 27407		Purchase Order #:		Address:	
Email:	R. Abrahamson@ECSInc.Hill.com	Project Name:	Lead and Copper - Air Phase	Pace Quote:	
Phone:		Project #:	49-8287-B	Pace Project Manager:	taylor.ezell@paceelabs.com
Fax:		Requested Due Date:		Pace Profile #:	1834-5
				State / Location	NC
				Regulatory Agency	

Page: 1 Of 1

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE		TIME		END	PRESERVATIVES										Analyses Test	Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
			Drinking Water	Water				Waste Water	Industrial	Surface	Oil		Wipe	Air	Other	Tissue	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3			Methanol	Other	Lead and Copper																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS	
Louis J. Arney		James J. Arney		8/23/19	6:30	James J. Arney		8/27/19	10:30	Sealed	
James J. Arney		James J. Arney		8/23/19	19:18	James J. Arney		8/27/19	15:48	Cooler	
										Custody	
										Received on	
										Ice	
										(Y/N)	
										Sealed	
										Cooler	
										(Y/N)	
										Samples	
										Inlet	
										(Y/N)	

SAMPLER NAME AND SIGNATURE		DATE SIGNED	
PRINT Name of SAMPLER: Jacob L. Fave		8/27/19	
SIGNATURE of SAMPLER: Jacob L. Fave			

CHAIN-OF-CUSTODY / Analytical request
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 Of 1

[illegible]

APPENDIX G

PILOT ELEMENTARY RESULTS

School Name: Pilot Elementary		Report Date (s): 08/29/19	
Date Test Conducted: 8/21/2019		Date Results Received: 08/29/19	
Number of Faucets Tested: 31 (all GCS identified faucets used for drinking/food preparation)			
Lead Results		Copper Results	
Results 15 ppb and above: 0		Results 1.3 ppm and above: 0	
Results 10 ppb to below 15 ppb: 0		Detectable results below 1.3 ppm: 30	
Detectable results below 10 ppb: 3		Results below detection level: 1	
Results below detection level: 28			
Number of Faucets Requiring Remedial Action: 0			
Daily School-Wide Flushing: <div style="margin-left: 100px;"> <input type="checkbox"/> Continue with protocol <input type="checkbox"/> Discontinue flushing protocol: mm/dd/yyyy <input checked="" type="checkbox"/> Other (Describe: Perform Periodic Flushing) </div>			
This is a summary report prepared by ECS. ECS suggests that the full report be referred to with regards to findings, recommendations, and technical limitations for this sampling event.			

Version _____
Date _____

<u>SAMPLE LOCATION</u> <u>CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
001		Kitchen	3 Department Sink (LH)	T&S	23	1
002		Kitchen	3 Department Sink (RH)	T&S	23	1
003		Kitchen	3 Department Sink (LH)	T&S	23	1
004		Kitchen	3 Department Sink (RH)	T&S	23	1
005						
006		Kitchen	Ice Maker	Manitowac	3	1
007		Hall at Room 106A	Water Cooler	Oasis	23	1
008	105		Drinking Station	Just	23	1
009		Hall at Room 304A	Water Cooler	Oasis	23	1
010	202		Drinking Station	Just	23	1
011	203		Drinking Station	Just	23	1
012	204		Drinking Station	Just	23	1
013	205		Drinking Station	Just	23	1
014	206		Drinking Station	Just	23	1
015	207		Drinking Station	Just	23	1
016	208		Drinking Station	Just	23	1
017	209		Drinking Station	Just	23	1
018	210		Drinking Station	Just	23	1
019	107		Drinking Station	Just	23	1
020		Hall at Room 114A	Water Cooler	Oasis	23	1
021		Hall at Room 114B	Water Cooler	Oasis	23	1
022	121		Drinking Station	Just	23	1
023		Hall at Room 503A	Water Cooler	Oasis	23	1
024		Hall at Room 126A	Water Cooler	Oasis	23	1
025		Hall at Room 126B	Water Cooler	Oasis	23	1
026		Hall at Room 605A	Water Cooler	Oasis	23	1
027		Hall at Room 405A	Water Cooler	Oasis	23	1
028		Mobile Unit 419	Water Cooler	Oasis	23	1
029		Mobile Unit 411	Water Cooler	Oasis	23	1
030		Mobile Unit 413	Water Cooler	Oasis	23	1
031		Mobile Unit 408	Water Cooler	H.Taylor	23	1
032		Hall at Room 106B	Water Cooler	Oasis	23	1
033	128		Drinking Station	Just	23	1

TOTAL NUMBER OF FIXTURES

32

August 29, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: LEAD AND COPPER PILOT ELEMENT
Pace Project No.: 92442346

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: LEAD AND COPPER PILOT ELEMENT

Pace Project No.: 92442346

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: LEAD AND COPPER PILOT ELEMMENT

Pace Project No.: 92442346

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92442346001	PE 001	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346002	PE 002	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346003	PE 003	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346004	PE 004	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346005	PE 006	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346006	PE 007	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346007	PE 008	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346008	PE 009	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346009	PE 010	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346010	PE 012	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346011	PE 014	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346012	PE 016	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346013	PE 018	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346014	PE 017	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346015	PE 015	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346016	PE 013	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346017	PE 011	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346018	PE 032	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346019	PE 019	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346020	PE 020	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346021	PE 021	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346022	PE 024	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346023	PE 022	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346024	PE 023	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346025	PE 027	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346026	PE 030	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346027	PE 029	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346028	PE 028	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346029	PE 025	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346030	PE 033	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442346031	PE 026	EPA 200.8 Rev 5.4	SER	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER PILOT ELEMMENT

Pace Project No.: 92442346

Sample: PE 001		Lab ID: 92442346001	Collected: 08/21/19 06:32	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	51.4	ug/L	5.0	1		08/28/19 20:30	7440-50-8	
Lead	3.2	ug/L	3.0	1		08/28/19 20:30	7439-92-1	

Sample: PE 002		Lab ID: 92442346002	Collected: 08/21/19 06:33	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	158	ug/L	5.0	1		08/28/19 20:33	7440-50-8	
Lead	5.1	ug/L	3.0	1		08/28/19 20:33	7439-92-1	

Sample: PE 003		Lab ID: 92442346003	Collected: 08/21/19 06:35	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	57.3	ug/L	5.0	1		08/28/19 20:36	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 20:36	7439-92-1	

Sample: PE 004		Lab ID: 92442346004	Collected: 08/21/19 06:36	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	65.4	ug/L	5.0	1		08/28/19 20:39	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 20:39	7439-92-1	

Sample: PE 006		Lab ID: 92442346005	Collected: 08/21/19 06:36	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	ND	ug/L	5.0	1		08/28/19 20:42	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 20:42	7439-92-1	

Sample: PE 007		Lab ID: 92442346006	Collected: 08/21/19 06:37	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	43.6	ug/L	5.0	1		08/28/19 20:50	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER PILOT ELEMENT

Pace Project No.: 92442346

Sample: PE 007		Lab ID: 92442346006	Collected: 08/21/19 06:37	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		08/28/19 20:50	7439-92-1
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Sample: PE 008		Lab ID: 92442346007	Collected: 08/21/19 06:38	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	47.7	ug/L	5.0	1		08/28/19 20:53	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 20:53	7439-92-1

Sample: PE 009		Lab ID: 92442346008	Collected: 08/21/19 06:40	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	148	ug/L	5.0	1		08/28/19 20:56	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 20:56	7439-92-1

Sample: PE 010		Lab ID: 92442346009	Collected: 08/21/19 06:42	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	46.4	ug/L	5.0	1		08/28/19 21:05	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 21:05	7439-92-1

Sample: PE 012		Lab ID: 92442346010	Collected: 08/21/19 06:43	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	44.9	ug/L	5.0	1		08/28/19 21:08	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 21:08	7439-92-1

Sample: PE 014		Lab ID: 92442346011	Collected: 08/21/19 06:44	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	45.5	ug/L	5.0	1		08/28/19 21:11	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 21:11	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER PILOT ELEMENT

Pace Project No.: 92442346

Sample: PE 016		Lab ID: 92442346012	Collected: 08/21/19 06:46	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	42.8	ug/L	5.0	1		08/28/19 21:14	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 21:14	7439-92-1	

Sample: PE 018		Lab ID: 92442346013	Collected: 08/21/19 06:47	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	46.1	ug/L	5.0	1		08/28/19 21:17	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 21:17	7439-92-1	

Sample: PE 017		Lab ID: 92442346014	Collected: 08/21/19 06:48	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	44.2	ug/L	5.0	1		08/28/19 21:25	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 21:25	7439-92-1	

Sample: PE 015		Lab ID: 92442346015	Collected: 08/21/19 06:50	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	40.7	ug/L	5.0	1		08/28/19 21:28	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 21:28	7439-92-1	

Sample: PE 013		Lab ID: 92442346016	Collected: 08/21/19 06:51	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	42.4	ug/L	5.0	1		08/28/19 21:31	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 21:31	7439-92-1	

Sample: PE 011		Lab ID: 92442346017	Collected: 08/21/19 06:52	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	46.8	ug/L	5.0	1		08/28/19 21:34	7440-50-8	
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ANALYTICAL RESULTS

Project: LEAD AND COPPER PILOT ELEMENT

Pace Project No.: 92442346

Sample: PE 011		Lab ID: 92442346017	Collected: 08/21/19 06:52	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		08/28/19 21:34	7439-92-1	
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Sample: PE 032		Lab ID: 92442346018	Collected: 08/21/19 06:53	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	72.1	ug/L	5.0	1		08/28/19 21:43	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 21:43	7439-92-1	

Sample: PE 019		Lab ID: 92442346019	Collected: 08/21/19 06:54	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	124	ug/L	5.0	1		08/28/19 21:51	7440-50-8	
Lead	5.0	ug/L	3.0	1		08/28/19 21:51	7439-92-1	

Sample: PE 020		Lab ID: 92442346020	Collected: 08/21/19 06:56	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	56.4	ug/L	5.0	1		08/28/19 22:00	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:00	7439-92-1	

Sample: PE 021		Lab ID: 92442346021	Collected: 08/21/19 06:56	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	72.2	ug/L	5.0	1		08/28/19 22:03	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:03	7439-92-1	

Sample: PE 024		Lab ID: 92442346022	Collected: 08/21/19 06:58	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	55.5	ug/L	5.0	1		08/28/19 22:06	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:06	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER PILOT ELEMENT

Pace Project No.: 92442346

Sample: PE 022		Lab ID: 92442346023	Collected: 08/21/19 06:59	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	52.8	ug/L	5.0	1		08/28/19 22:09	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:09	7439-92-1	

Sample: PE 023		Lab ID: 92442346024	Collected: 08/21/19 07:01	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	110	ug/L	5.0	1		08/28/19 22:12	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:12	7439-92-1	

Sample: PE 027		Lab ID: 92442346025	Collected: 08/21/19 07:03	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	56.3	ug/L	5.0	1		08/28/19 22:15	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:15	7439-92-1	

Sample: PE 030		Lab ID: 92442346026	Collected: 08/21/19 07:05	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	545	ug/L	50.0	10		08/28/19 23:33	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:18	7439-92-1	

Sample: PE 029		Lab ID: 92442346027	Collected: 08/21/19 07:06	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	43.1	ug/L	5.0	1		08/28/19 22:23	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:23	7439-92-1	

Sample: PE 028		Lab ID: 92442346028	Collected: 08/21/19 07:09	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	78.5	ug/L	5.0	1		08/28/19 22:26	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER PILOT ELEMMENT

Pace Project No.: 92442346

Sample: PE 028		Lab ID: 92442346028	Collected: 08/21/19 07:09	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		08/28/19 22:26	7439-92-1	
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Sample: PE 025		Lab ID: 92442346029	Collected: 08/21/19 07:11	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	55.4	ug/L	5.0	1		08/28/19 22:41	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:41	7439-92-1	

Sample: PE 033		Lab ID: 92442346030	Collected: 08/21/19 07:12	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	43.1	ug/L	5.0	1		08/28/19 22:44	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:44	7439-92-1	

Sample: PE 026		Lab ID: 92442346031	Collected: 08/21/19 07:14	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	121	ug/L	5.0	1		08/28/19 22:47	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 22:47	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER PILOT ELEMMENT

Pace Project No.: 92442346

QC Batch:	494791	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92442346001, 92442346002, 92442346003, 92442346004, 92442346005, 92442346006, 92442346007, 92442346008, 92442346009, 92442346010, 92442346011, 92442346012, 92442346013, 92442346014, 92442346015, 92442346016, 92442346017		

METHOD BLANK:	2666221	Matrix:	Water
Associated Lab Samples:	92442346001, 92442346002, 92442346003, 92442346004, 92442346005, 92442346006, 92442346007, 92442346008, 92442346009, 92442346010, 92442346011, 92442346012, 92442346013, 92442346014, 92442346015, 92442346016, 92442346017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/28/19 14:29	
Lead	ug/L	ND	3.0	08/28/19 14:29	

LABORATORY CONTROL SAMPLE: 2666222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.4	99	85-115	
Lead	ug/L	50	49.6	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:											
2666223				2666224							
			MS	MSD							
	92442342023		Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Copper	ug/L	44.1	50	50	92.4	91.8	97	95	70-130	1	
Lead	ug/L	ND	50	50	48.9	47.9	97	95	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:											
2666225				2666226							
		92442346008	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Copper	ug/L	148	50	50	203	199	111	102	70-130	2	
Lead	ug/L	ND	50	50	49.5	48.5	99	97	70-130	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER PILOT ELEMMENT

Pace Project No.: 92442346

QC Batch:	494799	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92442346018, 92442346019, 92442346020, 92442346021, 92442346022, 92442346023, 92442346024, 92442346025, 92442346026, 92442346027, 92442346028, 92442346029, 92442346030, 92442346031		

METHOD BLANK: 2666264 Matrix: Water
Associated Lab Samples: 92442346018, 92442346019, 92442346020, 92442346021, 92442346022, 92442346023, 92442346024, 92442346025, 92442346026, 92442346027, 92442346028, 92442346029, 92442346030, 92442346031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/28/19 21:37	
Lead	ug/L	ND	3.0	08/28/19 21:37	

LABORATORY CONTROL SAMPLE: 2666265

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.7	99	85-115	
Lead	ug/L	50	49.2	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666266 2666267

Parameter	Units	92442346018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	72.1	50	50	119	119	94	94	70-130	0	
Lead	ug/L	ND	50	50	48.9	49.3	98	98	70-130	1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666268 2666269

Parameter	Units	92442346028 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	78.5	50	50	128	127	99	97	70-130	1	
Lead	ug/L	ND	50	50	50.9	49.3	102	99	70-130	3	

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QUALIFIERS

Project: LEAD AND COPPER PILOT ELEMMENT
Pace Project No.: 92442346

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LEAD AND COPPER PILOT ELEMMENT

Pace Project No.: 92442346

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92442346001	PE 001	EPA 200.8 Rev 5.4	494791		
92442346002	PE 002	EPA 200.8 Rev 5.4	494791		
92442346003	PE 003	EPA 200.8 Rev 5.4	494791		
92442346004	PE 004	EPA 200.8 Rev 5.4	494791		
92442346005	PE 006	EPA 200.8 Rev 5.4	494791		
92442346006	PE 007	EPA 200.8 Rev 5.4	494791		
92442346007	PE 008	EPA 200.8 Rev 5.4	494791		
92442346008	PE 009	EPA 200.8 Rev 5.4	494791		
92442346009	PE 010	EPA 200.8 Rev 5.4	494791		
92442346010	PE 012	EPA 200.8 Rev 5.4	494791		
92442346011	PE 014	EPA 200.8 Rev 5.4	494791		
92442346012	PE 016	EPA 200.8 Rev 5.4	494791		
92442346013	PE 018	EPA 200.8 Rev 5.4	494791		
92442346014	PE 017	EPA 200.8 Rev 5.4	494791		
92442346015	PE 015	EPA 200.8 Rev 5.4	494791		
92442346016	PE 013	EPA 200.8 Rev 5.4	494791		
92442346017	PE 011	EPA 200.8 Rev 5.4	494791		
92442346018	PE 032	EPA 200.8 Rev 5.4	494799		
92442346019	PE 019	EPA 200.8 Rev 5.4	494799		
92442346020	PE 020	EPA 200.8 Rev 5.4	494799		
92442346021	PE 021	EPA 200.8 Rev 5.4	494799		
92442346022	PE 024	EPA 200.8 Rev 5.4	494799		
92442346023	PE 022	EPA 200.8 Rev 5.4	494799		
92442346024	PE 023	EPA 200.8 Rev 5.4	494799		
92442346025	PE 027	EPA 200.8 Rev 5.4	494799		
92442346026	PE 030	EPA 200.8 Rev 5.4	494799		
92442346027	PE 029	EPA 200.8 Rev 5.4	494799		
92442346028	PE 028	EPA 200.8 Rev 5.4	494799		
92442346029	PE 025	EPA 200.8 Rev 5.4	494799		
92442346030	PE 033	EPA 200.8 Rev 5.4	494799		
92442346031	PE 026	EPA 200.8 Rev 5.4	494799		

REPORT OF LABORATORY ANALYSIS

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Face Analytical

Sample Location upon receipt	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office
------------------------------	-----------------------------------	--

Laboratory receiving samples:

☐ Asheville ☐ Eden ☐ Greenwood ☒ Huntersville ☐ Raleigh ☐ Mechanicsville

Sample Condition Upon Receipt

Client Name: FCS Green Bay

Project MO#: 92442346

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client



92442346

Custody Seal Present? ☐ Yes ☐ No ☐ Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: PM8/2-11/19

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other ☐ Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ In Gun ID: 92T048

Cooler Temp (°C): 25.1 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C ☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

Chain of Custody Present?	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Chain of Custody Present?	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Includes Date/Time/ID/Analysis Matrix:											
Headspace in VOA Vials (>5-6mm)?											
Trip Blank Present?											
Trip Blank Custody Seals Present?											

COMMENTS/SAMPLE DISCREPANCY Field Data Required? ☐ Yes ☐ No

Lot ID of pit containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Project Manager SCURF Review:

Project Manager SRF Review:

Date:

Date:

Date/Time:

8/22
8/22

12
12

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
 Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, L/Hg
 **Bottom half of box is to list number of bottle

Project # **W0#: 92442346**
 PM: PTE
 Due Date: 08/30/19
 CLIENT: 92-ECS GBORO

Item#	1	2	3	4	5	6	7	8	9	10	11	12
BP4U-125 mL Plastic Unpreserved (N/A) (C-)												
BP3U-250 mL Plastic Unpreserved (N/A)												
BP2U-500 mL Plastic Unpreserved (N/A)												
BP1U-1 liter Plastic Unpreserved (N/A)												
BP4S-125 mL Plastic H2SO4 (pH < 2) (C-)												
BP3N-250 mL plastic HNO3 (pH < 2)												
BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)												
BP4C-125 mL Plastic NaOH (pH > 12) (C-)												
WGfU-Wide-mouthed Glass Jar Unpreserved												
AG1U-1 liter Amber Unpreserved (N/A) (C-)												
AG1H-1 liter Amber HCl (pH < 2)												
AG3U-250 mL Amber Unpreserved (N/A) (C-)												
AG1S-1 liter Amber H2SO4 (pH < 2)												
AG3S-250 mL Amber H2SO4 (pH < 2)												
AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(C-)												
DG9H-40 mL VOA HCl (N/A)												
VG9T-40 mL VOA Na2S2O3 (N/A)												
VG9U-40 mL VOA Unp (N/A)												
DG9T-40 mL VOA H3PO4 (N/A)												
VOAK (6 vials per kit)-5035 kit (N/A)												
V/GK (3 vials per kit)-VPH/Gas kit (N/A)												
SP5T-125 mL Sterile Plastic (N/A - lab)												
SP2T-250 mL Sterile Plastic (N/A - lab)												
BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)												
AG0U-100 mL Amber Unpreserved vials (N/A)												
V5GU-20 mL Scintillation vials (N/A)												
DG9U-40 mL Amber Unpreserved vials (N/A)												

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

pH Adjustment Log for Preserved Samples

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Due Date: 08/30/19

MO#: 92442346

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., Out of hold, incorrect preservative, out of temp, incorrect containers.

M0#: 92442346

Project #

[illegible]

pH Adjustment Log for Preserved Samples

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., Out of hold, incorrect preservative, out of temp, incorrect containers.

Section A

Required Client Information:

Company: ECS Greensboro
Address: 4811 Kopper Blvd
Greensboro, NC 27407
Email: Rachaelson@ecs-limited.com
Phone: Fax:
Requested Due Date:

Section B

Required Project Information:

Report To: Abrahamson, Ryan
Copy To:
Purchase Order #:
Project Name: Lead and Copper
Project #: 8287-13

Section C

Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: taylor.ezell@pacelabs.com
Pace Profile #: 1834-5

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Regulatory Agency

State / Location

NC

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -,) Sample IDs must be unique	MATRIX Drinking Water Water Waste Water Product Soil/Sed Oil Wine Air Other Tissue	CODE DW WT WW P SL OL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analyses Test	Y/N	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	NC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
						DATE	TIME	DATE	TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other			Lead and Copper																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

ACCEPTED BY / AFFILIATION

SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

Chad Hollandsworth

DATE Signed: 8/21/19

TEMP in C
Received on Ice (Y/N)
Custody Sealed Cooler (Y/N)
Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All

Section C

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	ECS Greensboro	Report To:	Abrahamson, Ryan	Attention:	
Address:	4811 Koger Blvd Greensboro, NC 27407	Copy To:		Company Name:	
Email:	kelley.hanson@ecs-inc.com			Address:	
Phone:		Purchase Order #:		Pace Quote:	
Requested Due Date:		Project Name:	Lead and Copper	Pace Quote:	

[illegible]

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be filled out.

Required Client Information:		Section B		Section C	
Company:	ECS Greensboro	Report To:	Abrahamson, Ryan	Attention:	
Address:	4811 Koger Blvd Greensboro, NC 27407	Copy To:		Company Name:	
Email:	Rick.Abrahamson@ECSInc.net (cc)			Address:	
Phone:		Purchase Order #:		Invoice Information:	
Requested Due Date:	Fax	Project Name:	Lead and Copper	Project #:	5282-13
		Project Manager:	taylor.azell@pacelabs.com		
			<div> <div>Page : 3 of 3</div> <div>Regulatory Agency</div> </div>		

[illegible]

AFFILIATION	DATE	TIME	ACCEPTED BY/AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	8/1/17	10:00	ACE S PACE	8/21	1050	
	8/21	1600	ACE	8/11/19	1400	25.1 °C
SAMPLER NAME AND SIGNATURE						
PRINT Name of SAMPLER: Chad Henderson						
SIGNATURE of SAMPLER: [Signature]						
DATE Signed: 8/12/11/17						
TEMP IN C						
Received on ice (Y/N)						
Custody Sealed Cooler (Y/N)						
Samples Intact (Y/N)						

APPENDIX H
SHADYBROOK ELEMENTARY RESULTS

School Name: Shadybrook Elementary		Report Date(s): 12/16/2019	
Date Test Conducted: 8/23/2019		Date Results Received: 12/6/2019	
Number of Faucets Tested: 26			
Lead Results		Copper Results	
Results 15 ppb and above:	4	Results 1.3 ppm and above:	0
Results 10 ppb to below 15 ppb:	0	Detectable results below 1.3 ppm:	25
Detectable results below 10 ppb:	1	Results below detection level:	1
Results below detection level:	21		
Number of Faucets Requiring Remedial Action: 4			
Location of Faucet		Action Taken	Date:
Sample ID: SBE-001, SBE-003, SBE-004, SBE-005		<input checked="" type="checkbox"/> Temporarily taken out of service:	8/29/2019
Location Description:		<input type="checkbox"/> Permanently taken out of service:	
SBE-001: sink in kitchen		<input checked="" type="checkbox"/> Flush tested:	8/30/2019 & 9/12/2019
SBE-003: sink in kitchen		Flush test result: no exceedances	
SBE-004: sink in kitchen		<input checked="" type="checkbox"/> Replaced:	9/4/2019, 9/11/2019
SBE-005: sink in kitchen		<input checked="" type="checkbox"/> Retest:	9/5/2019 & 9/12/2019
		Retest result:	
		SBE-001: lead exceedances	
		SBE-002, SBE-003, SBE-004: no exceedances	
		<input checked="" type="checkbox"/> Retest:	11/20/2019
		Retest result: no exceedances	
		Other: _____	
		<input checked="" type="checkbox"/> Placed back in service on:	9/11/2019 & 12/12/2019
Daily School-Wide Flushing:			
<input type="checkbox"/> Continue with protocol <input checked="" type="checkbox"/> Discontinue flushing protocol (date): 12/16/19 Note: Kitchen sinks 003, 004, and 005 were replaced 9/4/19, retested 9/5/19, and put back in service 9/11/19. Kitchen sink 001 was replaced 9/4/19, retested 9/5/19, replaced 9/11/19, retested 9/12/19 and 11/20/19, and put back in service 12/12/19.			
This is a summary report prepared by Hart & Hickman, PC (H&H). H&H suggests that the full report be referred to with regard to findings, recommendations, and technical limitations for this sampling event.			

SAMPLE LOCATION CODE	ROOM	LOCATION	FIXTURE TYPE	BRAND	AGE	COUNT
001		Kitchen	3 Department Sink (LH)	T&S	20	1
002		Kitchen	3 Department Sink (Center)	T&S	20	1
003		Kitchen	3 Department Sink (RH)	T&S	20	1
004		Kitchen	2 Department Sink (LH)	T&S	20	1
005		Kitchen	2 Department Sink (RH)	T&S	20	1
006						
007						
008		Kitchen	Ice Maker	Manitowac	10	1
009		Cafetorium	Water Cooler (LH)	H.Taylor	30+	1
010		Cafetorium	Water Cooler (RH)	H.Taylor	30+	1
011		Gym Hall	Water Cooler (LH)	H.Taylor	30+	1
012		Gym Hall	Water Cooler (RH)	H.Taylor	30	1
013		Hall at Girls' Bathroom	Water Cooler (LH)	H.Taylor	20	1
014		Hall at Girls' Bathroom	Water Cooler (RH)	H.Taylor	20	1
015		Hall at Boys' Bathroom	Water Cooler (LH)	H.Taylor	30+	1
016		Hall at Boys' Bathroom	Water Cooler (RH)	H.Taylor	30+	1
017		Hall at Restroom	Water Cooler (LH)	H.Taylor	30+	1
018		Hall at Restroom	Water Cooler (RH)	H.Taylor	30+	1
019		Hall in Teacher's Lounge	Water Cooler	H.Taylor	30+	1
020						
021	LC-0		Water Cooler (LH)	Oasis	15	1
022	LC-0		Water Cooler (RH)	Oasis	15	1
023	LC-2		Water Cooler	Elkay	15	1
024	LC-3		Water Cooler	H.Taylor	15	1
025	LC-4		Water Cooler	H.Taylor	15	1
026	LC-5		Water Cooler	Oasis	20	1
027	LC-8		Water Cooler (LH)	Oasis	10	1
028	LC-8		Water Cooler (RH)	Oasis	10	1
029	LC-7		Water Cooler	Oasis	10	1

TOTAL NUMBER OF FIXTURES

26

August 29, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: LEAD AND COPPER
Pace Project No.: 92442708

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LEAD AND COPPER

Pace Project No.: 92442708

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: LEAD AND COPPER

Pace Project No.: 92442708

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92442708001	SBE 001	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708002	SBE 002	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708003	SBE 003	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708004	SBE 004	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708005	SBE 005	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708006	SBE 008	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708007	SBE 009	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708008	SBE 010	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708009	SBE 011	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708010	SBE 012	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708011	SBE 013	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708012	SBE 014	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708013	SBE 015	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708014	SBE 016	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708015	SBE 019	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708016	SBE 017	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708017	SBE 018	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708018	SBE 021	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708019	SBE 022	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708020	SBE 023	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708021	SBE 024	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708022	SBE 027	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708023	SBE 028	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708024	SBE 029	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708025	SBE 025	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92442708026	SBE 026	EPA 200.8 Rev 5.4	JOR	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER

Pace Project No.: 92442708

Sample: SBE 001		Lab ID: 92442708001	Collected: 08/23/19 06:30	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	191	ug/L	5.0	1		08/29/19 01:41	7440-50-8	
Lead	151	ug/L	3.0	1		08/29/19 01:41	7439-92-1	

Sample: SBE 002		Lab ID: 92442708002	Collected: 08/23/19 06:31	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	104	ug/L	5.0	1		08/29/19 01:43	7440-50-8	
Lead	6.6	ug/L	3.0	1		08/29/19 01:43	7439-92-1	

Sample: SBE 003		Lab ID: 92442708003	Collected: 08/23/19 06:32	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	254	ug/L	5.0	1		08/29/19 01:46	7440-50-8	
Lead	67.7	ug/L	3.0	1		08/29/19 01:46	7439-92-1	

Sample: SBE 004		Lab ID: 92442708004	Collected: 08/23/19 06:33	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	432	ug/L	5.0	1		08/29/19 01:49	7440-50-8	
Lead	24.6	ug/L	3.0	1		08/29/19 01:49	7439-92-1	

Sample: SBE 005		Lab ID: 92442708005		Collected: 08/23/19 06:33	Received: 08/23/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	237	ug/L	5.0	1		08/29/19 01:52	7440-50-8	
Lead	26.6	ug/L	3.0	1		08/29/19 01:52	7439-92-1	

Sample: SBE 008		Lab ID: 92442708006	Collected: 08/23/19 06:34	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	ND	ug/L	5.0	1		08/29/19 01:55	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER

Pace Project No.: 92442708

Sample: SBE 008		Lab ID: 92442708006		Collected: 08/23/19 06:34	Received: 08/23/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1	08/29/19 01:55	7439-92-1
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Sample: SBE 009		Lab ID: 92442708007		Collected: 08/23/19 06:37	Received: 08/23/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	33.0	ug/L	5.0	1	08/29/19 01:58	7440-50-8
Lead	ND	ug/L	3.0	1	08/29/19 01:58	7439-92-1

Sample: SBE 010		Lab ID: 92442708008		Collected: 08/23/19 06:37	Received: 08/23/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	49.1	ug/L	5.0	1	08/29/19 02:53	7440-50-8
Lead	ND	ug/L	3.0	1	08/29/19 02:53	7439-92-1

Sample: SBE 011		Lab ID: 92442708009	Collected: 08/23/19 06:38	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	24.1	ug/L	5.0	1	08/29/19 03:02	7440-50-8
Lead	ND	ug/L	3.0	1	08/29/19 03:02	7439-92-1

Sample: SBE 012		Lab ID: 92442708010		Collected: 08/23/19 06:38	Received: 08/23/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	22.3	ug/L	5.0	1	08/29/19 03:05	7440-50-8
Lead	ND	ug/L	3.0	1	08/29/19 03:05	7439-92-1

Sample: SBE 013		Lab ID: 92442708011	Collected: 08/23/19 06:41	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	24.4	ug/L	5.0	1	08/29/19 03:08	7440-50-8
Lead	ND	ug/L	3.0	1	08/29/19 03:08	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER

Pace Project No.: 92442708

Sample: SBE 014		Lab ID: 92442708012	Collected: 08/23/19 06:42	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	18.9	ug/L	5.0	1		08/29/19 03:11	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:11	7439-92-1	

Sample: SBE 015		Lab ID: 92442708013	Collected: 08/23/19 06:43	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	27.7	ug/L	5.0	1		08/29/19 03:14	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:14	7439-92-1	

Sample: SBE 016		Lab ID: 92442708014	Collected: 08/23/19 06:44	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	24.3	ug/L	5.0	1		08/29/19 03:17	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:17	7439-92-1	

Sample: SBE 019		Lab ID: 92442708015	Collected: 08/23/19 06:46	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	154	ug/L	5.0	1		08/29/19 03:26	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:26	7439-92-1	

Sample: SBE 017		Lab ID: 92442708016	Collected: 08/23/19 06:47	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	21.9	ug/L	5.0	1		08/29/19 03:28	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:28	7439-92-1	

Sample: SBE 018		Lab ID: 92442708017	Collected: 08/23/19 06:48	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	20.4	ug/L	5.0	1		08/29/19 03:31	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER

Pace Project No.: 92442708

Sample: SBE 018		Lab ID: 92442708017	Collected: 08/23/19 06:48	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		08/29/19 03:31	7439-92-1	
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Sample: SBE 021		Lab ID: 92442708018	Collected: 08/23/19 06:51	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	17.1	ug/L	5.0	1		08/29/19 03:34	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:34	7439-92-1	

Sample: SBE 022		Lab ID: 92442708019	Collected: 08/23/19 06:52	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	18.9	ug/L	5.0	1		08/29/19 03:43	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:43	7439-92-1	

Sample: SBE 023		Lab ID: 92442708020	Collected: 08/23/19 06:54	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	103	ug/L	5.0	1		08/29/19 03:46	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:46	7439-92-1	

Sample: SBE 024		Lab ID: 92442708021	Collected: 08/23/19 06:56	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	33.8	ug/L	5.0	1		08/29/19 03:49	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:49	7439-92-1	

Sample: SBE 027		Lab ID: 92442708022	Collected: 08/23/19 07:00	Received: 08/23/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	23.4	ug/L	5.0	1		08/29/19 03:52	7440-50-8	
Lead	ND	ug/L	3.0	1		08/29/19 03:52	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER

Pace Project No.: 92442708

Sample: SBE 028		Lab ID: 92442708023		Collected: 08/23/19 07:00		Received: 08/23/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	20.8	ug/L	5.0	1		08/29/19 04:01	7440-50-8		
Lead	ND	ug/L	3.0	1		08/29/19 04:01	7439-92-1		

Sample: SBE 029		Lab ID: 92442708024		Collected: 08/23/19 07:03		Received: 08/23/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	17.4	ug/L	5.0	1		08/29/19 04:03	7440-50-8		
Lead	ND	ug/L	3.0	1		08/29/19 04:03	7439-92-1		

Sample: SBE 025		Lab ID: 92442708025		Collected: 08/23/19 07:06		Received: 08/23/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	22.0	ug/L	5.0	1		08/29/19 04:06	7440-50-8		
Lead	ND	ug/L	3.0	1		08/29/19 04:06	7439-92-1		

Sample: SBE 026		Lab ID: 92442708026		Collected: 08/23/19 07:08		Received: 08/23/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	22.2	ug/L	5.0	1		08/29/19 04:09	7440-50-8		
Lead	ND	ug/L	3.0	1		08/29/19 04:09	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER

Pace Project No.: 92442708

QC Batch: 494800 Analysis Method: EPA 200.8 Rev 5.4
QC Batch Method: EPA 200.8 Rev 5.4 Analysis Description: 200.8 MET Drinking Water, No Prep
Associated Lab Samples: 92442708001, 92442708002, 92442708003, 92442708004, 92442708005, 92442708006, 92442708007

METHOD BLANK: 2666270 Matrix: Water
Associated Lab Samples: 92442708001, 92442708002, 92442708003, 92442708004, 92442708005, 92442708006, 92442708007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/29/19 00:34	
Lead	ug/L	ND	3.0	08/29/19 00:34	

LABORATORY CONTROL SAMPLE: 2666271

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	46.3	93	85-115	
Lead	ug/L	50	45.9	92	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666272 2666273

Parameter	Units	92442349007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	79.2	50	50	124	127	90	95	70-130	2	
Lead	ug/L	ND	50	50	46.1	47.2	90	92	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666274 2666275

Parameter	Units	92442349017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	64.0	50	50	109	107	89	87	70-130	1	
Lead	ug/L	ND	50	50	46.1	45.2	92	90	70-130	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER

Pace Project No.: 92442708

QC Batch:	494801	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92442708008, 92442708009, 92442708010, 92442708011, 92442708012, 92442708013, 92442708014, 92442708015, 92442708016, 92442708017, 92442708018, 92442708019, 92442708020, 92442708021, 92442708022, 92442708023, 92442708024, 92442708025, 92442708026		

METHOD BLANK: 2666276

Matrix: Water

Associated Lab Samples: 92442708008, 92442708009, 92442708010, 92442708011, 92442708012, 92442708013, 92442708014, 92442708015, 92442708016, 92442708017, 92442708018, 92442708019, 92442708020, 92442708021, 92442708022, 92442708023, 92442708024, 92442708025, 92442708026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/29/19 02:42	
Lead	ug/L	ND	3.0	08/29/19 02:42	

LABORATORY CONTROL SAMPLE: 2666277

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	46.6	93	85-115	
Lead	ug/L	50	46.7	93	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666278 2666279

Parameter	Units	92442708008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	49.1	50	50	95.3	95.5	92	93	70-130	0	
Lead	ug/L	ND	50	50	47.4	47.6	94	94	70-130	0	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666280 2666281

Parameter	Units	92442708018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	17.1	50	50	65.7	63.3	97	92	70-130	4	
Lead	ug/L	ND	50	50	48.1	46.3	96	92	70-130	4	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: LEAD AND COPPER

Pace Project No.: 92442708

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

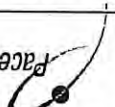
Project: LEAD AND COPPER

Pace Project No.: 92442708

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92442708001	SBE 001	EPA 200.8 Rev 5.4	494800		
92442708002	SBE 002	EPA 200.8 Rev 5.4	494800		
92442708003	SBE 003	EPA 200.8 Rev 5.4	494800		
92442708004	SBE 004	EPA 200.8 Rev 5.4	494800		
92442708005	SBE 005	EPA 200.8 Rev 5.4	494800		
92442708006	SBE 008	EPA 200.8 Rev 5.4	494800		
92442708007	SBE 009	EPA 200.8 Rev 5.4	494800		
92442708008	SBE 010	EPA 200.8 Rev 5.4	494801		
92442708009	SBE 011	EPA 200.8 Rev 5.4	494801		
92442708010	SBE 012	EPA 200.8 Rev 5.4	494801		
92442708011	SBE 013	EPA 200.8 Rev 5.4	494801		
92442708012	SBE 014	EPA 200.8 Rev 5.4	494801		
92442708013	SBE 015	EPA 200.8 Rev 5.4	494801		
92442708014	SBE 016	EPA 200.8 Rev 5.4	494801		
92442708015	SBE 019	EPA 200.8 Rev 5.4	494801		
92442708016	SBE 017	EPA 200.8 Rev 5.4	494801		
92442708017	SBE 018	EPA 200.8 Rev 5.4	494801		
92442708018	SBE 021	EPA 200.8 Rev 5.4	494801		
92442708019	SBE 022	EPA 200.8 Rev 5.4	494801		
92442708020	SBE 023	EPA 200.8 Rev 5.4	494801		
92442708021	SBE 024	EPA 200.8 Rev 5.4	494801		
92442708022	SBE 027	EPA 200.8 Rev 5.4	494801		
92442708023	SBE 028	EPA 200.8 Rev 5.4	494801		
92442708024	SBE 029	EPA 200.8 Rev 5.4	494801		
92442708025	SBE 025	EPA 200.8 Rev 5.4	494801		
92442708026	SBE 026	EPA 200.8 Rev 5.4	494801		

REPORT OF LABORATORY ANALYSIS

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	Document Name: Sample Condition Upon Receipt (SCUR)	Document No.: F-CAR-CS-033-Rev.06
	Document Revised: February 7, 2018 Page 1 of 2 Issuing Authority: Pace Carolinas Quality Office	

Laboratory receiving samples:

☐ Asheville ☐ Eden ☐ Greenwood ☒ Huntersville ☐ Raleigh ☐ Mechanicsville

Sample Condition
Upon Receipt

Client Name:

ECs Greenway
Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Other: _____

Courier: ☐ Commercial ☐ Pace ☐ Fed Ex ☐ USPS ☐ Client ☐ Other: _____

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Date/Initials Person Examining Contents: MA 8/23/19

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other ☐ None
Thermometer: ☐ IR Gun ID: 921048 02/04/19 PM 8:23

Cooler Temp (°C): 12.5 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 12.5
Temp should be above freezing to 6°C ☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil ☒ N/A, water sample ☐ Yes ☒ No
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Dissolved analysis: Samples Field Filtered?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
-Includes Date/Time/ID/Analysis Matrix:	<u>MA</u>	11.
Headspace in VOA Vials (>5-6mm)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Trip Blank Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☒ No

Lot ID of split containers:


CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review: 13
Project Manager SRF Review: 13

Date: 8/23
Date: 8/23

	Document Name:	Document No.:	Issuing Authority:
	Sample Condition Upon Receipt (SCUR)	F-CAR-CS-033-Rev.06	Pace Carolinas Quality Office
Document Revised: February 7, 2018		Page 1 of 2	

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation

samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRB/8015 (water), DOC, LTHg

**Bottom half of box is to list number of bottle

Project #

W0#: 92442708

PM: PTE

Due Date: 09/04/19

CLIENT: 92-ECS-GB0R0

Item#	1	2	3	4	5	6	7	8	9	10	11	12
BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)												
BP3U-250 mL Plastic Unpreserved (N/A)												
BP2U-500 mL Plastic Unpreserved (N/A)												
BP1U-1 liter Plastic Unpreserved (N/A)												
BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)												
BP3N-250 mL plastic HNO3 (pH < 2)												
BP4Z-125 mL Plastic ZN Acetate & NaOH (-9)												
BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)												
WGFLU-Wide-mouthed Glass jar Unpreserved												
AG1U-1 liter Amber Unpreserved (N/A) (Cl-)												
AG1H-1 liter Amber HCl (pH < 2)												
AG3U-250 mL Amber Unpreserved (N/A) (Cl-)												
AG1S-1 liter Amber H2SO4 (pH < 2)												
AG3S-250 mL Amber H2SO4 (pH < 2)												
AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)												
DG9H-40 mL VOA HCl (N/A)												
VG9T-40 mL VOA Na2S2O3 (N/A)												
VG9U-40 mL VOA Unp (N/A)												
DG9P-40 mL VOA H3PO4 (N/A)												
VOAK (6 vials per kit)-5035 kit (N/A)												
V/GK (3 vials per kit)-VPH/Gas kit (N/A)												
SP5T-125 mL Sterile Plastic (N/A - lab)												
SP2T-250 mL Sterile Plastic (N/A - lab)												
BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)												
AG0U-100 mL Amber Unpreserved vials (N/A)												
V5GU-20 mL Scintillation vials (N/A)												
DG9U-40 mL Amber Unpreserved vials (N/A)												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

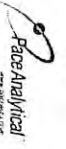
Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

****Bottom half of box is to list number of bottle**

pH Adjustment Log for Preserved Samples

Out of hold, incorrect preservative, out of temp, incorrect containers.

Page : 4 of 3



CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: ECS Greensboro
Address: 4811 Koger Blvd
Greensboro, NC 27407
Email: Rachaela.mason@ecsllm.com
Phone: 336.251.1111 Fax: 336.251.1111
Requested Due Date: 8/28/14

Section B

Required Project Information:

Report To: Abrahamson, Ryan
Copy To: Abrahamson, Ryan
Purchase Order #: 57407600
Project Name: Lead and Copper
Project #: 8287-B

Section C

Invoice Information:

Attention: Abrahamson, Ryan
Company Name: ECS
Address: 4811 Koger Blvd
City: Greensboro, NC 27407
Phone: 336.251.1111
Fax: 336.251.1111
Project Manager: taylor.ezell@paceanalytical.com
Pace Profile #: 1834-5

Page: 3 of 3

Regulatory Agency: NC
State / Location: NC

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique	MATRIX	CODE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyses Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	SAMPLE CONDITIONS				
				START	END			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol				Other	Lead and Copper	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1	SBE 025	Drinking Water	DW																			
2	SBE 026	Water	WT			8/23/14 7:06																
3		Waste Water	WW																			
4		Product	P																			
5		Soil/Solid	SL																			
6		Oil	OL																			
7		Wipe	WP																			
8		Air	AR																			
9		Other	OT																			
10		Tissue	TS																			
11																						
12																						
ADDITIONAL COMMENTS				RELINQUISHED BY / AFFILIATION				DATE		TIME		ACCEPTED BY / AFFILIATION				DATE		TIME		SAMPLE CONDITIONS		
				<u>Chad Taylor</u>				<u>8/23/14</u>		<u>12:40</u>		<u>Chad Taylor</u>				<u>8/23/14</u>		<u>12:40</u>		<u>Y</u>		
				<u>Chad Taylor</u>				<u>8/23/14</u>		<u>12:40</u>		<u>Chad Taylor</u>				<u>8/23/14</u>		<u>12:40</u>		<u>Y</u>		

SAMPLER NAME AND SIGNATURE: Chad Taylor
PRINT Name of SAMPLER: Chad Taylor
SIGNATURE of SAMPLER: Chad Taylor
DATE Signed: 8/23/14
TEMP in C: 25
Received on Ice (Y/N): Y
Custody Sealed Cooler (Y/N): Y
Samples Intact (Y/N): Y

September 04, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: Lead and Copper Shadybrook
Pace Project No.: 92443682

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 30, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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CERTIFICATIONS

Project: Lead and Copper Shadybrook

Pace Project No.: 92443682

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Lead and Copper Shadybrook

Pace Project No.: 92443682

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443682001	SBE 001-R1	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443682002	SBE 003-R1	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443682003	SBE 004-R1	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92443682004	SBE 005-R1	EPA 200.8 Rev 5.4	JOR	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper Shadybrook

Pace Project No.: 92443682

Sample: SBE 001-R1		Lab ID: 92443682001	Collected: 08/30/19 06:25	Received: 08/30/19 13:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	11.1	ug/L	5.0	1		09/04/19 02:24	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 02:24	7439-92-1	

Sample: SBE 003-R1		Lab ID: 92443682002	Collected: 08/30/19 06:30	Received: 08/30/19 13:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	11.6	ug/L	5.0	1		09/04/19 02:31	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 02:31	7439-92-1	

Sample: SBE 004-R1		Lab ID: 92443682003	Collected: 08/30/19 06:31	Received: 08/30/19 13:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	8.8	ug/L	5.0	1		09/04/19 02:33	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 02:33	7439-92-1	

Sample: SBE 005-R1		Lab ID: 92443682004	Collected: 08/30/19 06:32	Received: 08/30/19 13:30	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	5.3	ug/L	5.0	1		09/04/19 02:35	7440-50-8	
Lead	ND	ug/L	3.0	1		09/04/19 02:35	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper Shadybrook

Pace Project No.: 92443682

QC Batch:	495786	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443682001, 92443682002, 92443682003, 92443682004		

METHOD BLANK:	2670933	Matrix:	Water
Associated Lab Samples:	92443682001, 92443682002, 92443682003, 92443682004		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/04/19 02:20	
Lead	ug/L	ND	3.0	09/04/19 02:20	

LABORATORY CONTROL SAMPLE: 2670934

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	53.4	107	85-115	
Lead	ug/L	50	52.7	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2670935 2670936

Parameter	Units	92443682001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	11.1	50	50	63.3	65.1	104	108	70-130	3	
Lead	ug/L	ND	50	50	51.7	52.3	103	104	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Lead and Copper Shadybrook

Pace Project No.: 92443682

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lead and Copper Shadybrook

Pace Project No.: 92443682

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92443682001	SBE 001-R1	EPA 200.8 Rev 5.4	495786		
92443682002	SBE 003-R1	EPA 200.8 Rev 5.4	495786		
92443682003	SBE 004-R1	EPA 200.8 Rev 5.4	495786		
92443682004	SBE 005-R1	EPA 200.8 Rev 5.4	495786		

REPORT OF LABORATORY ANALYSIS

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Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition
Upon Receipt

Client Name:
ECS Greensboro

Project #:

WO# : 92443682



Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☒ Pace ☐ Other: _____

Date/Initials Person Examining Contents: DB 8/30/19

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Thermometer: ☒ IR Gun ID: 92T049 Type of Ice: ☐ Wet ☐ Blue ☒ None

Cooler Temp (°C): 25.9 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 25.9

☒ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil ☐ N/A, water sample

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: WT			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Out of Temp 25.9°C

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: 

Date: 9/3

Project Manager SRF Review: 

Date: 9/3

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO# : 92443682

PM: PTE Due Date: 09/11/19

CLIENT: 92-ECS GBORO

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H 2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-S035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page 10 of 10

September 11, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: Lead and Copper Shady Brook
Pace Project No.: 92444318

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on September 05, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Lead and Copper Shady Brook

Pace Project No.: 92444318

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Lead and Copper Shady Brook

Pace Project No.: 92444318

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92444318001	SBE 001-R2	EPA 200.8 Rev 5.4	SER	2	PASI-A
92444318002	SBE 003-R2	EPA 200.8 Rev 5.4	SER	2	PASI-A
92444318003	SBE 004-R2	EPA 200.8 Rev 5.4	SER	2	PASI-A
92444318004	SBE 005-R2	EPA 200.8 Rev 5.4	SER	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper Shady Brook

Pace Project No.: 92444318

Sample: SBE 001-R2		Lab ID: 92444318001		Collected: 09/05/19 06:27		Received: 09/05/19 11:20		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	470	ug/L	50.0	10		09/10/19 17:31	7440-50-8		
Lead	442	ug/L	30.0	10		09/10/19 17:31	7439-92-1		

Sample: SBE 003-R2		Lab ID: 92444318002		Collected: 09/05/19 06:27		Received: 09/05/19 11:20		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	58.7	ug/L	5.0	1		09/10/19 13:56	7440-50-8		
Lead	ND	ug/L	3.0	1		09/10/19 13:56	7439-92-1		

Sample: SBE 004-R2		Lab ID: 92444318003		Collected: 09/05/19 06:28		Received: 09/05/19 11:20		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	33.5	ug/L	5.0	1		09/10/19 14:00	7440-50-8		
Lead	ND	ug/L	3.0	1		09/10/19 14:00	7439-92-1		

Sample: SBE 005-R2		Lab ID: 92444318004		Collected: 09/05/19 06:28		Received: 09/05/19 11:20		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	26.6	ug/L	5.0	1		09/10/19 14:03	7440-50-8		
Lead	ND	ug/L	3.0	1		09/10/19 14:03	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper Shady Brook

Pace Project No.: 92444318

QC Batch:	496928	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92444318001, 92444318002, 92444318003, 92444318004		

METHOD BLANK:	2675806	Matrix:	Water
Associated Lab Samples:	92444318001, 92444318002, 92444318003, 92444318004		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/10/19 13:39	
Lead	ug/L	ND	3.0	09/10/19 13:39	

LABORATORY CONTROL SAMPLE: 2675807

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	48.8	98	85-115	
Lead	ug/L	50	47.2	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2675808 2675809

Parameter	Units	92444318001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	470	500	500	958	936	98	93	70-130	2	
Lead	ug/L	442	500	500	893	888	90	89	70-130	0	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Lead and Copper Shady Brook

Pace Project No.: 92444318

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lead and Copper Shady Brook

Pace Project No.: 92444318

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92444318001	SBE 001-R2	EPA 200.8 Rev 5.4	496928		
92444318002	SBE 003-R2	EPA 200.8 Rev 5.4	496928		
92444318003	SBE 004-R2	EPA 200.8 Rev 5.4	496928		
92444318004	SBE 005-R2	EPA 200.8 Rev 5.4	496928		

REPORT OF LABORATORY ANALYSIS

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Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition
Upon Receipt

Client Name:

ECS Greensboro

Project #:

WO# : 92444318



92444318

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client

☐ Commercial ☒ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Date/Initials Person Examining Contents: SK 9-5-19

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other

Thermometer:

☒ IR Gun ID: 92T049

Type of Ice: ☒ Wet ☐ Blue ☐ None

Biological Tissue Frozen?

☐ Yes ☒ No ☐ N/A

Cooler Temp (°C): 0.6 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 0.6

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>W1</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☒ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review:

NMG

Date:

9/6/19

Project Manager SRF Review:

NMG

Date:

9/6/19

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottle

Project #

WO# : 92444318

PM: PTE

Due Date: 09/16/19

CLIENT: 92-ECS GBORO

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-S035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: ECS Greensboro
Address: 4811 Koger Blvd
Greensboro, NC 27407
Email: Rachael@paceanalytical.com
Phone:
Fax:
Requested Due Date:

Report To: Abrahamsen, Ryan
Copy To:

Purchase Order #:
Project Name: Lead and Copper
Project #: K287-3

Section B

Required Project Information:

Report To: Abrahamsen, Ryan
Copy To:

Purchase Order #:
Project Name: Lead and Copper
Project #: K287-3

Section C

Invoice Information:

Company Name:
Attention:
Address:
Pace Quote:
Pace Project Manager: taylor.ezell@paceanalyticals.com,
Pace Profile #: 1894-S

Regulatory Agency:
State / Location: NC

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Sample IDs must be unique	MATRIX Drinking Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DW WW P SL OL WP AR OT TS	MATRIX CODE (see valid codes to left)		SAMPLE TYPE (G=GRAB C=COMP)		COLLECTED				SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Preservatives		Analyses Test		Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	NC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
				DATE	TIME	DATE	TIME	START	END	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Lead and Copper																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Chad Hollandsworth
SIGNATURE of SAMPLER:

DATE Signed: 9/5/19

TEMP in C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

September 16, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: LEAD AND COPPER - SHADYBROOK
Pace Project No.: 92445295

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on September 12, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole Gasiorowski for
Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92445295001	SBE-001-R3	EPA 200.8 Rev 5.4	JOR	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

Sample: SBE-001-R3		Lab ID: 92445295001	Collected: 09/12/19 07:22	Received: 09/12/19 09:40	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4						
Copper	94.5	ug/L	5.0	1		09/16/19 15:01	7440-50-8	
Lead	17.0	ug/L	3.0	1		09/16/19 15:01	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

QC Batch: 497940

Analysis Method: EPA 200.8 Rev 5.4

QC Batch Method: EPA 200.8 Rev 5.4

Analysis Description: 200.8 MET Drinking Water, No Prep

Associated Lab Samples: 92445295001

METHOD BLANK: 2681031

Matrix: Water

Associated Lab Samples: 92445295001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/16/19 14:55	
Lead	ug/L	ND	3.0	09/16/19 14:55	

LABORATORY CONTROL SAMPLE: 2681032

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.1	98	85-115	
Lead	ug/L	50	50.2	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2681033 2681034

Parameter	Units	92445295001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	94.5	50	50	141	142	93	95	70-130	0	
Lead	ug/L	17.0	50	50	65.7	66.4	97	99	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295


Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92445295001	SBE-001-R3	EPA 200.8 Rev 5.4	497940		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt	Client Name:	Project #:	WO# : 92445295
Courier:	<input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client		
<input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> Other:			

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No Date/Initials Person Examining Contents: 9-12-14 (FJ)

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☒ None ☐ Other Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A
Thermometer: ☒ IR Gun ID: 92T049 Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temp (°C): 3.3 Correction Factor: Add/Subtract (°C) 0.0 Temp should be above freezing to 6°C
Cooler Temp Corrected (°C): 3.3 ☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil ☒ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No



			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix:	WT		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review:  Date: 9/12
Project Manager SRF Review:  Date: 9/12

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottle

Project #

W0# : 92445295

PM: PTE Due Date: 09/23/19

CLIENT : 92-ECS GBORO

Item#																													
	BP4U-125 mL Plastic	Unpreserved (N/A) (Cl-)																											
	BP3U-250 mL Plastic	Unpreserved (N/A)																											
	BP2U-500 mL Plastic	Unpreserved (N/A)																											
	BP1U-1 liter Plastic	Unpreserved (N/A)																											
	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)																												
	BP3N-250 mL plastic HNO3 (pH < 2)																												
	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)																												
	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)																												
	WGJU-Wide-mouthed Glass jar	Unpreserved																											
	AG1U-1 liter Amber	Unpreserved (N/A) (Cl-)																											
	AG1H-1 liter Amber HCl (pH < 2)																												
	AG3U-250 mL Amber	Unpreserved (N/A) (Cl-)																											
	AG1S-1 liter Amber H2SO4 (pH < 2)																												
	AG3S-250 mL Amber H2SO4 (pH < 2)																												
	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)																												
	DG9H-40 mL VOA HQ	(N/A)																											
	VG9T-40 mL VOA Na2SO3	(N/A)																											
	VG9U-40 mL VOA Unp	(N/A)																											
	DG9P-40 mL VOA H3PO4	(N/A)																											
	VOAK (6 vials per kit)	-S035 kit (N/A)																											
	V/GK (3 vials per kit)	VPH/Gas kit (N/A)																											
	SP5T-125 mL Sterile	Plastic (N/A – lab)																											
	SP2T-250 mL Sterile	Plastic (N/A – lab)																											
	BP3A-250 mL Plastic	NH2)2SO4 (9.3-9.7)																											
	AG0U-100 mL Amber	Unpreserved vials (N/A)																											
	VSGU-20 mL Scintillation vials	(N/A)																											
	DG9U-40 mL Amber	Unpreserved vials (N/A)																											

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	ECS Greensboro	Report To:	Abrahamsco, Ryan	Attention:	
Address:	4811 Koger Blvd	Copy To:		Company Name:	
	Greensboro, NC 27407			Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:		Fax		Pace Project Manager:	taylor_ezell@pacelabs.com,
Requested Due Date:	ASAP	Project #:	419-8287-Q	Pace Profile #:	1834-5

Page :	1	Of	1
Regulatory Agency			
State / Location			
NC			

[illegible]

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:			
SIGNATURE of SAMPLER:			
DATE Signed:			
TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

September 20, 2019

Ryan Abrahamson
ECS Southeast, LLP

RE: Project: LEAD AND COPPER - SHADYBROOK
Pace Project No.: 92445295

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on September 12, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92445295001	SBE-001-R3	EPA 200.8 Rev 5.4	JOR	2	PASI-A
92445295002	SBE-001-R4	EPA 200.8 Rev 5.4	SER	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

Sample: SBE-001-R3		Lab ID: 92445295001		Collected: 09/12/19 07:22		Received: 09/12/19 09:40		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	94.5	ug/L	5.0	1		09/16/19 15:01	7440-50-8		
Lead	17.0	ug/L	3.0	1		09/16/19 15:01	7439-92-1		

Sample: SBE-001-R4		Lab ID: 92445295002		Collected: 09/12/19 07:23		Received: 09/12/19 09:40		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	12.7	ug/L	5.0	1		09/19/19 23:33	7440-50-8		
Lead	ND	ug/L	3.0	1		09/19/19 23:33	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

QC Batch: 497940

Analysis Method: EPA 200.8 Rev 5.4

QC Batch Method: EPA 200.8 Rev 5.4

Analysis Description: 200.8 MET Drinking Water, No Prep

Associated Lab Samples: 92445295001

METHOD BLANK: 2681031

Matrix: Water

Associated Lab Samples: 92445295001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/16/19 14:55	
Lead	ug/L	ND	3.0	09/16/19 14:55	

LABORATORY CONTROL SAMPLE: 2681032

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.1	98	85-115	
Lead	ug/L	50	50.2	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2681033 2681034

Parameter	Units	92445295001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	94.5	50	50	141	142	93	95	70-130	0	
Lead	ug/L	17.0	50	50	65.7	66.4	97	99	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

QC Batch: 498841

Analysis Method: EPA 200.8 Rev 5.4

QC Batch Method: EPA 200.8 Rev 5.4

Analysis Description: 200.8 MET Drinking Water, No Prep

Associated Lab Samples: 92445295002

METHOD BLANK: 2685136

Matrix: Water

Associated Lab Samples: 92445295002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/19/19 23:29	
Lead	ug/L	ND	3.0	09/19/19 23:29	

LABORATORY CONTROL SAMPLE: 2685137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	52.3	105	85-115	
Lead	ug/L	50	51.6	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2685138 2685139

Parameter	Units	92445295002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	12.7	50	50	64.6	64.5	104	104	70-130	0	
Lead	ug/L	ND	50	50	51.7	52.0	103	103	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: LEAD AND COPPER - SHADYBROOK

Pace Project No.: 92445295

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92445295001	SBE-001-R3	EPA 200.8 Rev 5.4	497940		
92445295002	SBE-001-R4	EPA 200.8 Rev 5.4	498841		

REPORT OF LABORATORY ANALYSIS

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Document Name:
Sample Condition Upon Receipt(SCUR)

Document No.:
F-CAR-CS-033-Rev.06

Document Revised: February 7, 2018
Page 1 of 2

Issuing Authority:
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood ☒ Huntersville Raleigh Mechanicsville

Sample Condition
Upon Receipt

Client Name:

Project #:

WO# : 92445295



92445295

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Date/Initials Person Examining Contents: 9-12-14 (FJ)

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☒ None ☐ Other

Thermometer: ☒ IR Gun ID: 92T049 Type of Ice: ☒ Wet ☐ Blue ☐ None

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Cooler Temp (°C): 3.3 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 3.3

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil ☒ N/A, water sample

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: WT			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottle

Project #

W0# : 92445295

PM: PTE Due Date: 09/23/19

CLIENT : 92-ECS GBORO

Item#																														

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	ECS Greensboro	Report To:	Abrahamsq, Ryan	Attention:	
Address:	4811 Koger Blvd	Copy To:		Company Name:	
	Greensboro, NC 27407			Address:	
Email:		Purchase Order #:		Quote:	
Phone:		Project Name:	Lead and Copper - SHADYBROOK	Price Project Manager:	taylor.vezell@parcelabs.com,
Requested Due Date:	ASAP	Project #:	419-8287-Q	Price Profile #:	1834-5
				Regulatory Agency	
				State / Location	
				NC	

[illegible]

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:			
SIGNATURE of SAMPLER:			
DATE Signed:			
TEMP in C			
Received on Ice (Y/N)			
Custody Sealed Cooler (Y/N)			
Samples Intact (Y/N)			

Hart & Hickman (Charlotte)
Christine Schaefer
2923 South Tryon St. Ste 100
Charlotte, NC 28203

Project: GCS-001 - Shadybrook

Lab Submittal Date: 12/03/2019

Prism Work Order: 9120013

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

Please call if you have any questions relating to this analytical report.

Respectfully,

PRISM LABORATORIES, INC.



Angela D. Overcash

VP Laboratory Services



Reviewed By Terri W. Cole For Angela D. Overcash

Project Manager

Data Qualifiers Key Reference:

BRL Below Reporting Limit

MDL Method Detection Limit

RPD Relative Percent Difference

* Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

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Sample Receipt Summary

12/06/2019

Prism Work Order: 9120013

Client Sample ID	Lab Sample ID	Matrix	Date/Time Sampled	Date/Time Received
SB-001-001A-KF-P	9120013-01	Drinking Water	11/20/19 5:45	12/03/19 11:30

Samples were received in good condition at 2.6 degrees C unless otherwise noted.

Summary of Detections

12/06/2019

Prism Work Order: 9120013

Prism ID	Client ID	Parameter	Method	Result	Units
9120013-01	SB-001-001A-KF-P	Copper	*200.8	0.16	mg/L
9120013-01	SB-001-001A-KF-P	Lead	*200.8	0.0023	mg/L

Hart & Hickman (Charlotte)
Attn: Christine Schaefer
2923 South Tryon St. Ste 100
Charlotte, NC 28203

Project: GCS-001 - Shadybrook

Sample Matrix: Drinking Water

Client Sample ID: SB-001-001A-KF-P

Prism Sample ID: 9120013-01

Prism Work Order: 9120013

Time Collected: 11/20/19 05:45

Time Submitted: 12/03/19 11:30

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Total Metals									
Copper	0.16	mg/L	0.0020	0.00094	1	*200.8	12/5/19 14:30	MMR	P9L0080
Lead	0.0023	mg/L	0.0020	0.00082	1	*200.8	12/5/19 14:30	MMR	P9L0080

Hart & Hickman (Charlotte)
Attn: Christine Schaefer
2923 South Tryon St. Ste 100
Charlotte, NC 28203

Project: GCS-001 - Shadybrook

Prism Work Order: 9120013
Time Submitted: 12/3/2019 11:30:00AM

Total Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9L0080 - 200.8										
Blank (P9L0080-BLK1)				Prepared: 12/04/19 Analyzed: 12/05/19						
Copper	BRL	0.0020	mg/L							
Lead	BRL	0.0020	mg/L							
LCS (P9L0080-BS1)				Prepared: 12/04/19 Analyzed: 12/05/19						
Copper	0.0987	0.0020	mg/L	0.1000		99	85-115			
Lead	0.101	0.0020	mg/L	0.1000		101	85-115			
Matrix Spike (P9L0080-MS1)				Source: 9120013-01		Prepared: 12/04/19 Analyzed: 12/05/19				
Copper	0.247	0.0020	mg/L	0.1000	0.158	88	70-130			
Lead	0.0996	0.0020	mg/L	0.1000	0.00234	97	70-130			
Matrix Spike Dup (P9L0080-MSD1)				Source: 9120013-01		Prepared: 12/04/19 Analyzed: 12/05/19				
Copper	0.248	0.0020	mg/L	0.1000	0.158	90	70-130	0.6	10	
Lead	0.0997	0.0020	mg/L	0.1000	0.00234	97	70-130	0.1	10	

Sample Extraction Data

Prep Method: 200.8

Lab Number	Batch	Initial	Final	Date/Time
9120013-01	P9L0080	50 mL	50 mL	12/04/19 14:29



Full Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/525-6364 • Fax: 704/525-0409

Client Company Name: Hart & Hickman

Report To/Contact Name: Christine Schaefer

Reporting Address:

Phone: Fax (Yes) (No):

Email (Y s) (No) Email Address

EDD Type: PDF Excel Other

Site Location Name:

Site Location Physical Address:

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # TO ENSURE PROPER BILLING: GCS-001 Shadybrook

Project Name: Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)

*Please ATTACH any project specific reporting (QC LEVEL I III IV) provisions and/or QC Requirements

Invoice To: Address:

Address:

Purchase Order No./Billing Reference

Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days
"Working Days" 6-9 Days Standard 10 days

Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC USACE FL NC ✓
SC OTHER N/A

Water Chlorinated: YES NO
Sample Iced Upon Collection: YES NO ✓

LAB USE ONLY

Samples INTACT upon arrival? YES NO N/A
Received ON WET ICE? Temp _____
PROPER PRESERVATIVES indicated? _____
Received WITHIN HOLDING TIMES? _____
CUSTODY SEALS INTACT? _____
VOLATILES rec'd W/OUT HEADSPACE? _____
PROPER CONTAINERS used? _____

12-14 2.5.6

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MULTIPLY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVA- TIVES	ANALYSES REQUESTED	REMARKS	PRISM LAB ID NO.
				TYPE SEE BELOW	NO.	SIZE				
SB-001-001A-KF-P	11-20-14	545	Water	P	1	125ml	HNO3	✓		01
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		
			Water	P	1	125ml	HNO3	✓		

PRESS DOWN FIRMLY - 3 COPIES

Sampler's Signature: Sampled By (Print Name) Chase Cedeno Affiliation: 1484

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By (Signature):
Relinquished By (Signature):
Relinquished By (Signature):

Received By (Signature):
Received By (Signature):
Received By (Signature):

Date: 12-02-19 Military/Hours: 08:46
Date: 12-02-19 15:42
Date: 12-31-19 1040

Additional Comments:
Received:
12-31-19

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

Fed Ex UPS Hand-delivered Pallet Field Service Other: 1130

NPDES: UST: GROUNDWATER: DRINKING WATER: SOLID WASTE: RCRA: CERCLA: LANDFILL: OTHER:
- NC - SC - NC - SC - NC - SC - NC - SC - NC - SC - NC - SC - NC - SC

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR
TERMS & CONDITIONS

ORIGINAL

APPENDIX I
SOUTHWEST ELEMENTARY RESULTS

School Name: Southwest Elementary		Report Date (s): 08/30/2019	
Date Test Conducted: 8/21/2019		Date Results Received: 08/30/2019	
Number of Faucets Tested: 25 (all GCS identified faucets used for drinking/food preparation)			
Lead Results		Copper Results	
Results 15 ppb and above: 0		Results 1.3 ppm and above: 0	
Results 10 ppb to below 15 ppb: 0		Detectable results below 1.3 ppm: 24	
Detectable results below 10 ppb: 0		Results below detection level: 1	
Results below detection level: 25			
Number of Faucets Requiring Remedial Action: 0			
Daily School-Wide Flushing: <div style="margin-left: 100px;"> <input type="checkbox"/> Continue with protocol <input type="checkbox"/> Discontinue flushing protocol: mm/dd/yyyy <input checked="" type="checkbox"/> Other (Describe: Perform Periodic Flushing) </div>			
This is a summary report prepared by ECS. ECS suggests that the full report be referred to with regards to findings, recommendations, and technical limitations for this sampling event.			

<u>SAMPLE LOCATION</u> <u>CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
001		Kitchen	3 Department Sink (LH)	T&S	20	1
002		Kitchen	3 Department Sink (RH)	T&S	20	1
003		Kitchen	Ice Maker	Manitowac	10	1
004		Kitchen	1 Department Sink	T&S	20	1
005						
006		Hall at Room 114	Water Cooler (LH)	Elkay	17	1
007		Hall at Room 114	Water Cooler (RH)	Elkay	17	1
008		Hall at Room 100	Water Cooler (LH)	Elkay	17	1
009		Hall at Room 100	Water Cooler (RH)	Elkay	17	1
010		Hall at J1	Water Cooler	Elkay	10	1
011		Hall at Room 202	Water Cooler	Elkay	40	1
012		Hall at J2	Water Cooler (LH)	Elkay	17	1
013		Hall at J2	Water Cooler (RH)	Elkay	17	1
014		Hall at Room 304	Water Cooler	Elkay	40	1
015		Hall at Office	Water Cooler (LH)	Elkay	17	1
016		Hall at Office	Water Cooler (RH)	Elkay	17	1
017		Hall at Room 402	Water Cooler (LH)	Elkay	17	1
018		Hall at Room 402	Water Cooler (RH)	Elkay	17	1
019		Hall at Room 411	Water Cooler (LH)	Elkay	17	1
020		Hall at Room 411	Water Cooler (RH)	Elkay	17	1
021		Mobile Unit #1	Water Cooler	Elkay	15	1
022		Mobile Unit #2	Water Cooler	Oasis	10	1
023		Mobile Unit #3	Water Cooler	H.Taylor	20	1
024		Mobile Unit #4	Water Cooler	Oasis	20	1
025		Mobile Unit #5	Water Cooler	Elkay	17	1
026		Mobile Unit #6	Water Cooler	H.Taylor	20	1

TOTAL NUMBER OF FIXTURES

25

August 30, 2019

Ryan Abrahamson
ECS Southeast, LLP

,

RE: Project: LEAD AND COPPER SOUTHWEST E
Pace Project No.: 92442342

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92442342001	SWE 003	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342002	SWE 004	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342003	SWE 001	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342004	SWE 002	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342005	SWE 014	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342006	SWE 019	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342007	SWE 020	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342008	SWE 017	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342009	SWE 018	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342010	SWE 015	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342011	SWE 016	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342012	SWE 010	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342013	SWE 011	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342014	SWE 006	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342015	SWE 007	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342016	SWE 008	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342017	SWE 009	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342018	SWE 024	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342019	SWE 025	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342020	SWE 026	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342021	SWE 012	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342022	SWE 013	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342023	SWE 021	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342024	SWE 022	EPA 200.8 Rev 5.4	SER	2	PASI-A
92442342025	SWE 023	EPA 200.8 Rev 5.4	SER	2	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

Sample: SWE 003		Lab ID: 92442342001	Collected: 08/21/19 06:34	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS Drinking Water Analytical Method: EPA 200.8 Rev 5.4 Preparation Method: EPA 200.8 Rev 5.4

Copper	ND	ug/L	5.0	1	08/28/19 10:52	08/28/19 19:49	7440-50-8	
Lead	ND	ug/L	3.0	1	08/28/19 10:52	08/28/19 19:49	7439-92-1	

Sample: SWE 004		Lab ID: 92442342002	Collected: 08/21/19 06:35	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	28.6	ug/L	5.0	1		08/28/19 15:56	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:56	7439-92-1	

Sample: SWE 001		Lab ID: 92442342003	Collected: 08/21/19 06:37	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.7	ug/L	5.0	1		08/28/19 15:59	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 15:59	7439-92-1	

Sample: SWE 002		Lab ID: 92442342004	Collected: 08/21/19 06:37	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	18.3	ug/L	5.0	1		08/28/19 16:08	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 16:08	7439-92-1	

Sample: SWE 014		Lab ID: 92442342005	Collected: 08/21/19 06:38	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	25.2	ug/L	5.0	1		08/28/19 16:11	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 16:11	7439-92-1	

Sample: SWE 019		Lab ID: 92442342006	Collected: 08/21/19 06:40	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.3	ug/L	5.0	1		08/28/19 16:14	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

Sample: SWE 019		Lab ID: 92442342006	Collected: 08/21/19 06:40	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		08/28/19 16:14	7439-92-1
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Sample: SWE 020		Lab ID: 92442342007	Collected: 08/21/19 06:40	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	29.7	ug/L	5.0	1		08/28/19 16:17	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 16:17	7439-92-1

Sample: SWE 017		Lab ID: 92442342008	Collected: 08/21/19 06:42	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	37.7	ug/L	5.0	1		08/28/19 18:04	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 18:04	7439-92-1

Sample: SWE 018		Lab ID: 92442342009	Collected: 08/21/19 06:42	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	38.6	ug/L	5.0	1		08/28/19 18:07	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 18:07	7439-92-1

Sample: SWE 015		Lab ID: 92442342010	Collected: 08/21/19 06:45	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	37.3	ug/L	5.0	1		08/28/19 18:10	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 18:10	7439-92-1

Sample: SWE 016		Lab ID: 92442342011	Collected: 08/21/19 06:45	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	38.6	ug/L	5.0	1		08/28/19 18:13	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 18:13	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

Sample: SWE 010		Lab ID: 92442342012	Collected: 08/21/19 06:46	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	55.5	ug/L	5.0	1		08/28/19 18:16	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 18:16	7439-92-1	

Sample: SWE 011		Lab ID: 92442342013	Collected: 08/21/19 06:47	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.6	ug/L	5.0	1		08/28/19 18:18	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 18:18	7439-92-1	

Sample: SWE 006		Lab ID: 92442342014	Collected: 08/21/19 06:48	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	41.6	ug/L	5.0	1		08/28/19 18:27	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 18:27	7439-92-1	

Sample: SWE 007		Lab ID: 92442342015	Collected: 08/21/19 06:48	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	41.9	ug/L	5.0	1		08/28/19 18:36	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 18:36	7439-92-1	

Sample: SWE 008		Lab ID: 92442342016	Collected: 08/21/19 06:52	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	41.1	ug/L	5.0	1		08/28/19 18:39	7440-50-8	
Lead	ND	ug/L	3.0	1		08/28/19 18:39	7439-92-1	

Sample: SWE 009		Lab ID: 92442342017	Collected: 08/21/19 06:52	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	46.5	ug/L	5.0	1		08/28/19 18:42	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

Sample: SWE 009		Lab ID: 92442342017	Collected: 08/21/19 06:52	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		08/28/19 18:42	7439-92-1
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Sample: SWE 024		Lab ID: 92442342018	Collected: 08/21/19 06:55	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	49.9	ug/L	5.0	1		08/28/19 18:45	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 18:45	7439-92-1

Sample: SWE 025		Lab ID: 92442342019	Collected: 08/21/19 06:56	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.9	ug/L	5.0	1		08/28/19 18:47	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 18:47	7439-92-1

Sample: SWE 026		Lab ID: 92442342020	Collected: 08/21/19 06:58	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	34.7	ug/L	5.0	1		08/28/19 18:50	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 18:50	7439-92-1

Sample: SWE 012		Lab ID: 92442342021	Collected: 08/21/19 07:02	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	837	ug/L	50.0	10		08/28/19 23:30	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 18:53	7439-92-1

Sample: SWE 013		Lab ID: 92442342022	Collected: 08/21/19 07:02	Received: 08/21/19 10:50	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	287	ug/L	5.0	1		08/28/19 18:59	7440-50-8
Lead	ND	ug/L	3.0	1		08/28/19 18:59	7439-92-1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

Sample: SWE 021		Lab ID: 92442342023		Collected: 08/21/19 07:05		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	44.1	ug/L	5.0	1		08/28/19 20:16	7440-50-8		
Lead	ND	ug/L	3.0	1		08/28/19 20:16	7439-92-1		

Sample: SWE 022		Lab ID: 92442342024		Collected: 08/21/19 07:06		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	68.4	ug/L	5.0	1		08/28/19 20:24	7440-50-8		
Lead	ND	ug/L	3.0	1		08/28/19 20:24	7439-92-1		

Sample: SWE 023		Lab ID: 92442342025		Collected: 08/21/19 07:08		Received: 08/21/19 10:50		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	28.7	ug/L	5.0	1		08/28/19 20:27	7440-50-8		
Lead	ND	ug/L	3.0	1		08/28/19 20:27	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

QC Batch: 494523

Analysis Method: EPA 200.8 Rev 5.4

QC Batch Method: EPA 200.8 Rev 5.4

Analysis Description: 200.8 MET Drinking Water, No Prep

Associated Lab Samples: 92442342002

METHOD BLANK: 2664909

Matrix: Water

Associated Lab Samples: 92442342002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/28/19 14:17	
Lead	ug/L	ND	3.0	08/28/19 14:17	

LABORATORY CONTROL SAMPLE: 2664910

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	50.1	100	85-115	
Lead	ug/L	50	49.0	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2664911 2664912

Parameter	Units	92442334001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	42.6	50	50	89.6	90.8	94	96	70-130	1	
Lead	ug/L	ND	50	50	49.2	50.6	96	98	70-130	3	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2664913 2664914

Parameter	Units	92442334011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	77.1	50	50	125	124	95	93	70-130	1	
Lead	ug/L	ND	50	50	50.8	50.4	98	98	70-130	1	

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QUALITY CONTROL DATA

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

QC Batch:	494790	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92442342003, 92442342004, 92442342005, 92442342006, 92442342007, 92442342008, 92442342009, 92442342010, 92442342011, 92442342012, 92442342013, 92442342014, 92442342015, 92442342016, 92442342017, 92442342018, 92442342019, 92442342020, 92442342021, 92442342022		

METHOD BLANK:	2666215	Matrix:	Water
Associated Lab Samples:	92442342003, 92442342004, 92442342005, 92442342006, 92442342007, 92442342008, 92442342009, 92442342010, 92442342011, 92442342012, 92442342013, 92442342014, 92442342015, 92442342016, 92442342017, 92442342018, 92442342019, 92442342020, 92442342021, 92442342022		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/28/19 14:23	
Lead	ug/L	ND	3.0	08/28/19 14:23	

LABORATORY CONTROL SAMPLE: 2666216

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	50.0	100	85-115	
Lead	ug/L	50	49.1	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666217 2666218

Parameter	Units	92442342003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	26.7	50	50	75.2	75.6	97	98	70-130	1	
Lead	ug/L	ND	50	50	48.2	48.3	96	96	70-130	0	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666219 2666220

Parameter	Units	92442342013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	26.6	50	50	76.2	75.9	99	99	70-130	0	
Lead	ug/L	ND	50	50	50.1	49.5	98	97	70-130	1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

QC Batch:	494791	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92442342023, 92442342024, 92442342025		

METHOD BLANK: 2666221 Matrix: Water

Associated Lab Samples: 92442342023, 92442342024, 92442342025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/28/19 14:29	
Lead	ug/L	ND	3.0	08/28/19 14:29	

LABORATORY CONTROL SAMPLE: 2666222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.4	99	85-115	
Lead	ug/L	50	49.6	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666223 2666224

Parameter	Units	92442342023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	44.1	50	50	92.4	91.8	97	95	70-130	1	
Lead	ug/L	ND	50	50	48.9	47.9	97	95	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666225 2666226

Parameter	Units	92442346008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	148	50	50	203	199	111	102	70-130	2	
Lead	ug/L	ND	50	50	49.5	48.5	99	97	70-130	2	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

QC Batch: 494903

Analysis Method: EPA 200.8 Rev 5.4

QC Batch Method: EPA 200.8 Rev 5.4

Analysis Description: 200.8 MET Drinking Water

Associated Lab Samples: 92442342001

METHOD BLANK: 2666584

Matrix: Water

Associated Lab Samples: 92442342001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	08/28/19 19:43	
Lead	ug/L	ND	3.0	08/28/19 19:43	

LABORATORY CONTROL SAMPLE: 2666585

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.6	99	85-115	
Lead	ug/L	50	50.4	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666586 2666587

Parameter	Units	92442342001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	ND	50	50	49.2	50.4	98	100	70-130	3	
Lead	ug/L	ND	50	50	49.7	50.1	99	100	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LEAD AND COPPER SOUTHWEST E

Pace Project No.: 92442342

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92442342001	SWE 003	EPA 200.8 Rev 5.4	494903	EPA 200.8 Rev 5.4	494993
92442342002	SWE 004	EPA 200.8 Rev 5.4	494523		
92442342003	SWE 001	EPA 200.8 Rev 5.4	494790		
92442342004	SWE 002	EPA 200.8 Rev 5.4	494790		
92442342005	SWE 014	EPA 200.8 Rev 5.4	494790		
92442342006	SWE 019	EPA 200.8 Rev 5.4	494790		
92442342007	SWE 020	EPA 200.8 Rev 5.4	494790		
92442342008	SWE 017	EPA 200.8 Rev 5.4	494790		
92442342009	SWE 018	EPA 200.8 Rev 5.4	494790		
92442342010	SWE 015	EPA 200.8 Rev 5.4	494790		
92442342011	SWE 016	EPA 200.8 Rev 5.4	494790		
92442342012	SWE 010	EPA 200.8 Rev 5.4	494790		
92442342013	SWE 011	EPA 200.8 Rev 5.4	494790		
92442342014	SWE 006	EPA 200.8 Rev 5.4	494790		
92442342015	SWE 007	EPA 200.8 Rev 5.4	494790		
92442342016	SWE 008	EPA 200.8 Rev 5.4	494790		
92442342017	SWE 009	EPA 200.8 Rev 5.4	494790		
92442342018	SWE 024	EPA 200.8 Rev 5.4	494790		
92442342019	SWE 025	EPA 200.8 Rev 5.4	494790		
92442342020	SWE 026	EPA 200.8 Rev 5.4	494790		
92442342021	SWE 012	EPA 200.8 Rev 5.4	494790		
92442342022	SWE 013	EPA 200.8 Rev 5.4	494790		
92442342023	SWE 021	EPA 200.8 Rev 5.4	494791		
92442342024	SWE 022	EPA 200.8 Rev 5.4	494791		
92442342025	SWE 023	EPA 200.8 Rev 5.4	494791		

REPORT OF LABORATORY ANALYSIS

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sample retention upon receipt	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office
-------------------------------	-----------------------------------	--

Pace Analytical

Laboratory receiving samples:

☐ Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville

MO#: 92442342



92442342

Project #:

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Other: ☐ Client

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other
 Thermometer: ☐ In Gun ID: 92T048
 Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp (°C): 25.1 Correction Factor: Add/Subtract (°C) 0.0
 Cooler Temp Corrected (°C): 25.1
 Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No
 Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

1.	Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
2.	Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
3.	Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4.	Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
5.	Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6.	Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6.	-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
7.	Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.	Dissolved analysis: Samples Field Filtered?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
9.	Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	-Includes Date/Time/ID/Analysis Matrix:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
10.	Headspace in VOA Vials (>5-6mm)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
11.	Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	Trip Blank Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Project Manager SRF Review:

Date:

Date:

8/22

8/22

8/22

PM: PTE Due Date: 08/30/19 CLIENT: 92-ECS GBORO

Exceptions: VOA, coliform, TOC, oil and grease, DRO/BO15 (water) DOC, LTHg

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina Compliance Bureau.

Notes: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers).

CLIENT: 92-ECS GBORO

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Section C

[illegible]

Section A

Section B

Required Client Information:

Required Project Information

Section C
Invoice Information:

Company: FRC Greenhouse

Personal

BILLIARD CIGARETTES

Page : 2 Of 3

Company:	ECS Greensboro
Address:	4811 Koger Blvd

Report To:	Abrahamson, Ryan
Copy To:	

Company Name:

Greensboro, NC 27407

[illegible]

Appendix.

Regulatory Agency

Phone: 74211103

Purchase Order #:	
Project Name:	Lead and Control

Page Project Ma

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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Requested Due Date:

Project #:	
------------	--

Pace Profile #: 1834-5

NO

[illegible]



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: ECS Greensboro
Address: 4811 Koger Blvd
Greensboro, NC 27407
Email: Katherine@paceanalytical.com
Phone: _____ Fax: _____
Requested Due Date: _____

Section B

Required Project Information:

Report To: Abrahamson Ryan
Copy To: _____
Purchase Order #: _____
Project Name: Lead and Copper
Project #: S25713
Southwest E

Section C

Invoice Information:

Attention: _____
Company Name: _____
Address: _____
Pace Quote: _____
Pace Project Manager: Taylor ezel@pacelabs.com,
Pace Profile #: 1834-5

Regulatory Agency

State / Location

NC

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX Drinking Water DW/ Water WT Waste Water WW Product P Soil/Solid SL Oil OL Wipe WP Air AR Other OT Tissue TS	CODE DW/ WT WW P SL OL WP AR OT TS	COLLECTED				SAMPLE TEMP AT COLLECTION		Preservatives								Analyses Test		Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	NC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
				MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	DATE	TIME	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Lead and Copper																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

Signature	8/21/19	0500	BAWS DACC	8/21	1050	BAWS	8/21/19	1000	BAWS
-----------	---------	------	-----------	------	------	------	---------	------	------

ACCEPTED BY / AFFILIATION

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

SAMPLE CONDITIONS

N

N

Y

APPENDIX J

TRIANGLE LAKE MONTESSORI SCHOOL RESULTS

School Name: Triangle Lake Elementary		Report Date (s): 9/10/19	
Date Test Conducted: 8/28/19		Date Results Received: 9/10/19	
Number of Faucets Tested: 51 (all GCS identified faucets used for drinking/food preparation)			
Lead Results		Copper Results	
Results 15 ppb and above: 0		Results 1.3 ppm and above: 0	
Results 10 ppb to below 15 ppb: 0		Detectable results below 1.3 ppm: 50	
Detectable results below 10 ppb: 0		Results below detection level: 1	
Results below detection level: 51			
Number of Faucets Requiring Remedial Action: 0			
Daily School-Wide Flushing: <div style="margin-left: 100px;"> <input type="checkbox"/> Continue with protocol <input type="checkbox"/> Discontinue flushing protocol: mm/dd/yyyy <input checked="" type="checkbox"/> Other (Describe: Perform Periodic Flushing) </div>			
This is a summary report prepared by ECS. ECS suggests that the full report be referred to with regards to findings, recommendations, and technical limitations for this sampling event.			

<u>SAMPLE LOCATION</u> <u>CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
001		Kitchen	2 Department Sink	T&S	16	1
002						
003						
004		Kitchen	3 Department Sink (LH)	T&S	16	1
005		Kitchen	3 Department Sink (RH)	T&S	16	1
006		Kitchen	Ice Maker	Scottman	16	1
007		Hall near Room 209	Water Cooler (LH)	Elkay	16	1
008		Hall near Room 209	Water Cooler (RH)	Elkay	16	1
009	502		Drinking Station	Just	16	1
010	504		Drinking Station	Just	16	1
011	508		Drinking Station	Just	16	1
012	510		Drinking Station	Just	16	1
013	514		Drinking Station	Just	16	1
014	516		Drinking Station	Just	16	1
015	518		Drinking Station	Just	16	1
016	520		Drinking Station	Just	16	1
017	527		Drinking Station	Just	16	1
018	525		Drinking Station	Just	16	1
019	523		Drinking Station	Just	16	1
020		Hall at Room 517	Water Cooler (LH)	Elkay	16	1
021		Hall at Room 517	Water Cooler (RH)	Elkay	16	1
022	517		Drinking Station	Just	16	1
023		Hall across from Room 214	Water Cooler (LH)	Elkay	16	1
024		Hall across from Room 214	Water Cooler (RH)	Elkay	16	1
025		Hall at Room 126	Water Cooler	Elkay	16	1
026	302		Drinking Station	Just	16	1
027	316		Drinking Station	Just	16	1
028	317		Drinking Station	Just	16	1
029	318		Drinking Station	Just	16	1
030	319		Drinking Station	Just	16	1
031	320		Drinking Station	Just	16	1
032	321		Drinking Station	Elkay	10	1
033	322		Drinking Station	Just	16	1
034	323		Drinking Station	Just	16	1
035	324		Drinking Station	Just	16	1
036	325		Drinking Station	Just	16	1
037		Hall at Room 305	Water Cooler (LH)	Elkay	16	1
038		Hall at Room 305	Water Cooler (RH)	Elkay	16	1
039	410		Drinking Station	Just	16	1
040		Hall at Room 412	Water Cooler (LH)	Elkay	16	1
041		Hall at Room 412	Water Cooler (RH)	Elkay	16	1
042	416		Drinking Station	Just	16	1
043	418		Drinking Station	Just	16	1
044	420		Drinking Station	Just	16	1

<u>SAMPLE LOCATION</u> <u>CODE</u>	<u>ROOM</u>	<u>LOCATION</u>	<u>FIXTURE TYPE</u>	<u>BRAND</u>	<u>AGE</u>	<u>COUNT</u>
045	422		Drinking Station	Just	16	1
046	421		Drinking Station	Just	16	1
047	419		Drinking Station	Just	16	1
048	417		Drinking Station	Just	16	1
049	415		Drinking Station	Just	16	1
050	405		Drinking Station	Just	16	1
051	403		Drinking Station	Just	16	1
052	402		Drinking Station	Central	10	1

TOTAL NUMBER OF FIXTURES

50

September 10, 2019

Ryan Abrahamson
ECS Southeast, LLP

RE: Project: Lead and Copper-Triangle Lake
Pace Project No.: 92443525

Dear Ryan Abrahamson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443525001	TLE-001	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525002	TLE-004	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525003	TLE-005	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525004	TLE-006	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525005	TLE-007	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525006	TLE-008	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525007	TLE-009	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525008	TLE-010	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525009	TLE-011	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525010	TLE-012	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525011	TLE-023	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525012	TLE-024	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525013	TLE-022	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525014	TLE-013	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525015	TLE-014	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525016	TLE-019	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525017	TLE-015	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525018	TLE-018	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525019	TLE-016	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525020	TLE-017	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525021	TLE-020	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525022	TLE-021	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525023	TLE-025	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525024	TLE-026	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525025	TLE-027	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525026	TLE-028	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525027	TLE-053	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525028	TLE-029	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525029	TLE-030	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525030	TLE-031	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525031	TLE-032	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525032	TLE-033	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525033	TLE-034	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525034	TLE-035	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525035	TLE-036	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525036	TLE-037	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525037	TLE-038	EPA 200.8 Rev 5.4	SER	2	PASI-A

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SAMPLE ANALYTE COUNT

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92443525038	TLE-051	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525039	TLE-052	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525040	TLE-050	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525041	TLE-039	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525042	TLE-040	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525043	TLE-041	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525044	TLE-049	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525045	TLE-042	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525046	TLE-043	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525047	TLE-048	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525048	TLE-047	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525049	TLE-045	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525050	TLE-044	EPA 200.8 Rev 5.4	SER	2	PASI-A
92443525051	TLE-046	EPA 200.8 Rev 5.4	SER	2	PASI-A

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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-001		Lab ID: 92443525001	Collected: 08/28/19 06:33	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	43.5	ug/L	5.0	1		09/09/19 20:15	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:15	7439-92-1	

Sample: TLE-004		Lab ID: 92443525002	Collected: 08/28/19 06:34	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	39.5	ug/L	5.0	1		09/09/19 20:17	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:17	7439-92-1	

Sample: TLE-005		Lab ID: 92443525003	Collected: 08/28/19 06:35	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	82.8	ug/L	5.0	1		09/09/19 20:23	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:23	7439-92-1	

Sample: TLE-006		Lab ID: 92443525004		Collected: 08/28/19 06:35	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	ND	ug/L	5.0	1		09/09/19 20:25	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:25	7439-92-1	

Sample: TLE-007		Lab ID: 92443525005	Collected: 08/28/19 06:36	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	26.2	ug/L	5.0	1		09/09/19 20:28	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:28	7439-92-1	

Sample: TLE-008		Lab ID: 92443525006	Collected: 08/28/19 06:37	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	17.6	ug/L	5.0	1		09/09/19 20:30	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-008		Lab ID: 92443525006	Collected: 08/28/19 06:37	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/09/19 20:30	7439-92-1
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Sample: TLE-009		Lab ID: 92443525007	Collected: 08/28/19 06:38	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	49.2	ug/L	5.0	1		09/09/19 20:32	7440-50-8
Lead	ND	ug/L	3.0	1		09/09/19 20:32	7439-92-1

Sample: TLE-010		Lab ID: 92443525008		Collected: 08/28/19 06:39	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	63.6	ug/L	5.0	1		09/09/19 20:34	7440-50-8
Lead	ND	ug/L	3.0	1		09/09/19 20:34	7439-92-1

Sample: TLE-011		Lab ID: 92443525009	Collected: 08/28/19 06:40	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	28.7	ug/L	5.0	1		09/09/19 20:36	7440-50-8
Lead	ND	ug/L	3.0	1		09/09/19 20:36	7439-92-1

Sample: TLE-012		Lab ID: 92443525010		Collected: 08/28/19 06:41	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	33.9	ug/L	5.0	1		09/09/19 20:43	7440-50-8
Lead	ND	ug/L	3.0	1		09/09/19 20:43	7439-92-1

Sample: TLE-023		Lab ID: 92443525011	Collected: 08/28/19 06:42	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.9	ug/L	5.0	1		09/09/19 20:50	7440-50-8
Lead	ND	ug/L	3.0	1		09/09/19 20:50	7439-92-1

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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-024		Lab ID: 92443525012	Collected: 08/28/19 06:43	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	39.3	ug/L	5.0	1		09/09/19 20:52	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:52	7439-92-1	

Sample: TLE-022		Lab ID: 92443525013	Collected: 08/28/19 06:44	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	37.5	ug/L	5.0	1		09/09/19 20:54	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:54	7439-92-1	

Sample: TLE-013		Lab ID: 92443525014	Collected: 08/28/19 06:49	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	36.9	ug/L	5.0	1		09/09/19 20:56	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:56	7439-92-1	

Sample: TLE-014		Lab ID: 92443525015	Collected: 08/28/19 06:45	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.1	ug/L	5.0	1		09/09/19 20:58	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 20:58	7439-92-1	

Sample: TLE-019		Lab ID: 92443525016	Collected: 08/28/19 06:46	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.0	ug/L	5.0	1		09/09/19 21:01	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:01	7439-92-1	

Sample: TLE-015		Lab ID: 92443525017	Collected: 08/28/19 06:47	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.4	ug/L	5.0	1		09/09/19 21:03	7440-50-8	
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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-015		Lab ID: 92443525017	Collected: 08/28/19 06:47	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/09/19 21:03	7439-92-1	
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Sample: TLE-018		Lab ID: 92443525018	Collected: 08/28/19 06:47	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.5	ug/L	5.0	1		09/09/19 21:05	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:05	7439-92-1	

Sample: TLE-016		Lab ID: 92443525019	Collected: 08/28/19 06:48	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	32.6	ug/L	5.0	1		09/09/19 21:25	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:25	7439-92-1	

Sample: TLE-017		Lab ID: 92443525020	Collected: 08/28/19 06:49	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	25.5	ug/L	5.0	1		09/09/19 21:32	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:32	7439-92-1	

Sample: TLE-020		Lab ID: 92443525021	Collected: 08/28/19 06:52	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	36.3	ug/L	5.0	1		09/09/19 21:34	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:34	7439-92-1	

Sample: TLE-021		Lab ID: 92443525022	Collected: 08/28/19 06:52	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	41.1	ug/L	5.0	1		09/09/19 21:36	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:36	7439-92-1	

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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-025		Lab ID: 92443525023		Collected: 08/28/19 06:53	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	60.2	ug/L	5.0	1		09/09/19 21:38	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:38	7439-92-1	

Sample: TLE-026		Lab ID: 92443525024	Collected: 08/28/19 06:54	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	30.8	ug/L	5.0	1		09/09/19 21:41	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:41	7439-92-1	

Sample: TLE-027		Lab ID: 92443525025	Collected: 08/28/19 06:56	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.6	ug/L	5.0	1		09/09/19 21:43	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:43	7439-92-1	

Sample: TLE-028		Lab ID: 92443525026	Collected: 08/28/19 06:56	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	41.2	ug/L	5.0	1		09/09/19 21:45	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:45	7439-92-1	

Sample: TLE-053		Lab ID: 92443525027		Collected: 08/28/19 06:56	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	30.1	ug/L	5.0	1		09/09/19 21:52	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:52	7439-92-1	

Sample: TLE-029		Lab ID: 92443525028	Collected: 08/28/19 06:57	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	44.3	ug/L	5.0	1		09/09/19 21:54	7440-50-8	
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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-029		Lab ID: 92443525028	Collected: 08/28/19 06:57	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/09/19 21:54	7439-92-1	
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Sample: TLE-030		Lab ID: 92443525029	Collected: 08/28/19 06:58	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	39.2	ug/L	5.0	1		09/09/19 21:56	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 21:56	7439-92-1	

Sample: TLE-031		Lab ID: 92443525030	Collected: 08/28/19 06:59	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	38.0	ug/L	5.0	1		09/09/19 22:03	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:03	7439-92-1	

Sample: TLE-032		Lab ID: 92443525031	Collected: 08/28/19 06:59	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	40.5	ug/L	5.0	1		09/09/19 22:05	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:05	7439-92-1	

Sample: TLE-033		Lab ID: 92443525032	Collected: 08/28/19 07:00	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	38.2	ug/L	5.0	1		09/09/19 22:07	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:07	7439-92-1	

Sample: TLE-034		Lab ID: 92443525033	Collected: 08/28/19 07:01	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.1	ug/L	5.0	1		09/09/19 22:09	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:09	7439-92-1	

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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-035		Lab ID: 92443525034	Collected: 08/28/19 07:01	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	50.9	ug/L	5.0	1		09/09/19 22:11	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:11	7439-92-1	

Sample: TLE-036		Lab ID: 92443525035	Collected: 08/28/19 07:02	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	52.4	ug/L	5.0	1		09/09/19 22:18	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:18	7439-92-1	

Sample: TLE-037		Lab ID: 92443525036	Collected: 08/28/19 07:03	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	23.0	ug/L	5.0	1		09/09/19 22:20	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:20	7439-92-1	

Sample: TLE-038		Lab ID: 92443525037	Collected: 08/28/19 07:04	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	39.4	ug/L	5.0	1		09/09/19 22:22	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:22	7439-92-1	

Sample: TLE-051		Lab ID: 92443525038	Collected: 08/28/19 07:05	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	25.6	ug/L	5.0	1		09/09/19 22:24	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:24	7439-92-1	

Sample: TLE-052		Lab ID: 92443525039	Collected: 08/28/19 07:05	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	37.3	ug/L	5.0	1		09/09/19 22:31	7440-50-8	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-052		Lab ID: 92443525039	Collected: 08/28/19 07:05	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Lead	ND	ug/L	3.0	1		09/09/19 22:31	7439-92-1	
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Sample: TLE-050		Lab ID: 92443525040		Collected: 08/28/19 07:06	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	34.8	ug/L	5.0	1		09/09/19 22:38	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:38	7439-92-1	

Sample: TLE-039		Lab ID: 92443525041		Collected: 08/28/19 07:07	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	49.0	ug/L	5.0	1		09/09/19 22:44	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:44	7439-92-1	

Sample: TLE-040		Lab ID: 92443525042	Collected: 08/28/19 07:08	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	29.6	ug/L	5.0	1		09/09/19 22:46	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:46	7439-92-1	

Sample: TLE-041		Lab ID: 92443525043		Collected: 08/28/19 07:08	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	20.5	ug/L	5.0	1		09/09/19 22:49	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:49	7439-92-1	

Sample: TLE-049		Lab ID: 92443525044		Collected: 08/28/19 07:09	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	31.8	ug/L	5.0	1		09/09/19 22:51	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:51	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-042		Lab ID: 92443525045		Collected: 08/28/19 07:09	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	37.6	ug/L	5.0	1		09/09/19 22:53	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:53	7439-92-1	

Sample: TLE-043		Lab ID: 92443525046	Collected: 08/28/19 07:10	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	40.8	ug/L	5.0	1		09/09/19 22:55	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:55	7439-92-1	

Sample: TLE-048		Lab ID: 92443525047		Collected: 08/28/19 07:11	Received: 08/29/19 10:00	Matrix: Drinking Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	36.1	ug/L	5.0	1		09/09/19 22:57	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:57	7439-92-1	

Sample: TLE-047		Lab ID: 92443525048	Collected: 08/28/19 07:12	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	35.4	ug/L	5.0	1		09/09/19 22:59	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 22:59	7439-92-1	

Sample: TLE-045		Lab ID: 92443525049	Collected: 08/28/19 07:13	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	40.7	ug/L	5.0	1		09/09/19 23:02	7440-50-8	
Lead	ND	ug/L	3.0	1		09/09/19 23:02	7439-92-1	

Sample: TLE-044		Lab ID: 92443525050	Collected: 08/28/19 07:01	Received: 08/29/19 10:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.8 MET ICPMS DW, No Prep Analytical Method: EPA 200.8 Rev 5.4

Copper	38.1	ug/L	5.0	1		09/09/19 23:13	7440-50-8	
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ANALYTICAL RESULTS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Sample: TLE-044		Lab ID: 92443525050		Collected: 08/28/19 07:01		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Lead	ND	ug/L	3.0	1		09/09/19 23:13	7439-92-1		

Sample: TLE-046		Lab ID: 92443525051		Collected: 08/28/19 07:04		Received: 08/29/19 10:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS DW, No Prep		Analytical Method: EPA 200.8 Rev 5.4							
Copper	43.7	ug/L	5.0	1		09/09/19 23:15	7440-50-8		
Lead	ND	ug/L	3.0	1		09/09/19 23:15	7439-92-1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

QC Batch:	496666	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443525001, 92443525002, 92443525003, 92443525004, 92443525005, 92443525006, 92443525007, 92443525008, 92443525009, 92443525010, 92443525011, 92443525012, 92443525013, 92443525014, 92443525015, 92443525016, 92443525017, 92443525018		

METHOD BLANK:	2674685	Matrix:	Water
Associated Lab Samples:	92443525001, 92443525002, 92443525003, 92443525004, 92443525005, 92443525006, 92443525007, 92443525008, 92443525009, 92443525010, 92443525011, 92443525012, 92443525013, 92443525014, 92443525015, 92443525016, 92443525017, 92443525018		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 20:01	
Lead	ug/L	ND	3.0	09/09/19 20:01	

LABORATORY CONTROL SAMPLE:	2674686					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	53.2	106	85-115	
Lead	ug/L	50	51.6	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	2674687			2674688							
Parameter	Units	92443515037 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	45.3	50	50	96.3	96.5	102	102	70-130	0	
Lead	ug/L	ND	50	50	52.4	52.4	103	103	70-130	0	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	2674689			2674690							
Parameter	Units	92443525009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	28.7	50	50	81.0	81.4	105	105	70-130	0	
Lead	ug/L	ND	50	50	52.1	52.2	104	104	70-130	0	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

QC Batch:	496667	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443525019, 92443525020, 92443525021, 92443525022, 92443525023, 92443525024, 92443525025, 92443525026, 92443525027, 92443525028, 92443525029, 92443525030, 92443525031, 92443525032, 92443525033, 92443525034, 92443525035, 92443525036, 92443525037, 92443525038		

METHOD BLANK: 2674691

Matrix: Water

Associated Lab Samples: 92443525019, 92443525020, 92443525021, 92443525022, 92443525023, 92443525024, 92443525025, 92443525026, 92443525027, 92443525028, 92443525029, 92443525030, 92443525031, 92443525032, 92443525033, 92443525034, 92443525035, 92443525036, 92443525037, 92443525038

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 21:17	
Lead	ug/L	ND	3.0	09/09/19 21:17	

LABORATORY CONTROL SAMPLE: 2674692

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	53.9	108	85-115	
Lead	ug/L	50	52.1	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674693 2674694

Parameter	Units	92443525019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	32.6	50	50	85.4	85.0	106	105	70-130	0	
Lead	ug/L	ND	50	50	51.8	52.6	103	105	70-130	1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674695 2674696

Parameter	Units	92443525029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	39.2	50	50	91.0	90.7	104	103	70-130	0	
Lead	ug/L	ND	50	50	52.7	52.0	105	104	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

QC Batch:	496668	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Drinking Water, No Prep
Associated Lab Samples:	92443525039, 92443525040, 92443525041, 92443525042, 92443525043, 92443525044, 92443525045, 92443525046, 92443525047, 92443525048, 92443525049, 92443525050, 92443525051		

METHOD BLANK:	2674697	Matrix:	Water
Associated Lab Samples:	92443525039, 92443525040, 92443525041, 92443525042, 92443525043, 92443525044, 92443525045, 92443525046, 92443525047, 92443525048, 92443525049, 92443525050, 92443525051		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	ND	5.0	09/09/19 22:27	
Lead	ug/L	ND	3.0	09/09/19 22:27	

LABORATORY CONTROL SAMPLE: 2674698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	53.2	106	85-115	
Lead	ug/L	50	51.7	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674699 2674700

Parameter	Units	92443525039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	37.3	50	50	89.2	89.3	104	104	70-130	0	
Lead	ug/L	ND	50	50	52.3	52.1	104	104	70-130	0	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674701 2674702

Parameter	Units	92443525049 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Copper	ug/L	40.7	50	50	92.0	92.5	103	104	70-130	1	
Lead	ug/L	ND	50	50	52.0	52.1	104	104	70-130	0	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92443525001	TLE-001	EPA 200.8 Rev 5.4	496666		
92443525002	TLE-004	EPA 200.8 Rev 5.4	496666		
92443525003	TLE-005	EPA 200.8 Rev 5.4	496666		
92443525004	TLE-006	EPA 200.8 Rev 5.4	496666		
92443525005	TLE-007	EPA 200.8 Rev 5.4	496666		
92443525006	TLE-008	EPA 200.8 Rev 5.4	496666		
92443525007	TLE-009	EPA 200.8 Rev 5.4	496666		
92443525008	TLE-010	EPA 200.8 Rev 5.4	496666		
92443525009	TLE-011	EPA 200.8 Rev 5.4	496666		
92443525010	TLE-012	EPA 200.8 Rev 5.4	496666		
92443525011	TLE-023	EPA 200.8 Rev 5.4	496666		
92443525012	TLE-024	EPA 200.8 Rev 5.4	496666		
92443525013	TLE-022	EPA 200.8 Rev 5.4	496666		
92443525014	TLE-013	EPA 200.8 Rev 5.4	496666		
92443525015	TLE-014	EPA 200.8 Rev 5.4	496666		
92443525016	TLE-019	EPA 200.8 Rev 5.4	496666		
92443525017	TLE-015	EPA 200.8 Rev 5.4	496666		
92443525018	TLE-018	EPA 200.8 Rev 5.4	496666		
92443525019	TLE-016	EPA 200.8 Rev 5.4	496667		
92443525020	TLE-017	EPA 200.8 Rev 5.4	496667		
92443525021	TLE-020	EPA 200.8 Rev 5.4	496667		
92443525022	TLE-021	EPA 200.8 Rev 5.4	496667		
92443525023	TLE-025	EPA 200.8 Rev 5.4	496667		
92443525024	TLE-026	EPA 200.8 Rev 5.4	496667		
92443525025	TLE-027	EPA 200.8 Rev 5.4	496667		
92443525026	TLE-028	EPA 200.8 Rev 5.4	496667		
92443525027	TLE-053	EPA 200.8 Rev 5.4	496667		
92443525028	TLE-029	EPA 200.8 Rev 5.4	496667		
92443525029	TLE-030	EPA 200.8 Rev 5.4	496667		
92443525030	TLE-031	EPA 200.8 Rev 5.4	496667		
92443525031	TLE-032	EPA 200.8 Rev 5.4	496667		
92443525032	TLE-033	EPA 200.8 Rev 5.4	496667		
92443525033	TLE-034	EPA 200.8 Rev 5.4	496667		
92443525034	TLE-035	EPA 200.8 Rev 5.4	496667		
92443525035	TLE-036	EPA 200.8 Rev 5.4	496667		
92443525036	TLE-037	EPA 200.8 Rev 5.4	496667		
92443525037	TLE-038	EPA 200.8 Rev 5.4	496667		
92443525038	TLE-051	EPA 200.8 Rev 5.4	496667		
92443525039	TLE-052	EPA 200.8 Rev 5.4	496668		
92443525040	TLE-050	EPA 200.8 Rev 5.4	496668		
92443525041	TLE-039	EPA 200.8 Rev 5.4	496668		
92443525042	TLE-040	EPA 200.8 Rev 5.4	496668		
92443525043	TLE-041	EPA 200.8 Rev 5.4	496668		
92443525044	TLE-049	EPA 200.8 Rev 5.4	496668		
92443525045	TLE-042	EPA 200.8 Rev 5.4	496668		
92443525046	TLE-043	EPA 200.8 Rev 5.4	496668		
92443525047	TLE-048	EPA 200.8 Rev 5.4	496668		
92443525048	TLE-047	EPA 200.8 Rev 5.4	496668		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: Lead and Copper-Triangle Lake

Pace Project No.: 92443525

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92443525049	TLE-045	EPA 200.8 Rev 5.4	496668		
92443525050	TLE-044	EPA 200.8 Rev 5.4	496668		
92443525051	TLE-046	EPA 200.8 Rev 5.4	496668		

REPORT OF LABORATORY ANALYSIS

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	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition
Upon Receipt

Client Name:

ECS Greenwood

Project #:

WO#: 92443525



Courier:

☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Date/Initials Person Examining Contents:

AM 8/29/19

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other

Thermometer:

☐ IR Gun ID: 92T049

Type of Ice: ☐ Wet ☐ Blue ☒ None

Biological Tissue Frozen?

☐ Yes ☒ No ☐ N/A

Cooler Temp (°C): 18.3 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 18.3

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>MT</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☒ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review:

TR


Date:

8/30

Project Manager SRF Review:

Date:

8/30

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.05	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO# : 92443525

PM: PTE

Due Date: 09/10/19


CLIENT: 92-ECS GBORO

Item#																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				</
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO# : 92443525

PM: PTE

Due Date: 09/10/19


CLIENT : 92-ECS GBORO

	Item#	
	BP4U-125 mL Plastic	Unpreserved (N/A) (Cl-)
	BP3U-250 mL Plastic	Unpreserved (N/A)
	BP2U-500 mL Plastic	Unpreserved (N/A)
	BP1U-1 liter Plastic	Unpreserved (N/A)
	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	
	BP3N-250 mL plastic HNO3 (pH < 2)	
	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	
	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	
	WGFU-Wide-mouthed Glass jar Unpreserved	
	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	
	AG1H-1 liter Amber HCl (pH < 2)	
	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	
	AG1S-1 liter Amber H2SO4 (pH < 2)	
	AG3S-250 mL Amber H2SO4 (pH < 2)	
	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	
	DG9H-40 mL VOA HCl (N/A)	
	VG9T-40 mL VOA Na2S2O3 (N/A)	
	VG9U-40 mL VOA Unp (N/A)	
	DG9P-40 mL VOA H3PO4 (N/A)	
	VOAK (6 vials per kit)-S035 kit (N/A)	
	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	
	SP5T-125 mL Sterile Plastic (N/A – lab)	
	SP2T-250 mL Sterile Plastic (N/A – lab)	
	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	
	AG0U-100 mL Amber Unpreserved vials (N/A)	
	VSGU-20 mL Scintillation vials (N/A)	
	DG9U-40 mL Amber Unpreserved vials (N/A)	

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

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Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project # **WO# : 92443525**

PM: PTE

Due Date: 09/10/19


CLIENT: 92-ECS GBORO

	Item#	
	BP4U-125 mL Plastic	Unpreserved (N/A) (Cl-)
	BP3U-250 mL Plastic	Unpreserved (N/A)
	BP2U-500 mL Plastic	Unpreserved (N/A)
	BP1U-1 liter Plastic	Unpreserved (N/A)
	BP4S-125 mL Plastic #2SO4 (pH < 2) (Cl-)	
	BP3N-250 mL plastic HNO3 (pH < 2)	
	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	
	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	
	WGFU-Wide-mouthed Glass jar	Unpreserved
	AG1U-1 liter Amber	Unpreserved (N/A) (Cl-)
	AG1H-1 liter Amber HCl (pH < 2)	
	AG3U-250 mL Amber	Unpreserved (N/A) (Cl-)
	AG1S-1 liter Amber H2SO4 (pH < 2)	
	AG3S-250 mL Amber #2SO4 (pH < 2)	
	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	
	DG9H-40 mL VOA HCl (N/A)	
	VG9T-40 mL VOA Na22O3 (N/A)	
	VG9U-40 mL VOA Unp(N/A)	
	DG9P-40 mL VOA H3PO4 (N/A)	
	VOAK (6 vials per kit)-5035 kit (N/A)	
	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	
	SP5T-125 mL Sterile Plastic (N/A – lab)	
	SP2T-250 mL Sterile Plastic (N/A – lab)	
	BP3A-250 mL Plastic (N/A)H2SO4 (9.3-9.7)	
	AG0U-100 mL Amber	Unpreserved vials (N/A)
	V5GU-20 mL Scintillation vials (N/A)	
	DG9U-40 mL Amber	Unpreserved vials (N/A)

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

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Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

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Project #

WO# : 92443525

PM: PTE

Due Date: 09/10/19

CLIENT: 92-ECS GBORO

	Item#	
	BP4U-125 mL Plastic	Unpreserved (N/A) (Cl-)
	BP3U-250 mL Plastic	Unpreserved (N/A)
	BP2U-500 mL Plastic	Unpreserved (N/A)
	BP1U-1 liter Plastic Unpreserved	Unpreserved (N/A)
	BP4S-125 mL Plastic H ₂ SO ₄ (pH < 2) (Cl-)	
	BP3N-250 mL plastic HNO ₃ (pH < 2)	
	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	
	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	
	WGFU-Wide-mouthed Glass jar Unpreserved	
	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	
	AG1H-1 liter Amber HCl (pH < 2)	
	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	
	AG1S-1 liter Amber H ₂ SO ₄ (pH < 2)	
	AG3S-250 mL Amber H ₂ SO ₄ (pH < 2)	
	AG3A(DG3A)-250 mL Amber NH ₄ Cl (N/A)(Cl-)	
	DG9H-40 mL VOA HCl (N/A)	
	VG9T-40 mL VOA Na ₂ SO ₃ (N/A)	
	VG9U-40 mL VOA Unp (N/A)	
	DG9P-40 mL VOA H ₃ PO ₄ (N/A)	
	VOAK (6 vials per kit)-S035 kit (N/A)	
	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	
	SPST-125 mL Sterile Plastic (N/A – lab)	
	SP2T-250 mL Sterile Plastic (N/A – lab)	
	BP3A-250 mL Plastic (NH ₂) ₂ SO ₄ (9.3-9.7)	
	AG0U-100 mL Amber Unpreserved vials (N/A)	
	VSGU-20 mL Scintillation vials (N/A)	
	DG9U-40 mL Amber Unpreserved vials (N/A)	

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, Incorrect containers.

Section A

Required Client Information:

Company:	ECS Greensboro	
Address:	4811 Koger Blvd	
Greensboro, NC 27407		
Email:	R.Lalanne@ECSlimited.com	
Phone:		Fax:
Requested Due Date:		

Section B

Required Project Information:

Report To:	Abrahamson, Ryan
Copy To:	
Purchase Order #:	
Project Name:	Lead and Copper Triangle Lake
Project #:	828-18

Section C

Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	taylor_etzell@paceelabs.com
Pace Profile #:	1834-5

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 2

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CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	ECS Greensboro	Report To:	Abrahamson	Attention:	
Address:	4811 Koger Blvd Greensboro, NC 27407	Copy To:	Ryan	Company Name:	
Email:	Richard.Harrison@ECSlimited.com			Address:	
Phone:		Purchase Order #:		Pace Quote:	
	Fax	Project Name:	Lead and Copper Triangle Lake	Pace Project Manager:	taylor.ezell@pacecabs.com
Requested Due Date:		Project #:	5287-13	Pace Profile #:	1834-5
				Regulatory/Agency	
				State/ Jurisdiction:	
				NC	

Page : 2 of 5

[illegible]

Section A

Required Client Information:

Company:	ECS Greensboro
Address:	4811 Koger Blvd Greensboro, NC 27407
Email:	R.A. & T. Hanson LLC Limited Liability
Phone:	
Requested Due Date:	

Section B

Required Project Information:	
Based on:	

Copy To:	Abrahamson, Ryan
Project 10:	
Purchase Order #:	
Project Name:	Leed and Cop
Project #:	5257-133

Section C
Invoice Information:

Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	talor_ezell@paceclabs.com
Pace Profile #:	1834-5

Page : 4 of 5

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be complete

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

Email: <u>AC&W Hanson LLC (516) 411-1111</u>		Purchase Order #		Pace Quote:	
Phone: <u>(516) 411-1111</u>		Project Name: <u>Lead and Copper Thru Lake</u>		Pace Project Manager: <u>taylor.ezell@pacelabs.com</u>	
Fax: <u>(516) 411-1111</u>		Project # <u>5257-13</u>		Pace Profile #: <u>1834-5</u>	
Requested Due Date:		Project #		Requested Analysis Filtered (Y/N)	
NC					
ITEM #		SAMPLE ID		Residual Chlorine (Y/N)	
One Character per box. (a-z, 0-9 /, -)		Sample IDs must be unique			
MATRIX		CODE			
Drinking Water Well Waste Water Process Water Soil/Solid Oil Wipe Air Other Tissue		DW WT WW PW SL OL WP AR OT TS			
MATRIX CODE (see valid codes to left)		SAMPLE TYPE (G=GRAB C=COMP)			
DATE		TIME			
START		END			
SAMPLE TEMP AT COLLECTION		# OF CONTAINERS			
Unpreserved		H2SO4			
HNO3		HCl			
NaOH		Na2S2O3			
Methanol		Other			
Analyses Test		Y/N			
Lead and Copper					
TEMP in C		Received on Ice (Y/N)			
Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)			

Section A

Required Client Information:

Section B
Required

Required Project Information:	
Project Title:	
Project Description:	
Project Objectives:	
Project Budget:	
Project Timeline:	
Project Risks:	
Project Stakeholders:	
Project Deliverables:	
Project Status:	
Project Manager:	
Project Sponsor:	
Project Steering Committee:	
Project Charter:	
Project Management Plan:	
Project Communication Plan:	
Project Risk Management Plan:	
Project Quality Management Plan:	
Project Resource Management Plan:	
Project Procurement Management Plan:	
Project Stakeholder Management Plan:	
Project Change Management Plan:	
Project Closure Plan:	
Project Final Report:	
Project Lessons Learned:	
Project Archive:	

Section C

Invoice Information:

Company:	ECS Greensboro
Address:	4814 Kozak Blvd

Address: 4811 Koger Blvd

Greensboro, NC 27407

Email: Paola.hanson@eccs.mil.ru

Phone:	Fax:
--------	------

Requested Due Date:

Project #:

Lead and Copper	11 mg/L
6257-13	

Pace Project Manager:	
Pace Profile #:	1834-5

taylor.ezell@pacelabs.com,

NC

Regulatory Agency

State / Location

Page : 7 Of 7

CHAIN-OF-CUSTODY / Analytical Request Document

THE CRIMINAL RECORD is a LEGAL DOCUMENT. All relevant fields must be completed accurately

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