PARTNER
Engineering and Science, Inc.®

DRINKING WATER SAMPLING REPORT

Union County Vocational-Technical Schools
1776 Raritan Road
Scotch Plains, New Jersey 07076

August 30, 2016
Partner Project No. 61138115000

Prepared for

Union County Vocational-Technical Schools
1776 Raritan Road
Scotch Plains, New Jersey 07076

August 30, 2016

Ms. Gwen Ryan
Union County Vocational-Technical Schools
1776 Raritan Road
Scotch Plains, New Jersey 07076

Subject: Drinking Water Sampling Report
Union County Vocational-Technical Schools
1776 Raritan Road
Partner Project 61138115000

Dear Ms. Ryan

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the *Drinking Water Sampling* conducted at the abovementioned address (the "subject property"). This sampling event was performed in general conformance with the scope and limitations as detailed in our fee proposal.

This inspection included a site reconnaissance as well as sampling and analysis. An assessment was made, conclusions stated, and recommendations outlined, as required.

We appreciate the opportunity to provide environmental services to the Union County Vocational-Technical Schools. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (732) 380-1700 x1271.

Sincerely,

Matt Genna
Project Manager
Health and Safety Services

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

1.1 Property Description

Address:	1776 Raritan Road, Scotch Plains, NJ
Nature of Use:	Vocational –Technical School, High School
Inspected By:	Matt Genna, Michelle Gomez
Assessment Date:	Friday August 12, 2016

1.2 Purpose and Scope

The purpose of this drinking water sampling event was to sample and analyze drinking water for a determination of lead content.

1.3 Methodology

DRINKING WATER

Select drinking water samples were collected according to the "New Jersey Department of Education N.J.A.C. 6A:26" requirements for testing of lead in New Jersey Schools and the "USEPA 3Ts for Reducing Lead in Drinking Water in Schools" recommendations, as well as the Safe Drinking Water Act of 1974. This law requires the USEPA to determine safe levels of chemicals in drinking water which do or may cause health problems. These non-enforceable levels, based solely on possible health risks and exposure, are called Maximum Contaminant Level Goals.

The MCLG for lead has been set at zero because the USEPA believes this level of protection would not cause potential health problems. Since lead contamination generally occurs from corrosion of onsite lead pipes, or lead-based solder on fittings and fixtures, it cannot be directly detected or removed by the municipal water system. Instead, the USEPA is requiring municipal water systems to control the corrosiveness of their water if the level of lead at the tap exceeds an Action Level.

The action level for lead has been set at 15 parts per billion (ppb). According to the USEPA, given present technology and resources, this level is the lowest level to which water systems can reasonably be required to control this contaminant should it be present in drinking water.

These drinking water standards and the regulations for ensuring that these standards are met are called National Primary Drinking Water Regulations. All public water supplies must abide by these regulations.

2.0 ANALYTICAL RESULTS

2.1 Visual Inspection

During the course of this site visit, Partner collected water samples at one hundred (100) locations. Partner did not attempt to disassemble mechanical equipment, open plumbing pipe chases, or assess materials within wall voids.

2.2 Drinking Water Sample Results

A total of two hundred (200) drinking water samples were collected from Union County Vocational-Technical Schools on August 12, 2016. The first sample at each fixture was a "first draw" which was collected directly from the fixture without letting the water run or flush. Ideally, the water had not been used for the past 6-8 hours but Partner could not be certain that this was the case. Partner requested from the Client that the test locations be inactive for a minimum of 6 hours prior to testing. This "first draw" sample was collected to evaluate the lead content in the pipes that service the facility. Frequently, older buildings may have corroded pipes or solder joints that leach lead into the drinking water.

The second sample was collected after letting the water run (flush) for thirty seconds. This sample evaluates the lead in water from the water purveyor and the pipes outside the residence.

Following collection, samples were sent to ESC Lab Sciences in Mount Juliet, Tennessee for analysis of lead content using USEPA Method 200.8 for lead in drinking water. The results are listed in the following table.

Analytical Results

Sample No.	Location	Description	Results (ppb)
001	Administration Building	POE	2.76
002	Administration Building	POE - Flush	NA
003	Administration Building	Water Fountain	ND
004	Administration Building	Water Fountain -Flush	NA
005	Administration Building	Sink	1.95
006	Administration Building	Sink - Flush	NA
007	Administration Building	Water Fountain 2	ND
008	Administration Building	Water Fountain 2-Flush	NA
009	Academy for Performing Arts	POE	ND
010	Academy for Performing Arts	POE - Flush	NA

Sample No.	Location	Description	Results (ppb)
011	Academy for Performing Arts	Water Fountain near Bathroom	ND
012	Academy for Performing Arts	Water Fountain near Bathroom - Flush	NA
013	Academy for Performing Arts	Water Fountain Outside 208	ND
014	Academy for Performing Arts	Water Fountain Outside 208 - Flush	NA
015	Academy for Performing Arts	Faculty Room 208	ND
016	Academy for Performing Arts	Faculty Room 208 - Flush	NA
017	West Hall	POE	7.44
018	West Hall	POE - Flush	NA
019	West Hall	Bathroom Sink	1.39
020	West Hall	Bathroom Sink Flush	NA
021	West Hall	Room 308A	ND
022	West Hall	Room 308A - Flush	NA
023	West Hall	Outside 308A	ND
024	West Hall	Outside 308A - Flush	NA
025	West Hall	Outside 307	ND
026	West Hall	Outside 307 - Flush	NA
027	West Hall	Outside 307 (2)	ND
028	West Hall	Outside 307 (2) - Flush	NA
029	West Hall	Outside 314	ND
030	West Hall	Outside 314 - Flush	NA
031	West Hall	Room 312	9.25
032	West Hall	Room 312 - Flush	NA
033	**West Hall**	**Room 313**	**28.2**

Sample No.	Location	Description	Results (ppb)
034	West Hall	Room 313 - Flush	4.44
035	West Hall	Room 317	4.31
036	West Hall	Room 317 - Flush	NA
037	West Hall	Room 319	1.49
038	West Hall	Room 319 - Flush	NA
039	West Hall	Outside 318 (1)	ND
040	West Hall	Outside 318 (1)	NA
041	West Hall	Outside 318 (2)	1.51
042	West Hall	Outside 318 (2) - Flush	NA
043	West Hall	Outside 325	1.55
044	West Hall	Outside 325 - Flush	NA
045	West Hall	Outside 325 (2)	1.32
046	West Hall	Outside 325 (2) - Flush	NA
047	West Hall	331 Culinary Sink (1)	2.2
048	West Hall	331 Culinary Sink (1) - Flush	NA
049	West Hall	331 Culinary Sink (2)	1.2
050	West Hall	331 Culinary Sink (2) - Flush	NA
051	West Hall	331 Culinary Sink (3)	ND
052	West Hall	331 Culinary Sink (3) - Flush	NA
053	West Hall	331 Culinary Sink (4)	1.41
054	West Hall	331 Culinary Sink (4) - Flush	NA
055	West Hall	331 Culinary Sink (5)	2.99

Sample No.	Location	Description	Results (ppb)
056	West Hall	331 Culinary Sink (5) - Flush	NA
057	West Hall	330 Culinary Sink (1)	1.27
058	West Hall	330 Culinary Sink (1) - Flush	NA
059	West Hall	330 Culinary Sink (2)	2.38
060	West Hall	330 Culinary Sink (2) - Flush	NA
061	West Hall	330 Culinary Sink (3)	1.05
062	West Hall	330 Culinary Sink (3) - Flush	NA
063	**West Hall**	**330 Culinary Sink (4)**	**32.8**
064	West Hall	330 Culinary Sink (4) - Flush	10.1
065	West Hall	WF Across Cafeteria (1)	ND
066	West Hall	WF Across Cafeteria (1) - Flush	NA
067	West Hall	WF Across Cafeteria (2)	2.64
068	West Hall	WF Across Cafeteria (2) - Flush	NA
069	West Hall	Cafeteria Prep Sink (1)	1.01
070	West Hall	Cafeteria Prep Sink (1) – Flush	NA
071	West Hall	Cafeteria Prep Sink (2)	ND
072	West Hall	Cafeteria Prep Sink (2) - Flush	NA
073	West Hall	Cafeteria Prep Sink (3)	2.12
074	West Hall	Cafeteria Prep Sink (3) - Flush	NA
075	West Hall	Cafeteria Sink Server	3.34
076	West Hall	Cafeteria Sink Server – Flush	NA
077	West Hall	Outside Cafeteria WF (1)	ND

Sample No.	Location	Description	Results (ppb)
078	West Hall	Outside Cafeteria WF (1) - Flush	NA
079	West Hall	Outside Cafeteria WF (2)	ND
080	West Hall	Outside Cafeteria WF (2) - Flush	NA
081	West Hall	Room 342 WF	ND
082	West Hall	Room 342 WF – Flush	NA
083	West Hall	Outside 341 (1)	ND
084	West Hall	Outside 341 (1) – Flush	NA
085	West Hall	Outside 341 (2)	ND
086	West Hall	Outside 341 (2) - Flush	NA
087	West Hall	Room 343 Sink	1.14
088	West Hall	Room 343 Sink – Flush	NA
089	West Hall	Room 344 Gym	ND
090	West Hall	Room 344 Gym - Flush	NA
091	West Hall	Outside 346 (1)	1.01
092	West Hall	Outside 346 (1) – Flush	NA
093	West Hall	Outside 346 (2)	1.91
094	West Hall	Outside 346 (2) - Flush	NA
095	West Hall	Room 345 WF	3.42
096	West Hall	Room 345 WF - Flush	NA
097	West Hall	Room 366 WF	ND
098	West Hall	Room 366 WF - Flush	NA
099	West Hall	Outside 363 (1)	ND
100	West Hall	Outside 363 (1) - Flush	NA

Sample No.	Location	Description	Results (ppb)
101	West Hall	Outside 363 (2)	ND
102	West Hall	Outside 363 (2) - Flush	ND
103	West Hall	Room 4 Bakery (1)	1.1
104	West Hall	Room 4 Bakery (1) – Flush	NA
105	West Hall	Room 4 Bakery (2)	1.47
106	West Hall	Room 4 Bakery (2) - Flush	NA
107	West Hall	Room 6 Supermarket (1)	ND
108	West Hall	Room 6 Supermarket (1) - Flush	NA
109	West Hall	Room 6 Supermarket (2)	1.23
110	West Hall	Room 6 Supermarket (2) - Flush	NA
111	West Hall	Outside Room 6 (1)	ND
112	West Hall	Outside Room 6 (1) - Flush	NA
113	West Hall	Outside Room 6 (2)	ND
114	West Hall	Outside Room 6 (2) - Flush	NA
115	Baxel Hall	POE	1.59
116	Baxel Hall	POE - Flush	NA
117	Baxel Hall	Faculty Lounge Sink	ND
118	Baxel Hall	Faculty Lounge Sink - Flush	NA
119	Baxel Hall	WF Outside 121 (1)	ND
120	Baxel Hall	WF Outside 121 (1) – Flush	NA
121	Baxel Hall	WF Outside 121 (2)	ND
122	Baxel Hall	WF Outside 121 (2) - Flush	NA

Sample No.	Location	Description	Results (ppb)
123	Baxel Hall	WF Across from Office (1)	ND
124	Baxel Hall	WF Across from Office (1)- Flush	NA
125	Baxel Hall	WF Across from Office (2)	ND
126	Baxel Hall	WF Across from Office (2) - Flush	NA
127	Baxel Hall	Outside 219 (1)	ND
128	Baxel Hall	Outside 219 (1)- Flush	NA
129	Baxel Hall	Outside 219 (2)	ND
130	Baxel Hall	Outside 219 (2) - Flush	NA
131	Mancuso Hall	POE	3.67
132	Mancuso Hall	POE - Flush	NA
133	Mancuso Hall	Outside 112 (1)	ND
134	Mancuso Hall	Outside 112 (1) – Flush	NA
135	Mancuso Hall	Outside 112 (2)	ND
136	Mancuso Hall	Outside 112 (2) Flush	NA
137	Mancuso Hall	Outside 128 (1)	ND
138	Mancuso Hall	Outside 128 (1) - Flush	NA
139	Mancuso Hall	Outside 128 (2)	ND
140	Mancuso Hall	Outside 128 (2) -Flush	NA
141	Mancuso Hall	127 Faculty Room	ND
142	Mancuso Hall	127 Faculty room - Flush	NA
143	Mancuso Hall	131 Gym (1)	1.01
144	Mancuso Hall	131 Gym (1) - Flush	NA
145	Mancuso Hall	131 Gym (2)	ND

Sample No.	Location	Description	Results (ppb)
146	Mancuso Hall	131 Gym (2) - Flush	NA
147	Mancuso Hall	Outside 219 (1)	ND
148	Mancuso Hall	Outside 219 (1) - Flush	NA
149	Mancuso Hall	Outside 219 (2)	ND
150	Mancuso Hall	Outside 219 (2) - Flush	NA
151	Mancuso Hall	Room 223 Sink	3.9
152	Mancuso Hall	Room 223 Sink- Flush	NA
153	Mancuso Hall	Outside 208A	ND
154	Mancuso Hall	Outside 208A - Flush	NA
155	Mancuso Hall	Outside 208A (2)	ND
156	Mancuso Hall	Outside 208A (2) - Flush	NA
157	Bistocci Hall	POE	ND
158	Bistocci Hall	POE - Flush	NA
159	Bistocci Hall	Faculty Room 501D	2.13
160	Bistocci Hall	Faculty Room 501D - Flush	NA
161	Bistocci Hall	Outside Student Bathroom (1)	ND
162	Bistocci Hall	Outside Student Bathroom (1) – Flush	NA
163	Bistocci Hall	Outside Student Bathroom (2)	ND
164	Bistocci Hall	Outside Student Bathroom (2) - Flush	NA
165	Bistocci Hall	503D Nurse's Office	1.52
166	Bistocci Hall	503D Nurse's Office - Flush	NA
167	Bistocci Hall	Room 511 Sink	1.42
168	Bistocci Hall	Room 511 Sink - Flush	NA

Sample No.	Location	Description	Results (ppb)
169	Bistocci Hall	Outside Student Rest Room	ND
170	Bistocci Hall	Outside Student Rest Room - Flush	NA
173	Bistocci Hall	Room 619	ND
174	Bistocci Hall	Room 619 -Flush	NA
175	Bistocci Hall	Outside Room 400 (1)	3.07
176	Bistocci Hall	Outside Room 400 (1) - Flush	NA
177	Bistocci Hall	Outside Room 400 (2)	3.02
178	Bistocci Hall	Outside Room 400 (2) - Flush	NA
179	Bistocci Hall	Room 402 WF (1)	ND
180	Bistocci Hall	Room 402 WF (1) - Flush	NA
181	Bistocci Hall	Room 402 WF (2)	1.82
182	Bistocci Hall	Room 402 WF (2) - Flush	NA
183	Bistocci Hall	Room 401 WF (1)	1.69
184	Bistocci Hall	Room 401 WF (1) - Flush	NA
185	Bistocci Hall	Room 401 WF (2)	2.17
186	Bistocci Hall	Room 401 WF (2) - Flush	NA
187	Bistocci Hall	Faculty Room Sink	ND
188	Bistocci Hall	Faculty Room Sink-Flush	NA
189	Bistocci Hall	Fitness Near 710 (1)	ND
190	Bistocci Hall	Fitness Near 710 (1) - Flush	NA
191	Bistocci Hall	Fitness Near 710 (2)	ND
192	Bistocci Hall	Fitness Near 710 (2) - Flush	NA
193	Bistocci Hall	Outside 707 WF (1)	ND

Sample No.	Location	Description	Results (ppb)
194	Bistocci Hall	Outside 707 WF (1)-Flush	NA
195	Bistocci Hall	Outside 707 WF (2)	ND
196	Bistocci Hall	Outside 707 WF (2)-Flush	NA
197	Bistocci Hall	WF Outside 812	ND
198	Bistocci Hall	WF Outside 812 - Flush	NA
199	Bistocci Hall	WF Outside 807	ND
200	Bistocci Hall	WF Outside 807 - Flush	NA

ND= Not detected. Lead levels not detected at the reporting limit (1 ppb)
NA= Not analyzed. Flush samples were only analyzed if the associated initial sample exceeded the action level (15 ppb)

The analytical result for lead in drinking water for the initial draw sample of the "West Hall Room 313 water fountain" (Sample 033) was 28.2 ppb which exceeds the USEPA action level of 15 ppb. The analytical result for lead in drinking water for the flush sample of the "West Hall Room 313 water fountain" (Sample 034) was 4.44 ppb which is below the USEPA action level of 15 ppb.

The analytical result for the initial draw sample of the "West Hall Room 330 Culinary Sink 4" (Sample 063) was 32.8 ppb which is above the USEPA action level of 15 ppb. The analytical result for the flush sample of the "West Hall Room 330 Culinary Sink 4" (064) was 10.1 ppb which is below the USEPA action level of 15 ppb.

The analytical results for lead in drinking water for all other samples collected were found to be below the USEPA action level of 15 ppb.

3.0 CONCLUSION

DRINKING WATER

The water fountain in West Hall Room 313 and Sink 4 in the West Hall Room 330 Culinary Room were found to have lead levels above the USEPA action level. Partner recommends immediately taking these fixtures out of service until actions are taken to reduce lead levels from these fixtures and follow-up sampling documents that the lead level for a first draw sample is below the USEPA action level.

West Hall Room 313 Water Fountain:

Partner recommends removing or permanently taking the West Hall Room 313 water fountain out of service due to the elevated lead levels found during sampling.

West Hall Room 330 Culinary Room Sink 4:

Partner recommends a regularly documented flushing schedule or installation of a filtration device for Sink 4 in the West Hall Room 330 Culinary Room.

Flushing involves opening suspect taps every morning before the facility opens and letting the water run to remove water that has been standing in the interior pipes and/or the outlets. All flushing should be recorded in a log submitted daily to the head of maintenance. The faucet should be opened and the water should run for 30 seconds to one minute, or until cold.

A filtration device, or point-of-use (POU) device can be relatively inexpensive ($65 to $250) or expensive (ranging from $250 to $500), their effectiveness varies, and they may be vulnerable to vandalism. They also require a maintenance program for regular upkeep to ensure effectiveness. Cartridge filter units need to be replaced periodically to remain effective. NSF International, an independent, third-party certification organization, has a testing program to evaluate the performance of POU devices for lead removal (NSF Standard 53). Before purchasing any device, ask the manufacturer for proof of NSF approval and the Performance Data Sheet, or check by visiting the NSF Web site at:
http://www.nsf.org/business/search_listings/index/asp

4.0 LIMITATIONS

Partner subcontracted with ESC Lab Sciences who performed the lead analysis. No warranties expressed or implied, are made by Partner or its subcontractor ESC, or their employees as to the use of any information, apparatus, product or process disclosed in this report. Every reasonable effort has been made to assure correctness.

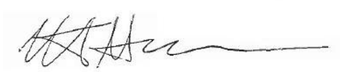
State-of-the-art practices have been employed to perform this inspection. No demolition or product research was performed in attempts to reveal material compositions. The services consist of professional opinions and recommendations made in accordance with generally accepted engineering principles/practices. These services are designed to provide an analytical tool to assist the client. Partner and its subcontractor ESC and their employees/representatives bear no responsibility for the actual condition of the structure or safety of this site pertaining to lead and/or lead contamination regardless of the actions taken by the inspection team or the client.

5.0 SIGNATURES OF PROFESSIONALS

Partner has performed a lead-in-drinking water inspection on the property at 1776 Raritan Road, Scotch Plains, Union County, New Jersey in general conformance with the scope and limitations of the protocol stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

Prepared By:

Partner Engineering and Science, Inc.



Matt Genna
Project Manager
Health and Safety Services

Douglas R. Lawson, Ph.D., CIH
Technical Director
Industrial Hygiene Services

APPENDIX A: LABORATORY ANALYSIS AND CHAIN OF CUSTODY

ANALYTICAL REPORT

August 18, 2016

ESC LAB SCIENCES — YOUR LAB OF CHOICE

myESC — REAL TIME DATA ACCESS

Partner Engineering & Science - NJ

Sample Delivery Group:	L853759
Samples Received:	08/16/2016
Project Number:	61138115000
Description:	Union County Vocational Tech School
Site:	ADMIN BLDG
Report To:	Mr. Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Entire Report Reviewed By:

T. Alan Harvill
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

001-ADMIN POE L853759-01 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 07:12	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899427	1	08/17/16 07:59	08/18/16 10:04	JDG

003-ADMIN WF L853759-02 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 07:14	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899427	1	08/17/16 07:59	08/18/16 10:28	JDG

005-ADMIN SINK L853759-03 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 07:16	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899427	1	08/17/16 07:59	08/18/16 10:31	JDG

007-ADMIN WF2 L853759-04 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 07:20	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899427	1	08/17/16 07:59	08/18/16 10:34	JDG

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Alan Harvill

T. Alan Harvill
Technical Service Representative

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00276		0.00100	0.0150	1	08/18/2016 10:04	WG899427	JDG

Cp Tc Ss Cn Sr Qc Gl Al Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 10:28	WG899427	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00195		0.00100	0.0150	1	08/18/2016 10:31	WG899427	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 10:34	WG899427	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3157686-1 08/18/16 09:53

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157686-3 08/18/16 09:59 • (LCSD) R3157686-4 08/18/16 10:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0462	0.0458	92	92	85-115			1	20

L853759-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853759-01 08/18/16 10:04 • (MS) R3157686-6 08/18/16 11:17 • (MSD) R3157686-7 08/18/16 11:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00276	0.0486	0.0496	92	94	1	70-130			2	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1,4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

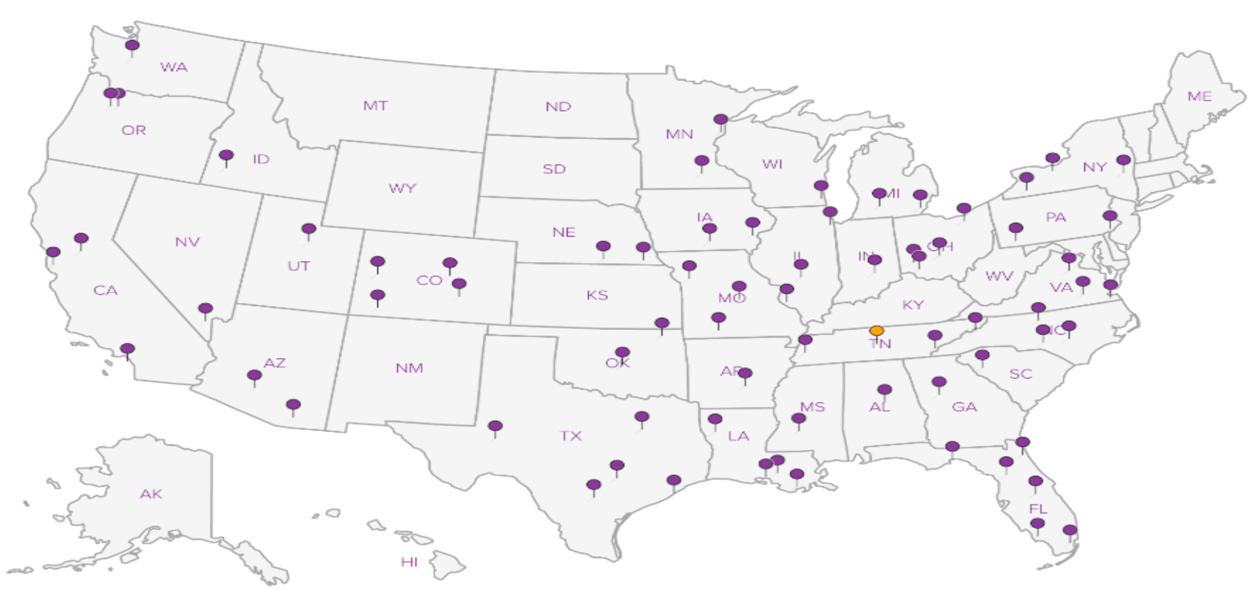
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

ESC L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains, NJ

Phone: 609.947-7563
Fax:

Client Project # 61138115000

Lab Project # PARENGENJ-DW

L # 853755
K186

Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Collected by (print): Matt Genna

Site/Facility ID # Admin Bldg

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
001- Admin POE		DW	250mL	8/12/16	7:12	1			01
002- Admin POE f					7:13				
003- Admin WF					7:14				02
004- Admin WF F					7:15				
005- Admin Sink					7:16				03
006- Admin Sink F					7:17				
007- Admin WF2					7:20				04
008- Admin WF2 F					7:21				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other________

Remarks: If initial Sample comes back above action level- Analyze flush Sample

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	8/15/16	11:15	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Temp: AMB °C Bottles Received: 8 BR

Date: 8/16/16 Time: 0900

Condition: (lab use only)

COC Seal Intact: ✓ Y ___N ___NA

pH Checked:

NCF:

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: PARENGENJ SDG# 853759

Cooler Received/Opened On: 8/16/16 By: _Alex_Schulert___

Temperature Upon Receipt: AMB °c

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out (ink, signed, etc.)?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?	✓		
Were all applicable sample containers checked for preservation?	✓		
(Any samples not in accepted pH range noted on COC .)			
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)		✓	

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O·N·E L·A·B
Est. 1970
N·A·T·I·O·N·W·I·D·E

ANALYTICAL REPORT

August 18, 2016

Partner Engineering & Science - NJ

Sample Delivery Group:	L853763
Samples Received:	08/16/2016
Project Number:	61138115000
Description:	Union County Vocational Tech School
Site:	APA HALL
Report To:	Mr. Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Entire Report Reviewed By:

T. Alan Harvill

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

1 Cp	2 Tc	3 Ss	4 Cn	5 Sr	6 Qc	7 Gl	8 Al	9 Sc

POE/OUTSIDE 117 WF 009 L853763-01 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 07:24	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899427	1	08/17/16 07:59	08/18/16 10:37	JDG

011-APA WF NEAR BR L853763-02 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 07:33	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899427	1	08/17/16 07:59	08/18/16 10:39	JDG

013-WF OUTSIDE 208 L853763-03 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 07:40	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899427	1	08/17/16 07:59	08/18/16 10:42	JDG

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Alan Harvill

T. Alan Harvill
Technical Service Representative

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 10:37	WG899427	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 10:39	WG899427	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 10:42	WG899427	JDG

Method Blank (MB)

(MB) R3157686-1 08/18/16 09:53

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157686-3 08/18/16 09:59 • (LCSD) R3157686-4 08/18/16 10:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0462	0.0458	92	92	85-115			1	20

L853759-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853759-01 08/18/16 10:04 • (MS) R3157686-6 08/18/16 11:17 • (MSD) R3157686-7 08/18/16 11:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00276	0.0486	0.0496	92	94	1	70-130			2	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660
Alaska	UST-080
Arizona	AZ0612
Arkansas	88-0469
California	01157CA
Colorado	TN00003
Conneticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA	100789
DOD	1461.01
USDA	S-67674

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

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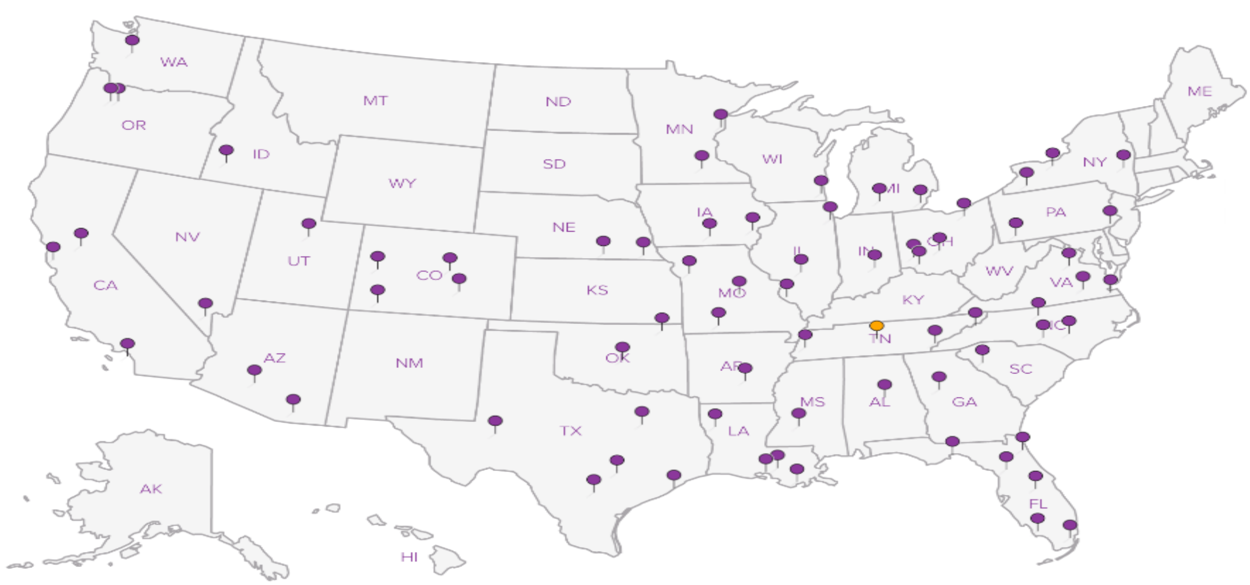

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: Matt Genna	Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains, NJ

Phone: 609-947-7563
Fax:

Client Project #: 61138115000

Lab Project #: PARENGENJ-DW

Collected by (print): Matt Genna

Site/Facility ID #: APA Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3 ✓

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
POE/Outside 117 WF009		DW	250mL	8/12/16	7:24	1			01
010-POE outside 117 WF		↓	↓	↓	7:25	↓			
011-APA WF near BR					7:33				02
012-APA WF near BR F					7:34				
013-WF outside 208					7:40				03
014-WF outside 208 F					7:41				

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 853763
K189
Acctnum: PARENG...
Template:
Prelogin:
TSR:
PB:
Shipped Via:

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other__________

Remarks: If initial Sample comes back above action level - Analyze flush Sample

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
[signature]	8/15/16	11:15	[signature]		MNC
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 6 BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Alexis	Date: 8/16/16 Time: 0900	pH Checked: <2 NCF:

ESC LAB SCIENCES
YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: PARENGENS SDG# 853763

Cooler Received/Opened On: 8- 16 -16 By Alex Schulert

Temperature Upon Receipt: AMB °c

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out (ink, signed, etc.)?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?	✓		
Were all applicable sample containers checked for preservation?	✓		
(Any samples not in accepted pH range noted on COC .)			
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)		✓	

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www.esclabsciences.com • sales@esclabsciences.com
ONE LAB Est. 1970 NATIONWIDE

ANALYTICAL REPORT

August 19, 2016

ESC LAB SCIENCES YOUR LAB OF CHOICE

myESC REAL TIME DATA ACCESS

Partner Engineering & Science - NJ

Sample Delivery Group:	L853975
Samples Received:	08/16/2016
Project Number:	61138115000
Description:	Union County Vocational Tech School
Site:	APA HALL
Report To:	Mr. Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Entire Report Reviewed By:

T. Alan Harvill
Technical Service Representative

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TABLE OF CONTENTS

	Collected by	Collected date/time	Received date/time
015-FACULTY ROOM 208 L853975-01 DW	Matt Genna	08/12/16 00:00	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899580	1	08/17/16 13:57	08/19/16 01:09	JD

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Alan Harvill

T. Alan Harvill
Technical Service Representative

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:09	WG899580	JD

Method Blank (MB)

(MB) R3157813-11 08/19/16 00:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157813-13 08/19/16 00:37 • (LCSD) R3157813-14 08/19/16 00:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0502	0.0498	100	100	85-115			1	20

L853655-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853655-01 08/19/16 00:42 • (MS) R3157813-15 08/19/16 00:45 • (MSD) R3157813-16 08/19/16 00:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	ND	0.0489	0.0516	98	103	1	70-130			5	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

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State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

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A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

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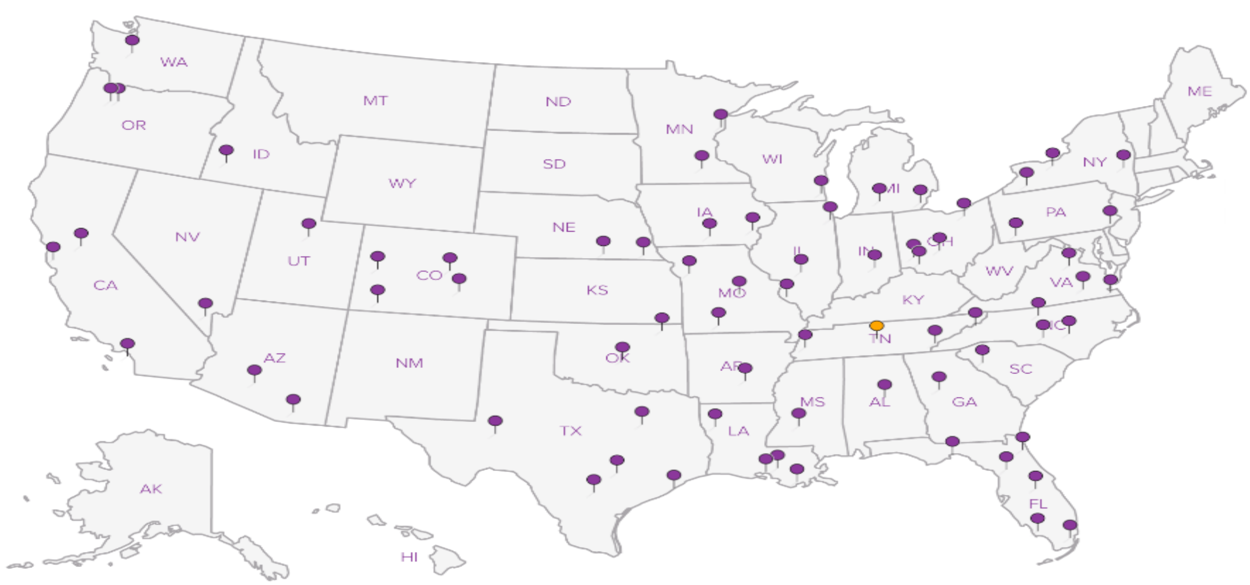

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 853975

K195

Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains NJ

Phone: 609-947-756
Fax:

Client Project # 61138115000

Lab Project # PARENGENJ-DW

Collected by (print): Matt Genna

Site/Facility ID # APA Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
Per cont 015 - Faculty Rm 208		DW	250mL	8/12/16					-01

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other__________

Remarks: If Sample comes back above action level - Analyze flush Sample

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	8/15/16	11:15	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Temp: Amb °C Bottles Received: 2BR

Date: 8/16/16 Time: 0900

Condition: (lab use only)

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: CL

NCF: X

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: PARENGENT SDG# 853975

Cooler Received/Opened On: 8-16-16 By Alex Schulert

Temperature Upon Receipt: AMB °C

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out (ink, signed, etc.)?		✓	
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?	✓		
Were all applicable sample containers checked for preservation?	✓		
(Any samples not in accepted pH range noted on COC .)			
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)	✓		

...Green Technology through Innovation

12065 LEBANON ROAD • MOUNT JULIET, TENNESSEE 37122
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O·N·E L·A·B
Est. 1970
N·A·T·I·O·N·W·I·D·E

Matt Shacklock

ESC Lab Sciences
Non-Conformance Form

Login # 353975	Client: PARENGENJ	Date:8/16/16	Evaluated by:Alex

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	x	Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: No IDs on COC. Received "015-Faculty Room 208", "016-Faculty Room 208"

Client informed by:		Call	x	Email		Voice Mail		Date: 8/17/16	Time: 8:32
TSR Initials: TAH	Client Contact: Matt Genna								

Login Instructions:

Alan,

I apologize for our mistake – please analyze these two samples.

015-Faculty Room 208 was the initial sample
016-Faculty Room 208 was the flush sample.

Any other issues let me know, thanks.

Matt

ESC LAB SCIENCES
YOUR LAB OF CHOICE

ANALYTICAL REPORT

August 18, 2016

myESC
REAL TIME DATA ACCESS

Partner Engineering & Science - NJ

Sample Delivery Group:	L853750
Samples Received:	08/16/2016
Project Number:	61138115000
Description:	Union County Vocational Tech School
Site:	WEST HALL
Report To:	Mr. Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Entire Report Reviewed By:

[Preliminary Report]

T. Alan Harvill
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

017-POE BOILER BR L853750-01 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 07:58	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:09	JDG

019-POE BR SINK L853750-02 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 07:58	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:28	JDG

021-RM 308A L853750-03 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:03	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:31	JDG

023-OUTSIDE 308A L853750-04 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:06	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:33	JDG

025-OUTSIDE 307 L853750-05 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:12	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:36	JDG

027-OUTSIDE 307 L853750-06 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:14	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:39	JDG

029-OUTSIDE 314 L853750-07 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:19	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:42	JDG

031-RM 312 WF L853750-08 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:20	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:44	JDG

033 RM 313 WF L853750-09 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:28	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:47	JDG

035 RM 317 L853750-10 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:32	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:50	JDG

037-ROOM 319 L853750-11 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:36	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:11	JDG

039-HALLWAY OUTSIDE 318 WF1 L853750-12 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:40	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:24	JDG

041-HALL OUTSIDE 318 WF2 L853750-13 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:42	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:27	JDG

043-OUTSIDE 325 L853750-14 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:52	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:30	JDG

045-OUTSIDE 325 (2) L853750-15 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:55	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:33	JDG

047-331 CULINARY SINK 1 L853750-16 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:56	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:35	JDG

049-331 CULINARY SINK 2 L853750-17 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:57 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:38	JDG

051-331 CULINARY SINK 3 L853750-18 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:00 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:41	JDG

053-331 CULINARY SINK 4 L853750-19 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:02 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:43	JDG

055-331 CULINARY SINK 5 L853750-20 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 07:58 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:46	JDG

057-330 CULINARY SINK 1 L853750-21 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:15 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:13	JDG

059-330 CULINARY SINK 2 L853750-22 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:16 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:28	JDG

061-330 CULINARY SINK 3 L853750-23 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:17 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:30	JDG

063-330 CULINARY SINK 4 L853750-24 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:18 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:33	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

065-WF ACROSS CAF 1 L853750-25 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:25 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:36	JDG

067-WF ACROSS CAF 2 L853750-26 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:26 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:38	JDG

069-CAF PREP SINK 1 L853750-27 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:29 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:41	JDG

071-CAF PREP SINK 2 L853750-28 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:30 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:44	JDG

073-CAF PREP SINK 3 L853750-29 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:31 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:46	JDG

075-CAF SINK SERVE L853750-30 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:36 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:49	JDG

077-OUTSIDE CAFERIA WF 1 L853750-31 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:42 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:08	JDG

079-OUTSIDE CAFERIA WF 2 L853750-32 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:43 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:22	JDG

Cp	Tc	Ss	Cn	Sr	Qc	Gl	Al	Sc

081-342 WF L853750-33 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:53 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:24	JDG

083-OUTSIDE 341 L853750-34 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:53 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:27	JDG

085-OUTSIDE 341 (2) L853750-35 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:54 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:30	JDG

087-RM 343 SINK L853750-36 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:59 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:33	JDG

089-344 GYM L853750-37 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:02 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:35	JDG

091-OUTSIDE 346 (1) L853750-38 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:12 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:38	JDG

093-OUTSIDE 346 (2) L853750-39 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:13 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:41	JDG

095-RM 345 WF L853750-40 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:15 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:43	JDG

097-RM 366 WF L853750-41 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:19 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:18	JDG

099-OUTSIDE 363 (1) L853750-42 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:23 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:26	JDG

101-OUTSIDE 363 (2) L853750-43 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:24 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:29	JDG

103-RM4 BAKERY (1) L853750-44 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:32 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:31	JDG

105-RM4 BAKERY (2) L853750-45 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:33 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:40	JDG

107-RM 6 SUPERMARKET 1 L853750-46 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:39 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:43	JDG

109-RM 6 SUPERMARKET 2 L853750-47 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:41 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:45	JDG

111-OUTSIDE RM 6 (1) L853750-48 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 10:45 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:48	JDG

113-OUTSIDE RM 6 (2) L853750-49 DW			Collected by Matt Genna	Collected date/time 08/12/16 10:45	Received date/time 08/16/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:51	JDG

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

[Preliminary Report]

T. Alan Harvill
Technical Service Representative

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00744		0.00100	0.0150	1	08/18/2016 11:09	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00139		0.00100	0.0150	1	08/18/2016 11:28	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:31	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:33	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:36	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:39	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:42	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00925		0.00100	0.0150	1	08/18/2016 11:44	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.0282		0.00100	0.0150	1	08/18/2016 11:47	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00431		0.00100	0.0150	1	08/18/2016 11:50	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00149		0.00100	0.0150	1	08/18/2016 12:11	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 12:24	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00151		0.00100	0.0150	1	08/18/2016 12:27	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00155		0.00100	0.0150	1	08/18/2016 12:30	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00132		0.00100	0.0150	1	08/18/2016 12:33	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00220		0.00100	0.0150	1	08/18/2016 12:35	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00120		0.00100	0.0150	1	08/18/2016 12:38	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 12:41	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00141		0.00100	0.0150	1	08/18/2016 12:43	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00299		0.00100	0.0150	1	08/18/2016 12:46	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00127		0.00100	0.0150	1	08/18/2016 13:13	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00238		0.00100	0.0150	1	08/18/2016 13:28	WG899421	JDG

Metals (ICPMS) by Method 200.8

	Result	Qualifier	Det. Limit	Reference Limit	Dilution	Analysis	Batch	Analyst
Analyte	mg/l		mg/l	mg/l		date / time		
Lead	0.00105		0.00100	0.0150	1	08/18/2016 13:30	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.0328		0.00100	0.0150	1	08/18/2016 13:33	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 13:36	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00264		0.00100	0.0150	1	08/18/2016 13:38	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00101		0.00100	0.0150	1	08/18/2016 13:41	WG899421	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 13:44	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00212		0.00100	0.0150	1	08/18/2016 13:46	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00334		0.00100	0.0150	1	08/18/2016 13:49	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:08	WG899423	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:22	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:24	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:27	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:30	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00114		0.00100	0.0150	1	08/18/2016 14:33	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:35	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00101		0.00100	0.0150	1	08/18/2016 14:38	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00191		0.00100	0.0150	1	08/18/2016 14:41	WG899423	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00342		0.00100	0.0150	1	08/18/2016 14:43	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:18	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:26	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:29	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.0110		0.00100	0.0150	1	08/18/2016 09:31	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.0147		0.00100	0.0150	1	08/18/2016 09:40	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:43	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00123		0.00100	0.0150	1	08/18/2016 09:45	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:48	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:51	WG899424	JDG

Method Blank (MB)

(MB) R3157687-1 08/18/16 10:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157687-3 08/18/16 11:04 • (LCSD) R3157687-4 08/18/16 11:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0453	0.0446	91	89	85-115			2	20

L853750-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-01 08/18/16 11:09 • (MS) R3157687-5 08/18/16 11:12 • (MSD) R3157687-6 08/18/16 11:15

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00744	0.0538	0.0553	93	96	1	70-130			3	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3157688-1 08/18/16 11:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157688-3 08/18/16 12:03 • (LCSD) R3157688-4 08/18/16 12:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0465	0.0481	93	96	85-115			4	20

L853750-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-11 08/18/16 12:11 • (MS) R3157688-5 08/18/16 12:14 • (MSD) R3157688-6 08/18/16 12:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00149	0.0486	0.0467	94	90	1	70-130			4	20

Method Blank (MB)

(MB) R3157742-1 08/18/16 13:03

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157742-3 08/18/16 13:08 • (LCSD) R3157742-4 08/18/16 13:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0465	0.0473	93	95	85-115			2	20

L853750-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-21 08/18/16 13:13 • (MS) R3157742-5 08/18/16 13:16 • (MSD) R3157742-6 08/18/16 13:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00127	0.0489	0.0485	95	94	1	70-130			1	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3157743-1 08/18/16 13:57

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157743-3 08/18/16 14:03 • (LCSD) R3157743-4 08/18/16 14:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0469	0.0477	94	95	85-115			2	20

L853750-31 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-31 08/18/16 14:08 • (MS) R3157743-5 08/18/16 14:11 • (MSD) R3157743-6 08/18/16 14:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	ND	0.0460	0.0458	92	92	1	70-130			0	20

Method Blank (MB)

(MB) R3157609-7 08/18/16 09:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157609-9 08/18/16 09:12 • (LCSD) R3157609-10 08/18/16 09:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0470	0.0474	94	95	85-115			1	20

L853750-41 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-41 08/18/16 09:18 • (MS) R3157609-11 08/18/16 09:20 • (MSD) R3157609-12 08/18/16 09:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	ND	0.0467	0.0466	93	93	1	70-130			0	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1,4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

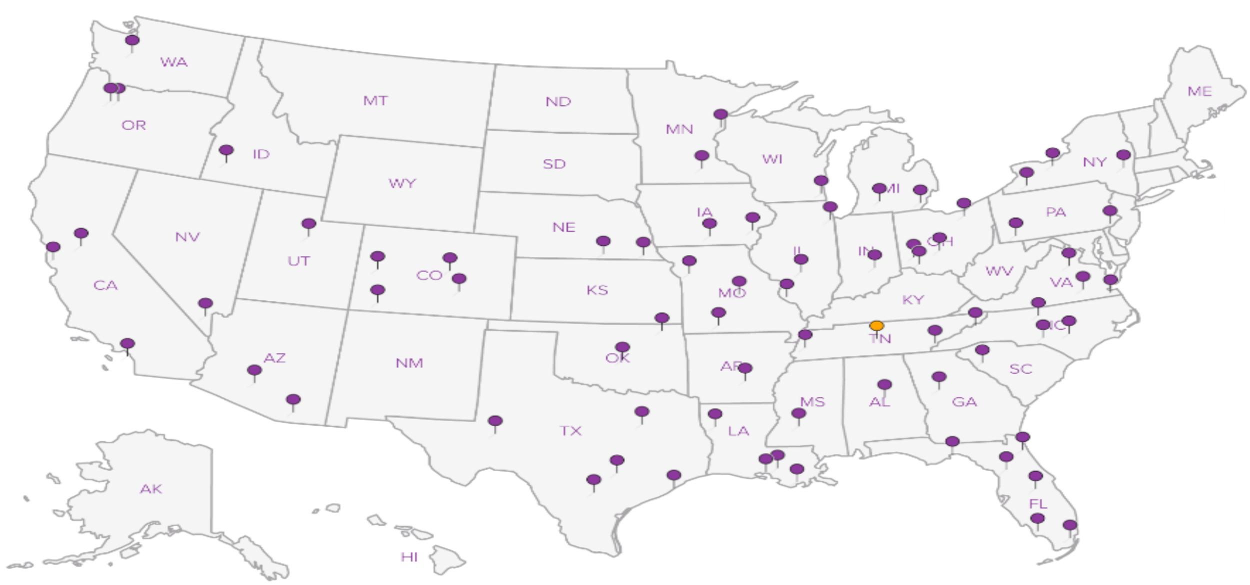
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:	Billing Information:	Analysis / Container / Preservative	Chain of Custody Page ___ of ___
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724	PBG--250mL HDPE HNO3	ESC LAB SCIENCES YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859

Report to: **Matt Genna**

Email To: mgenna@partneresi.com

Project Description: **Union County Vocational Tech School**

City/State Collected: Scotch Plains, NJ

Phone: 609-947-7563
Fax:

Client Project #: 61138115000

Lab Project #: **PARENGENJ-DW**

Collected by (print): Matt Genna

Site/Facility ID #: West Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

L# 853750

K188

Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
017-POE Boiler BR		DW	250mL	8/12/16	7:58	1			01
018-POE Boiler BRF					7:59				
019-POE BR Sink					7:58				02
020-POE BR SinkF					7:59				
021-Rm 308A					8:03				03
022 Rm 308A Flush					8:04				
023-Outside 308A					8:06				04
024-Outside 308A flush					8:07				
025-Outside 307					8:12				05
026 Outside 307 flush					8:13				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

Remarks: If initial Sample comes back above action level analyze flush

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
	8/15/16	11:15			OK
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 9 8 BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: 0900	pH Checked: <2 NCF:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains, NJ

L# 853750

Phone: 609-947-7563
Fax:

Client Project # 61138115000

Lab Project # PARENGENJ-DW

Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Collected by (print): Matt Genna

Site/Facility ID # West Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

PBG--250mL HDPE HNO3

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
027- outside 307(2)		DW	250ml	8/12/16	8:14	1			06
028- outside 307(2) flush					8:15				
029- outside 314					8:19				07
030 outside 314 (flush)					8:20				
031 - Rm 312 WF					8:23				08
032 Rm 312 WF f					8:24				
033 Rm 313 WF					8:28				09
034 Rm 313 WF f					8:29				10
035 Rm 317					8:32				
036 Rm 317					8:33				

6617 3604 1384

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

pH ________ Temp ________
Flow ________ Other ________

Hold #

Remarks: If initial sample comes back above action level - analyze flush sample

Relinquished by : (Signature)	Date: 8/15/16	Time: 11:15	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only) M12C
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 9 BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Alexis	Date: 8/16/16 Time: 09:00	pH Checked: <2 NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: Matt Genna	Email To: mgenna@partneresi.com
Project Description: Union County Vocational Tech School	City/State Collected: Scotch Plains, NJ

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Phone: 609-947-7563 Fax:	Client Project # 61138115000	Lab Project # PARENGENJ-DW
Collected by (print): Matt Genna	Site/Facility ID # ~~Baxel~~ West Hall	P.O. #
Collected by (signature): Immediately Packed on Ice N X Y ___	*Rush?* (Lab MUST Be Notified) ___ Same Day ....200% ___ Next Day ....100% ___ Two Day ....50% X Three Day 25%	Date Results Needed; Email? ___No X Yes; FAX? X No ___Yes

L# 853780
Table #
Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
037- Room 319		DW	250mL	8/12/16	8:36				11
038- Room 319 Flush					8:37				
039- hallway outside 318 WFL					8:40				12
040- hall outside 318 WFL flush					8:41				
041- hall outside 318 WFL					8:42				13
042- hall outside 318 WFL flush					8:43				
043- outside 325					8:52				14
044- outside 325F					8:53				
045 outside 325(2)					8:52				15
046 outside 325(2)F					8:53				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other__________

pH ________ Temp ________

Flow ________ Other ________

6617 3604 1384

Remarks: If initial sample comes back above action level-analyze flush sample

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
	8/15/16	11:15			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 9 BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: @900	pH Checked: <2 NCF:

Company Name/Address:	Billing Information:	Analysis / Container / Preservative	Chain of Custody Page ___ of ___
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724	PBG--250mL HDPE HNO3	ESC LAB SCIENCES YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859

Report to: **Matt Genna**

Email To: mgenna@partneresi.com

Project Description: **Union County Vocational Tech School**

City/State Collected: Scotch Plains, NJ

Phone: 609-9477563

Fax:

Client Project #: 61138115000

Lab Project #: **PARENGENJ-DW**

L # 853750

Table #

Collected by (print): Matt Genna

Site/Facility ID #: West Hall

P.O. #

Acctnum: **PARENGENJ**

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Collected by (signature): [signature]

Immediately Packed on Ice N ✓ Y ___

Rush? (Lab MUST Be Notified)

___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes

FAX? X No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
047-331 Culinary Sink 1		DW	250mL	8/12/16	8:55				
048-331 Culinary Sink 1F		↓	↓	↓	8:58				16
049-331 Culinary Sink 2					8:56				
050-331 Culinary Sink 2F					8:59				17
051-331 Culinary Sink 3					8:57				
052-331 Culinary Sink 3F					9:00				18
053-331 Culinary Sink 4					9:01				
054-331 Culinary Sink 4F					9:03				19
055-331 Culinary Sink 5					9:02				
056-331 Culinary Sink 5F		DW	250mL		9:04				20

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other________

Remarks: If initial sample comes back above action level analyze flush sample

pH ________ Temp ________

Flow ________ Other ________

6617 7604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
[signature]	8/15/16	11:15	[signature]		OK
Relinquished by : (Signature)	**Date:**	**Time:**	**Received by: (Signature)**	Temp: °C Amb / Bottles Received: 98BR	MK COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	**Date:**	**Time:**	**Received for lab by: (Signature)**	Date: 8/16/16 Time: 0900	pH Checked: <2 / NCF:
			[signature]		

Company Name/Address:	Billing Information:	Analysis / Container / Preservative	Chain of Custody Page ___ of ___
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724	PBG--250mL HDPE HNO3	ESC LAB SCIENCES YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859
Report to: Matt Genna	Email To: mgenna@partneresi.com		
Project Description: Union County Vocational Tech School	City/State Collected: Scotch Plains, NJ		L # 853780
Phone: 609-947-7563 Fax:	Client Project # 61138115000	Lab Project # PARENGENJ-DW	Table #
Collected by (print): Matt Genna	Site/Facility ID # West Hall	P.O. #	Acctnum: PARENGENJ Template: Prelogin:
Collected by (signature): [signature] Immediately Packed on Ice N X Y ___	Rush? (Lab MUST Be Notified) ___ Same Day ....200% ___ Next Day ....100% ___ Two Day ....50% X Three Day 25%	Date Results Needed Email? ___No X Yes FAX? X No ___Yes	TSR: PB: Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
057-330 Culinary Sink 1		DW	250mL	8/12/16	9:15	1			21
058-330 Culinary Sink 1F		↓	↓	↓	9:19	↓			
059-330 Culinary Sink 2					9:16				22
060-330 Culinary Sink 2F					9:20				
061-330 Culinary Sink 3					9:17				23
062-330 Culinary Sink 3F					9:21				
063-330 Culinary Sink 4					9:18				24
064-330 Culinary Sink 4F					9:22				
065-WF across Caf 1					9:25				25
066-WF across Caf 1F		↓	↓	↓	9:26	↓			

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other__________

Remarks: If initial Sample comes back above action level - analyze flush

pH ________ Temp ________

Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
[signature]	8/15/16	11:15	[signature]		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 98BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 8/16/16 Time: 0900	pH Checked: <2 NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: Matt Genna	Email To: mgenna@partneresi.com
Project Description: Union County Vocational Tech School	City/State Collected: Scotch Plains NJ
Phone: 609-947-7563 Fax:	Client Project # 61138115000
Lab Project # PARENGENJ-DW	
Collected by (print): Matt Genna	Site/Facility ID # West Hall
P.O. #	
Collected by (signature):	Rush? (Lab MUST Be Notified) ___ Same Day ....200% ___ Next Day ....100% ___ Two Day ....50% X Three Day 25%
Immediately Packed on Ice N X Y ___	Date Results Needed Email? ___No X Yes FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 853750
Table #
Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
067-WF across Caf 2		DW	250mL	8/12/16	9:26	1			26
068-WF across Caf 2F		↓	↓	↓	9:27	↓			
069-Caf prep sink 1					9:29				27
070 Caf prep sink F1					9:30				
071 Caf prep sink 2					9:30				28
072 Caf prep sink F2					9:31				
073 Caf prep sink 3					9:31				29
074 Caf prep sink 3F					9:32				
075-Caf sink serve					9:36				30
076-Caf sink serve F		↓	↓	↓	9:37	↓			

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

Remarks: If initial sample comes back above action level - analyze flush sample

pH _______ Temp _______
Flow _______ Other _______

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____
	8/15/16	11:15		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 98 BR
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: 0900

Condition: (lab use only)
COC Seal Intact: ✓ Y ___N ___NA
pH Checked: <2
NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: Matt Genna	Email To: mgenna@partneresi.com
Project Description: Union County Vocational Tech School	City/State Collected: Scotch Plains NJ
Phone: 609-947-7563 Fax:	Client Project #: West Hall
Lab Project #: PARENGENJ-DW	
Collected by (print): Matt Genna	Site/Facility ID #: 6113811S000
P.O. #:	
Collected by (signature):	Rush? (Lab MUST Be Notified) ___ Same Day ....200% ___ Next Day ....100% ___ Two Day ....50% X Three Day 25%
Immediately Packed on Ice N X Y ___	Date Results Needed Email? ___No X Yes FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 853750
Table #
Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
077-outside Cafeteria WF1		DW	250mL	8/12/16	9:42	1			31
078-outside caf WF1F					9:43				
079-outside caf WF2					9:43				32
080-outside caf WF2F					9:44				
081-342 WF					9:53				33
082-342 WF flush					9:54				
083-outside 341					9:53				34
084-outside 341 flush					9:54				
085-outside 341 (2)					9:54				35
086 Outside 341 flush					9:55				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

pH ________ Temp ________ 6617 3604 1384

Flow ________ Other ________

Remarks: If initial sample comes back above action level - analyze flush

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Hold #
	8/15/16	11:15			Condition: (lab use only)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 18 BR	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: 0900	COC Seal Intact: ✓ Y ___ N ___ NA pH Checked: <2 NCF:

Company Name/Address: **Partner Engineering- Eatontown NJ** 611 Industrial Way W Eatontown, NJ 07724	Billing Information: Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: **Matt Genna**	Email To: mgenna@partneresi.com
Project Description: **Union County Vocational Tech School**	City/State Collected: Scotch Plains NJ
Phone: 609 847 7563 Fax:	Client Project # 61138115000
Lab Project # PARENGENJ-DW	
Collected by (print): Matt Genna	Site/Facility ID # West Hall
P.O. #	
Collected by (signature):	
Immediately Packed on Ice N X Y ___	

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
087-Rm 343 Sink		DW	250ml	8/12/16	9:59				
088-Rm 343 Sink flush					10:00				37
089-344 gym					10:02				
090-344 gym flush					10:03				37
091-outside 346(1)					10:12				
092-outside 346(1)F					10:13				38
093-outside 346(2)					10:13				
094-outside 346(2)F					10:14				39
095-Rm 345 WF					10:15				
096-Rm 345 WF flush					10:16				40

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

Remarks: If initial comes back above action level analyze flush

pH ________ Temp ________
Flow ________ Other ________

0617 3604 1384

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	8/15/16	1115	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Temp: AMB °C Bottles Received: 9 BR

Date: 8/16/16 Time: 0900

Hold #

Condition: (lab use only)

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: <2 NCF:

Chain of Custody Page ___ of ___
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Mount Juliet, TN 37122
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Phone: 800-767-5859
Fax: 615-758-5859

L# 853750

Table #

Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Matt Genna**

Email To: mgenna@partneresi.com

Project Description: **Union County Vocational Tech School**

City/State Collected: Scotch Plains NJ

Phone: 609 947 7563
Fax:

Client Project #: 6113811SCCO

Lab Project #: **PARENGENJ-DW**

Collected by (print): Matt Genna

Site/Facility ID #: West Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

L# 853780

Table #

Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
097-Rm366 WF		DW	250mL	8/12	10:19	1			41
098-Rm 366 WF flush					10:20				
099-outside 363(1)					10:23				42
100-outside 363(1) F					10:24				
101 outside 363(2)					10:24				43
102-outside 363(2)F					10:25				
103-Rm4 bakery(1)					10:32				44
104-Rm4 bakery(1)F					10:33				
105-Rm 4 bakery 2					10:33				45
106-Rm 4 bakery 2F					10:34				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other________

pH ________ Temp ________

Flow ________ Other ________

6617 3604 1384

Remarks: If initial comes back above action level analyze flush sample

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
	8/15/16	11:15			MRO
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 98BR	COC Seal Intact: ✓ Y ___ N ___ NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: 0400	pH Checked: <2 NCF:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains NJ

L# 853750

Phone: 6099447763
Fax:

Client Project # 61138115006

Lab Project # PARENGENJ-DW

Table #

Collected by (print): Matt Genna

Site/Facility ID #

P.O. #

Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed
Email? ___No X Yes
FAX? X No ___Yes

PBG--250mL HDPE HNO3

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
107-Rm 6 Supermarket 1		DW	250mL	8/12/16	10:39	1			46
108 Rm 6 Supermarket 1F					10:40				
109 Rm 6 Supermarket 2					10:41				47
110 Rm 6 Supermarket 2F					10:42				
111-outside rm 6 (1)					10:45				48
112-outside rm 6(1)F					10:46				
113-outside rm 6(2)					10:45				49
114 outside rm 6(2) F					10:46				

6617 3604 1384

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

pH ________ Temp ________
Flow ________ Other ________

Hold #

Remarks: If sample comes back above action level - analyze flush sample

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Condition: (lab use only)

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	8/15/16	11:15	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Alexis

Temp: Amb °C Bottles Received: 48 BR

COC Seal Intact: ✓ Y ___N ___NA

Date: 8/16/16 Time: 0900

pH Checked: <2

NCF:

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: PARENGENS SDG# 853750

Cooler Received/Opened On: 8/ 16 /16 By: _Alex_Schulert____

Temperature Upon Receipt: AMB °c

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out (ink, signed, etc.)?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?	✓		
Were all applicable sample containers checked for preservation?	✓		
(Any samples not in accepted pH range noted on COC .)			
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)		✓	

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O·N·E L·A·B Est. 1970 N·A·T·I·O·N·W·I·D·E

ANALYTICAL REPORT

August 19, 2016

Partner Engineering & Science - NJ

Sample Delivery Group:	L853766
Samples Received:	08/16/2016
Project Number:	61138115000
Description:	Union County Vocational Tech School
Site:	BAXTEL HALL
Report To:	Mr. Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Entire Report Reviewed By:

T. Alan Harvill

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

115-POE JANITOR L853766-01 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:03 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 19:07	VSS

117-FACULTY LOUNGE SINK L853766-02 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:08 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 21:30	VSS

119-WF OUTSIDE 121 L853766-03 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:14 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 21:33	VSS

121-WF OUTSIDE 121 (2) L853766-04 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:14 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 21:35	VSS

123-WF ACROSS OFFICE L853766-05 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:19 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 21:38	VSS

125-WF ACROSS OFFICE 2 L853766-06 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:19 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 21:41	VSS

127-OUTSIDE 219 L853766-07 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:27 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 21:43	VSS

127-OUTSIDE 219 (2) L853766-08 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:29 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 21:46	VSS

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Alan Harvill

T. Alan Harvill
Technical Service Representative

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00159		0.00100	0.0150	1	08/18/2016 19:07	WG899573	VSS

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 21:30	WG899573	VSS

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 21:33	WG899573	VSS

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 21:35	WG899573	VSS

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 21:38	WG899573	VSS

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 21:41	WG899573	VSS

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 21:43	WG899573	VSS

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 21:46	WG899573	VSS

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3157812-1 08/18/16 17:10

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157812-3 08/18/16 17:16 • (LCSD) R3157812-4 08/18/16 17:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0500	0.0496	100	99	85-115			1	20

L853766-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853766-01 08/18/16 19:07 • (MS) R3157812-8 08/18/16 19:10 • (MSD) R3157812-9 08/18/16 19:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00159	0.0504	0.0520	98	101	1	70-130			3	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660
Alaska	UST-080
Arizona	AZ0612
Arkansas	88-0469
California	01157CA
Colorado	TN00003
Conneticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1 4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

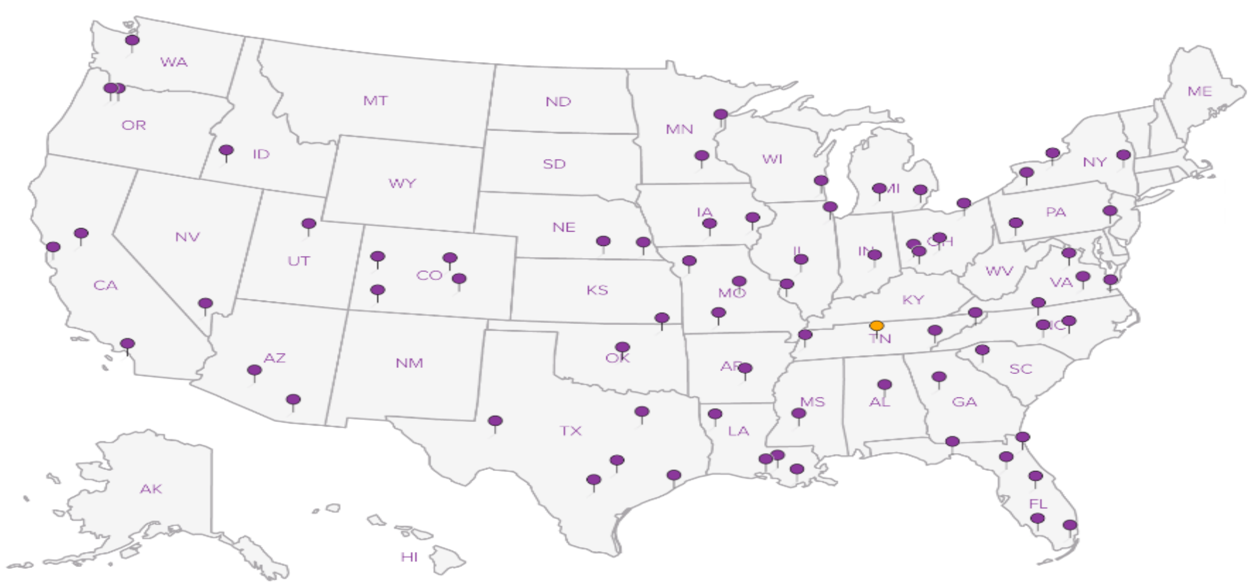
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA	100789
DOD	1461.01
USDA	S-67674

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:

Partner Engineering- Eatontown NJ

611 Industrial Way W
Eatontown, NJ 07724

Billing Information:

Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains, NJ

Phone: 609-947-7563
Fax:

Client Project #: 61138115000

Lab Project #: PARENGENJ-DW

L # 853766

K190

Collected by (print): Matt Genna

Site/Facility ID #: Baxel Hall

P.O. #

Acctnum: PARENGENJ

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
115-POE Janitor	X	DW	250mL	8/12/16	11:03	1			01
116-POE Janitor Flush	↓	↓	↓	↓	11:04	↓			
117-Faculty Lounge Sink					11:08				02
118-faculty Lounge Sink flush					11:09				
119-WF outside 121					11:14				03
120-WF outside 121 flush					11:15				
121-WF outside 121(2)					11:14				04
122-WF outside 121(2) flush					11:15				
123-WF across office					11:19				05
124-WF across office flush					11:20				

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___________

pH ________ Temp ________

Flow ________ Other ________

6617 3604 1384

Remarks: If initial Sample comes back above action level analyze flush Sample

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	8/15/16	11:15	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____

Temp: AMB °C Bottles Received: 16 BR

Date: 8/16/16 Time: 0900

Condition: (lab use only) MR R

COC Seal Intact: ✓ Y ___ N ___ NA

pH Checked: <2

NCF:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative: PBG--250mL HDPE HNO3 <2

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna
Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School
City/State Collected: Scotch Plains NJ

Phone: 609-947-7563
Fax:
Client Project #: 61138115000
Lab Project #: PARENGENJ-DW

Collected by (print): Matt Genna
Site/Facility ID #: Baxel Hall
P.O. #:

Collected by (signature):
Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed
Email? ___No X Yes
FAX? X No ___Yes

L# 853766
Table #
Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
125- Wf across office 2		DW	250mL	8/12/16	11:19				
126 - Wf across office 2 flush					11:20				06
127- Outside 219					11:27				
128 - Outside 219 flush					11:28				07
129 - Outside 219 (2)					11:28				
130 Outside 219(2) flush					11:29				08
~~131~~									
~~132~~									

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other__________

pH ______ Temp ______
Flow ______ Other ______

6617 3604 1354

Remarks: If initial Sample comes back above action level - analyze flush Sample

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____
[signature]	8/15/16	11:15	[signature]	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 6 BR
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Alexis	Date: 8/16/16 Time: 0900

Condition: (lab use only) OK MK
COC Seal Intact: ✓ ___Y ___N ___NA
pH Checked: <2
NCF:

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: PARINGENT SDG# 853766

Cooler Received/Opened On: 8- 16 -16 By Alex Schulert

Temperature Upon Receipt: AMB °c

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out (ink, signed, etc.)?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?	✓		
Were all applicable sample containers checked for preservation? (Any samples not in accepted pH range noted on COC .)			
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)		✓	

...Green Technology through Innovation
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www.esclabsciences.com • sales@esclabsciences.com
ONE LAB Est. 1970 NATIONWIDE

ANALYTICAL REPORT

August 19, 2016

Partner Engineering & Science - NJ

Sample Delivery Group:	L853771
Samples Received:	08/16/2016
Project Number:	61138115000
Description:	Union County Vocational Tech School
Site:	MANCUSCO HALL
Report To:	Mr. Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Entire Report Reviewed By:

T. Alan Harvill

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

131-POE JANITOR L853771-01 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:37 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 01:27	JDG

133-OUTSIDE 112 L853771-02 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:40 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 01:41	JDG

135-OUTSIDE 112 (2) L853771-03 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:40 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 01:43	JDG

137-OUTSIDE 128 L853771-04 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:45 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 01:46	JDG

139-OUTSIDE 128 (2) L853771-05 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:45 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 01:49	JDG

141- 127 FACULTY L853771-06 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:49 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 01:51	JDG

143-131 GYM (1) L853771-07 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:52 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 01:54	JDG

145-131 GYM (2) L853771-08 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:52 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 01:57	JDG

147-OUTSIDE 219 (1) L853771-09 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:58 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 01:59	JDG

149-OUTSIDE 219 (2) L853771-10 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 11:58 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899578	1	08/17/16 09:54	08/19/16 02:02	JDG

151-RM 223 SINK L853771-11 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:03 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899580	1	08/17/16 09:54	08/19/16 01:01	JD

153-OUTSIDE 208A L853771-12 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:07 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899580	1	08/17/16 09:54	08/19/16 01:03	JD

155-OUTSIDE 208A (2) L853771-13 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:07 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899580	1	08/17/16 09:54	08/19/16 01:06	JD

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Alan Harvill

T. Alan Harvill
Technical Service Representative

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00367		0.00100	0.0150	1	08/19/2016 01:27	WG899578	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:41	WG899578	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:43	WG899578	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:46	WG899578	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:49	WG899578	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:51	WG899578	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00101		0.00100	0.0150	1	08/19/2016 01:54	WG899578	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:57	WG899578	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:59	WG899578	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 02:02	WG899578	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00390		0.00100	0.0150	1	08/19/2016 01:01	WG899580	JD

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:03	WG899580	JD

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 01:06	WG899580	JD

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3157833-1 08/19/16 01:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157833-3 08/19/16 01:22 • (LCSD) R3157833-4 08/19/16 01:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0503	0.0507	101	101	85-115			1	20

L853771-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853771-01 08/19/16 01:27 • (MS) R3157833-5 08/19/16 01:30 • (MSD) R3157833-6 08/19/16 01:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00367	0.0665	0.0542	126	101	1	70-130			20	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3157813-11 08/19/16 00:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157813-13 08/19/16 00:37 • (LCSD) R3157813-14 08/19/16 00:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0502	0.0498	100	100	85-115			1	20

L853655-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853655-01 08/19/16 00:42 • (MS) R3157813-15 08/19/16 00:45 • (MSD) R3157813-16 08/19/16 00:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	ND	0.0489	0.0516	98	103	1	70-130			5	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1,4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

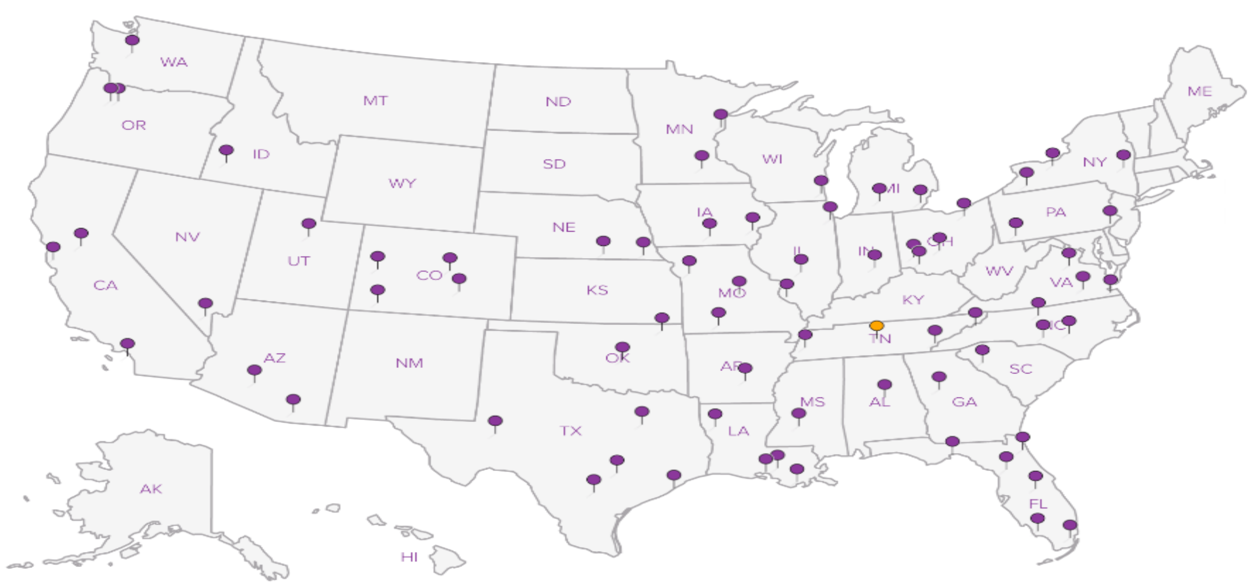
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:	Billing Information:	Analysis / Container / Preservative	Chain of Custody Page ___ of ___
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724	PBG--250mL HDPE HNO3 <2	ESC LAB SCIENCES YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains

Phone: 609-947-7563

Fax:

Client Project #: 61138115000

Lab Project #: PARENGENJ-DW

L #: K191

Acctnum: PARENGENJ

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Collected by (print): Matt Genna

Site/Facility ID #: Mancusco Hall

P.O. #:

Collected by (signature): [signature]

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
- ___ Same Day 200%
- ___ Next Day 100%
- ___ Two Day 50%
- X Three Day 25%

Date Results Needed

Email? ___No X Yes

FAX? X No ___Yes

TAH 8/17/16

L853771-

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
131-POE Janitor		DW	250mL	8/12/16	11:37	1			01
132-POE Janitor Flush		↓	↓	↓	11:38	↓			
133-outside 112					11:40				02
134-outside 112 flush					11:41				
135 outside 112(2)					11:40				03
136 outside 112(2) flush					11:41				
137 outside 128					11:45				04
138 outside 128 flush					11:46				
139 outside 128(2)					11:45				05
140 outside 128(2) flush					11:46				

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other__________

pH ________ Temp ________

Flow ________ Other ________

6617 3604 1884

Remarks: If initial Sample Comes back above action level - analyze flush Sample

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
[signature]	8/15/16	11:15	[signature]		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 26 BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 8/16/16 Time: 0900	pH Checked: <2 NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Analysis / Container / Preservative: PBG--250mL HDPE HNO3 2 V

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains, NJ

Phone: 609-947-7563
Fax:

Client Project #: 6113811500C0

Lab Project #: PARENGENJ-DW

Collected by (print): Matt Genna

Site/Facility ID #: Mancusco Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

L #
Table #
Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Rem./Contaminant	Sample # (lab only)
141-127 faculty		DW	250ml	8/12/16	11:49	1		
142-127 faculty flush		↓	↓	↓	11:50	↓		06
143-131 gym(1)					11:52			
144-131 gym (1) flush					11:53			07
145-131 gym(2)					11:52			
146-131 gym(2) flush					11:53			08
147-outside 219(1)					11:58			
148-outside 219(1) flush					11:59			09
149-outside 219(2)					11:58			
150-outside 219(2) flush					11:59			10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other__________

Remarks: If initial sample comes back above action level - analyze flush sample

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	8/16/16	11:15	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Temp: AMB °C Bottles Received: 26BR

Date: 8/16/16 Time: 0900

Condition: (lab use only)

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: <2

NCF:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative

PBG--250mL HDPE HNO3 ✓2

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L #

Table #

Acctnum: **PARENGENJ**

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Report to: **Matt Genna**

Email To: mgenna@partneresi.com

Project Description: **Union County Vocational Tech School**

City/State Collected: Scotch Plains NJ

Phone: 609-947-7563

Fax:

Client Project # 61138115000

Lab Project # **PARENGENJ-DW**

Collected by (print): Matt Genna

Site/Facility ID # Mancusco Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
151-Rm223 Sink		DW	250mL	8/12/16	12:03	1			11
152-Rm223 Sink flush		↓	↓	↓	12:04	↓			
153-outside 208A					12:07				12
154-Outside 208A flush					12:08				
155-Outside 208A(2)					12:07				13
156-outside 208A(2) flush					12:08				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

pH ________ Temp ________

Flow ________ Other ________

6617 3604 1384

Remarks: If initial Sample comes back above action level - analyze flush Sample

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
[signature]	8/15/16	11:15	[signature]		OK MK
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 26 BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 8/16/16 Time: 0900	pH Checked: LL NCF:

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: PARENFENJ SDG# 853 771

Cooler Received/Opened On: 8-16-16 By Alex Schulert

Temperature Upon Receipt: AMB °c

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out (ink, signed, etc.)?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?	✓		
Were all applicable sample containers checked for preservation?	✓		
(Any samples not in accepted pH range noted on COC .)			
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)		✓	

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ESC LAB SCIENCES
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ANALYTICAL REPORT

August 19, 2016

myESC
REAL TIME DATA ACCESS

Partner Engineering & Science - NJ

Sample Delivery Group:	L853780
Samples Received:	08/16/2016
Project Number:	61138115000
Description:	Union County Vocational Tech School
Site:	BISTOCCI HALL
Report To:	Mr. Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Entire Report Reviewed By:

T. Alan Harvill
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

1 Cp	2 Tc	3 Ss	4 Cn	5 Sr	6 Qc	7 Gl	8 Al	9 Sc

157-POE JANTORIAL L853780-01 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:15 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899574	1	08/17/16 09:55	08/19/16 05:53	JDG

159-FACULTY 501D L853780-02 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:16 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899574	1	08/17/16 09:55	08/19/16 07:40	JDG

161-OUTSIDE STUDENT BR L853780-03 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:18 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899574	1	08/17/16 09:55	08/19/16 07:43	JDG

163-OUTSIDE BR (2) L853780-04 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:18 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899574	1	08/17/16 09:55	08/19/16 07:46	JDG

165-503D NURSE L853780-05 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:25 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899574	1	08/17/16 09:55	08/19/16 07:48	JDG

167-RM 511 SINK L853780-06 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:28 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899574	1	08/17/16 09:55	08/19/16 07:51	JDG

169-OUTSIDE STUDENT RR L853780-07 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:31 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899574	1	08/17/16 09:55	08/19/16 07:53	JDG

173-RM 619 L853780-09 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:35 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899574	1	08/17/16 09:55	08/19/16 07:56	JDG

175-OUTSIDE 400 L853780-10 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:41 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899574	1	08/17/16 09:55	08/19/16 07:59	JDG

177-OUTSIDE L853780-11 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:41 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:00	JDG

179-402 WF L853780-12 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:47 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:13	JDG

181-402 WF (2) L853780-13 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:47 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:16	JDG

183-401 WF L853780-14 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:52 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:19	JDG

185-401 WF (2) L853780-15 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 12:53 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:21	JDG

187-FACULTY ROOM SINK L853780-16 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 13:02 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:24	JDG

189-FITNESS NEAR 710 L853780-17 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 13:04 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:27	JDG

191-FITNESS NEAR 710 (2) L853780-18 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 13:04	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:29	JDG

193-OUTSIDE 707 WF L853780-19 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 13:07	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:32	JDG

195-OUTSIDE 707 WF (2) L853780-20 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 13:07	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899576	1	08/17/16 09:55	08/19/16 05:35	JDG

197-WF OUTSIDE 812 L853780-21 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 13:12	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 21:49	VSS

199 WF OUTSIDE 807 L853780-22 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 13:14	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899573	1	08/17/16 09:55	08/18/16 21:51	VSS

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Alan Harvill

T. Alan Harvill
Technical Service Representative

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 05:53	WG899574	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00213		0.00100	0.0150	1	08/19/2016 07:40	WG899574	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 07:43	WG899574	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 07:46	WG899574	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00152		0.00100	0.0150	1	08/19/2016 07:48	WG899574	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00142		0.00100	0.0150	1	08/19/2016 07:51	WG899574	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 07:53	WG899574	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 07:56	WG899574	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00307		0.00100	0.0150	1	08/19/2016 07:59	WG899574	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00302		0.00100	0.0150	1	08/19/2016 05:00	WG899576	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 05:13	WG899576	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00182		0.00100	0.0150	1	08/19/2016 05:16	WG899576	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00169		0.00100	0.0150	1	08/19/2016 05:19	WG899576	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00217		0.00100	0.0150	1	08/19/2016 05:21	WG899576	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 05:24	WG899576	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 05:27	WG899576	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 05:29	WG899576	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 05:32	WG899576	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/19/2016 05:35	WG899576	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 21:49	WG899573	VSS

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 21:51	WG899573	VSS

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3157812-1 08/18/16 17:10

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157812-3 08/18/16 17:16 • (LCSD) R3157812-4 08/18/16 17:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0500	0.0496	100	99	85-115			1	20

L853766-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853766-01 08/18/16 19:07 • (MS) R3157812-8 08/18/16 19:10 • (MSD) R3157812-9 08/18/16 19:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00159	0.0504	0.0520	98	101	1	70-130			3	20

Method Blank (MB)

(MB) R3157853-1 08/19/16 05:43

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157853-3 08/19/16 05:48 • (LCSD) R3157853-4 08/19/16 05:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0494	0.0489	99	98	85-115			1	20

L853780-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853780-01 08/19/16 05:53 • (MS) R3157853-5 08/19/16 05:56 • (MSD) R3157853-6 08/19/16 05:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	ND	0.0501	0.0484	99	96	1	70-130			3	20

Method Blank (MB)

(MB) R3157852-1 08/19/16 04:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157852-3 08/19/16 04:55 • (LCSD) R3157852-4 08/19/16 04:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0481	0.0476	96	95	85-115			1	20

L853780-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853780-11 08/19/16 05:00 • (MS) R3157852-5 08/19/16 05:03 • (MSD) R3157852-6 08/19/16 05:05

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00302	0.0516	0.0506	97	95	1	70-130			2	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1,4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

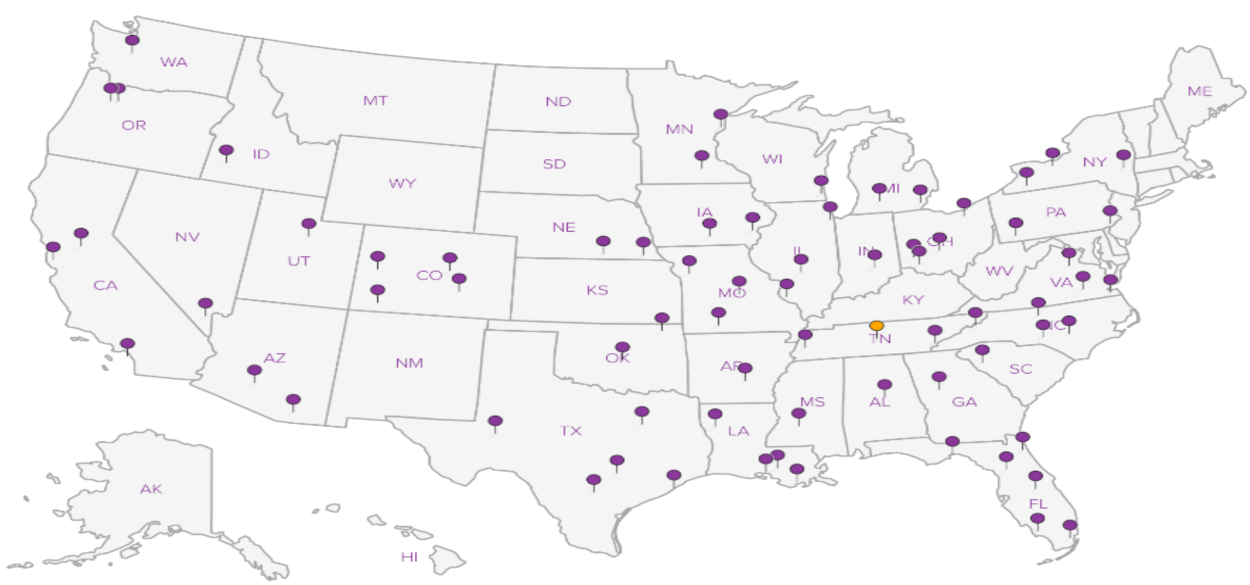
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

1. Drinking Water 2. Underground Storage Tanks 3. Aquatic Toxicity 4. Chemical/Microbiological 5. Mold n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 855780

K194

Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Report to: **Matt Genna**

Email To: mgenna@partneresi.com

Project Description: **Union County Vocational Tech School**

City/State Collected: Scotch Plains, NJ

Phone: 609-947-7563
Fax:

Client Project #: 6113811500C

Lab Project #: **PARENGENJ-DW**

Collected by (print): Matt Genna

Site/Facility ID #: Bistocci Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
157-POE Janitorial		DW	250mL	8/12/16	12:15	1			01
158-POE Janitorial flush					12:16				
159-faculty 501D					12:16				02
160-faculty 501D flush					12:17				
161-outside Student BR					12:18				03
162-outside Student BR flush					12:19				
163-outside BR(2)					12:18				04
164-outside BR(2) flush					12:19				
165-503D Nurse					12:25				05
166-503D Nurse flush					12:26				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

Remarks: If initial Sample comes back above action level - Analyze flush Sample

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Condition: (lab use only)

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	8/15/16	11:15	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Temp: AMB °C Bottles Received: 44 BR

COC Seal Intact: ✓ Y ___N ___NA

Date: 8/16/16 Time: 0900

pH Checked: <2

NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: **Matt Genna**	Email To: mgenna@partneresi.com

Analysis / Container / Preservative: PBG--250mL HDPE HNO3 <2

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Project Description: **Union County Vocational Tech School**	City/State Collected: Scotch Plains, NJ	L# 853730
Phone: 609-947-7563 Fax:	Client Project # 6113811500O	Lab Project # **PARENGENJ-DW**
Collected by (print): Matt Genna	Site/Facility ID # Bistocchi Hall	P.O. #
Collected by (signature): Immediately Packed on Ice N X Y ___	*Rush?* (Lab MUST Be Notified) ___ Same Day ..... 200% ___ Next Day ..... 100% ___ Two Day ..... 50% X Three Day 25%	Date Results Needed Email? ___No X Yes FAX? X No ___Yes

Table #
Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
167-Rm 511 Sink		DW	250mL	8/12/16	12:28	1			06
168-Rm 511 Sink flush		↓	↓	↓	12:29	↓			
169-outside Student RR					12:31				07
170-outside Student RR flush					12:32				
171 Outside student RR2					12:51				08
172 outside Student RR2 flush					12:32				
173-Rm 619					12:35				09
174-Rm 619 flush					12:36				
175-outside 400					12:41				10
176-outside 400 flush		↓	↓	↓	12:42	↓			

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other__________

Remarks: If initial Sample comes back above action level analyze flush Sample

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date: 8/15/16	Time: 11:15	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 44BR
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Alexis	Date: 8/16/16 Time: 0900

Condition: (lab use only) MR
COC Seal Intact: ✓ Y ___N ___NA
pH Checked: <2
NCF:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Report to: **Matt Genna**

Email To: mgenna@partneresi.com

Project Description: **Union County Vocational Tech School**

City/State Collected: Scotch Plains

Phone: 609-947-7563
Fax:

Client Project # 61138115000

Lab Project # **PARENGENJ-DW**

Collected by (print): Matt Genna

Site/Facility ID # Bistocci Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3 ✓

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 853780
Table #
Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
177-outside 400(2)		DW	250mL	8/12/16	12:41	1			
178-outside 400(2) flush		↓	↓	↓	12:42	↓			11
179-402 WF					12:47				
180-402 WF(2) flush					12:48				12
181-402 WF(2)					12:47				
182-402 WF(2) flush					12:48				13
183-401 WF					12:52				
184-401 WF flush					12:53				14
185-401 WF(2)					12:53				
186-401 WF(2) flush					12:54				15

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ________

Remarks: If initial sample comes back above action level - analyze flush sample

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	8/15/16	1115	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Temp: AmB °C Bottles Received: 44 BR

Date: 8/16/16 Time: 0900

Condition: (lab use only) MI2

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: ✓

NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: Matt Genna	Email To: mgenna@partneresi.com

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 853730

Table #

Acctnum: PARENGENJ

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Project Description: UC Vo Tech		City/State Collected: Scotch Plains, NJ
Phone: 609 9477563 Fax:	Client Project #	Lab Project #
Collected by (print): Matt Genna	Site/Facility ID #: West Hall Addition	P.O. #
Collected by (signature): Immediately Packed on Ice N X Y ___	*Rush?* (Lab MUST Be Notified) ___ Same Day ....200% ___ Next Day ....100% ___ Two Day ....50% X Three Day 25%	Date Results Needed Email? ___No ___Yes FAX? ___No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Rem./Contaminant	Sample # (lab only)
187 faculty room sink		DW	250mL	8/12/16	1:02	1		16
188 " "flush					1:03			
189 fitness near 710					1:04			17
190 " "flush					1:05			
191 fitness near 710 (2)					1:04			18
192 " "flush					1:05			
193 outside 707 wf					1:07			19
194 " 'flush					1:08			
195 outside 707 wf (2)					1:07			20
196 " "flush					1:08			

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other________

Remarks: If initial sample above action level - analyze flush

pH ________ Temp ________

Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	
	8/15/16	11:15		Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb 44 °C Bottles Received: ~~10~~ 13 R AS 8/16
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: 0908

Condition: (lab use only) MM

COC Seal Intact: ✓ Y ___ N ___ NA

pH Checked: <2

NCF:

Company Name/Address:	Billing Information:	Analysis / Container / Preservative	Chain of Custody Page ___ of ___
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724		ESC LAB SCIENCES YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859
Report to: **Matt Genna**	Email To: **mgenna@partneresi.com**		
Project Description: VC Votech	City/State Collected: Scotch plains		L# 853781
Phone: 6094477563 Fax:	Client Project #	Lab Project #	Table #
Collected by (print): Matt Genna	Site/Facility ID # West Hall Addition	P.O. #	Acctnum: **PARENGENJ**
Collected by (signature):	Rush? (Lab MUST Be Notified)	Date Results Needed	Template:
Immediately Packed on Ice N X Y ___	___ Same Day ....200% ___ Next Day ....100% ___ Two Day ....50% X Three Day 25%	Email? ___No ___Yes FAX? ___No ___Yes	Prelogin: TSR: PB: Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Cu	Rem./Contaminant	Sample # (lab only)
197-Wf outside 812		DW	250ml	8/12	1:12				21
198 ' 'flush		DW	↓	↓	1:13				
199 Wf outside 807		↓	↓	↓	1:14				22
200 ' 'flush		↓	↓	↓	1:15				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

Remarks:

pH ________ Temp ________

Flow ________ Other ________

6617 3604 1384

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Hold #
	8/15	1115			Condition: (lab use only)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 4 BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/14 Time: 0900	pH Checked: <2 NCF:

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: PARENGENS SDG# 853780

Cooler Received/Opened On: 8-16-16 By Alex Schulert

Temperature Upon Receipt: AMB °c

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out (ink, signed, etc.)?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?	✓		
Were all applicable sample containers checked for preservation?	✓		
(Any samples not in accepted pH range noted on COC .)			
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)		✓	

ESC Lab Sciences
Non-Conformance Form

Login #L853780	Client: PARENGENJ	Date:8/16	Evaluated by:Matt S

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	x	Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Didn't receive sample 171-OUTSIDE STUDENT (-08)

Client informed by:		Call	x	Email		Voice Mail		Date: 8/17/16	Time: 8:36
TSR Initials: TAH	Client Contact: Matt Genna								

Login Instructions:

Client notified via email.

ANALYTICAL REPORT

August 24, 2016

Partner Engineering & Science - NJ

Sample Delivery Group:	L853750
Samples Received:	08/16/2016
Project Number:	61138115000
Description:	Union County Vocational Tech School
Site:	WEST HALL
Report To:	Mr. Matt Genna 611 Industrial Way W Eatontown, NJ 07724

Entire Report Reviewed By:

T. Alan Harvill

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

017-POE BOILER BR L853750-01 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 07:58 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:09	JDG

019-POE BR SINK L853750-02 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 07:58 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:28	JDG

021-RM 308A L853750-03 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:03 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:31	JDG

023-OUTSIDE 308A L853750-04 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:06 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:33	JDG

025-OUTSIDE 307 L853750-05 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:12 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:36	JDG

027-OUTSIDE 307 L853750-06 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:14 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:39	JDG

029-OUTSIDE 314 L853750-07 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:19 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:42	JDG

031-RM 312 WF L853750-08 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:20 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:44	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

033 RM 313 WF L853750-09 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:28 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:47	JDG

035 RM 317 L853750-10 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:32 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899418	1	08/17/16 07:58	08/18/16 11:50	JDG

037-ROOM 319 L853750-11 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:36 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:11	JDG

039-HALLWAY OUTSIDE 318 WF1 L853750-12 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:40 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:24	JDG

041-HALL OUTSIDE 318 WF2 L853750-13 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:42 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:27	JDG

043-OUTSIDE 325 L853750-14 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:52 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:30	JDG

045-OUTSIDE 325 (2) L853750-15 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:55 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:33	JDG

047-331 CULINARY SINK 1 L853750-16 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:56 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:35	JDG

049-331 CULINARY SINK 2 L853750-17 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 08:57 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:38	JDG

051-331 CULINARY SINK 3 L853750-18 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:00 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:41	JDG

053-331 CULINARY SINK 4 L853750-19 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:02 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:43	JDG

055-331 CULINARY SINK 5 L853750-20 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 07:58 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899420	1	08/17/16 07:58	08/18/16 12:46	JDG

057-330 CULINARY SINK 1 L853750-21 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:15 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:13	JDG

059-330 CULINARY SINK 2 L853750-22 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:16 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:28	JDG

061-330 CULINARY SINK 3 L853750-23 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:17 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:30	JDG

063-330 CULINARY SINK 4 L853750-24 DW

Collected by: Matt Genna | Collected date/time: 08/12/16 09:18 | Received date/time: 08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:33	JDG

			Collected by	Collected date/time	Received date/time
065-WF ACROSS CAF 1 L853750-25 DW			Matt Genna	08/12/16 09:25	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:36	JDG

			Collected by	Collected date/time	Received date/time
067-WF ACROSS CAF 2 L853750-26 DW			Matt Genna	08/12/16 09:26	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:38	JDG

			Collected by	Collected date/time	Received date/time
069-CAF PREP SINK 1 L853750-27 DW			Matt Genna	08/12/16 09:29	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:41	JDG

			Collected by	Collected date/time	Received date/time
071-CAF PREP SINK 2 L853750-28 DW			Matt Genna	08/12/16 09:30	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:44	JDG

			Collected by	Collected date/time	Received date/time
073-CAF PREP SINK 3 L853750-29 DW			Matt Genna	08/12/16 09:31	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:46	JDG

			Collected by	Collected date/time	Received date/time
075-CAF SINK SERVE L853750-30 DW			Matt Genna	08/12/16 09:36	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899421	1	08/17/16 07:58	08/18/16 13:49	JDG

			Collected by	Collected date/time	Received date/time
077-OUTSIDE CAFERIA WF 1 L853750-31 DW			Matt Genna	08/12/16 09:42	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:08	JDG

			Collected by	Collected date/time	Received date/time
079-OUTSIDE CAFERIA WF 2 L853750-32 DW			Matt Genna	08/12/16 09:43	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:22	JDG

081-342 WF L853750-33 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 09:53	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:24	JDG

083-OUTSIDE 341 L853750-34 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 09:53	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:27	JDG

085-OUTSIDE 341 (2) L853750-35 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 09:54	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:30	JDG

087-RM 343 SINK L853750-36 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 09:59	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:33	JDG

089-344 GYM L853750-37 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:02	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:35	JDG

091-OUTSIDE 346 (1) L853750-38 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:12	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:38	JDG

093-OUTSIDE 346 (2) L853750-39 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:13	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:41	JDG

095-RM 345 WF L853750-40 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:15	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899423	1	08/17/16 07:58	08/18/16 14:43	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

097-RM 366 WF L853750-41 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:19	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:18	JDG

099-OUTSIDE 363 (1) L853750-42 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:23	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:26	JDG

101-OUTSIDE 363 (2) L853750-43 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:24	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:29	JDG

103-RM4 BAKERY (1) L853750-44 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:32	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:31	JDG

105-RM4 BAKERY (2) L853750-45 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:33	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:40	JDG

107-RM 6 SUPERMARKET 1 L853750-46 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:39	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:43	JDG

109-RM 6 SUPERMARKET 2 L853750-47 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:41	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:45	JDG

111-OUTSIDE RM 6 (1) L853750-48 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:45	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:48	JDG

113-OUTSIDE RM 6 (2) L853750-49 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 10:45	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG899424	1	08/17/16 07:59	08/18/16 09:51	JDG

034 RM313 WF F L853750-51 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 08:29	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG900923	1	08/23/16 09:13	08/23/16 21:15	JDG

064 330 CULINARY SINK 4 F L853750-52 DW

Collected by	Collected date/time	Received date/time
Matt Genna	08/12/16 09:22	08/16/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG900923	1	08/23/16 09:13	08/23/16 21:24	JDG

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Alan Harvill

T. Alan Harvill
Technical Service Representative

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00744		0.00100	0.0150	1	08/18/2016 11:09	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00139		0.00100	0.0150	1	08/18/2016 11:28	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:31	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:33	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:36	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:39	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 11:42	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00925		0.00100	0.0150	1	08/18/2016 11:44	WG899418	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.0282		0.00100	0.0150	1	08/18/2016 11:47	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00431		0.00100	0.0150	1	08/18/2016 11:50	WG899418	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00149		0.00100	0.0150	1	08/18/2016 12:11	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 12:24	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00151		0.00100	0.0150	1	08/18/2016 12:27	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00155		0.00100	0.0150	1	08/18/2016 12:30	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00132		0.00100	0.0150	1	08/18/2016 12:33	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00220		0.00100	0.0150	1	08/18/2016 12:35	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00120		0.00100	0.0150	1	08/18/2016 12:38	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 12:41	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00141		0.00100	0.0150	1	08/18/2016 12:43	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00299		0.00100	0.0150	1	08/18/2016 12:46	WG899420	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00127		0.00100	0.0150	1	08/18/2016 13:13	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00238		0.00100	0.0150	1	08/18/2016 13:28	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00105		0.00100	0.0150	1	08/18/2016 13:30	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.0328		0.00100	0.0150	1	08/18/2016 13:33	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 13:36	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00264		0.00100	0.0150	1	08/18/2016 13:38	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00101		0.00100	0.0150	1	08/18/2016 13:41	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 13:44	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00212		0.00100	0.0150	1	08/18/2016 13:46	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00334		0.00100	0.0150	1	08/18/2016 13:49	WG899421	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:08	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:22	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:24	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:27	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:30	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00114		0.00100	0.0150	1	08/18/2016 14:33	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 14:35	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00101		0.00100	0.0150	1	08/18/2016 14:38	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00191		0.00100	0.0150	1	08/18/2016 14:41	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00342		0.00100	0.0150	1	08/18/2016 14:43	WG899423	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:18	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:26	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:29	WG899424	JDG

Cp Tc Ss Cn Sr Qc Gl Al Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.0110		0.00100	0.0150	1	08/18/2016 09:31	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.0147		0.00100	0.0150	1	08/18/2016 09:40	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:43	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00123		0.00100	0.0150	1	08/18/2016 09:45	WG899424	JDG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:48	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	ND		0.00100	0.0150	1	08/18/2016 09:51	WG899424	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.00444		0.00100	0.0150	1	08/23/2016 21:15	WG900923	JDG

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	Det. Limit mg/l	Reference Limit mg/l	Dilution	Analysis date / time	Batch	Analyst
Lead	0.0101		0.00100	0.0150	1	08/23/2016 21:24	WG900923	JDG

Method Blank (MB)

(MB) R3157687-1 08/18/16 10:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157687-3 08/18/16 11:04 • (LCSD) R3157687-4 08/18/16 11:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0453	0.0446	91	89	85-115			2	20

L853750-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-01 08/18/16 11:09 • (MS) R3157687-5 08/18/16 11:12 • (MSD) R3157687-6 08/18/16 11:15

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00744	0.0538	0.0553	93	96	1	70-130			3	20

Method Blank (MB)

(MB) R3157688-1 08/18/16 11:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157688-3 08/18/16 12:03 • (LCSD) R3157688-4 08/18/16 12:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0465	0.0481	93	96	85-115			4	20

L853750-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-11 08/18/16 12:11 • (MS) R3157688-5 08/18/16 12:14 • (MSD) R3157688-6 08/18/16 12:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00149	0.0486	0.0467	94	90	1	70-130			4	20

Method Blank (MB)

(MB) R3157742-1 08/18/16 13:03

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157742-3 08/18/16 13:08 • (LCSD) R3157742-4 08/18/16 13:11

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Lead	0.0500	0.0465	0.0473	93	95	85-115			2	20

L853750-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-21 08/18/16 13:13 • (MS) R3157742-5 08/18/16 13:16 • (MSD) R3157742-6 08/18/16 13:19

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Lead	0.0500	0.00127	0.0489	0.0485	95	94	1	70-130			1	20

Method Blank (MB)

(MB) R3157743-1 08/18/16 13:57

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157743-3 08/18/16 14:03 • (LCSD) R3157743-4 08/18/16 14:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0469	0.0477	94	95	85-115			2	20

L853750-31 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-31 08/18/16 14:08 • (MS) R3157743-5 08/18/16 14:11 • (MSD) R3157743-6 08/18/16 14:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	ND	0.0460	0.0458	92	92	1	70-130			0	20

Method Blank (MB)

(MB) R3157609-7 08/18/16 09:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3157609-9 08/18/16 09:12 • (LCSD) R3157609-10 08/18/16 09:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0470	0.0474	94	95	85-115			1	20

L853750-41 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-41 08/18/16 09:18 • (MS) R3157609-11 08/18/16 09:20 • (MSD) R3157609-12 08/18/16 09:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	ND	0.0467	0.0466	93	93	1	70-130			0	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3158747-1 08/23/16 21:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.00026	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3158747-3 08/23/16 21:08 • (LCSD) R3158747-4 08/23/16 21:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.0519	0.0510	104	102	85-115			2	20

L853750-51 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L853750-51 08/23/16 21:15 • (MS) R3158747-5 08/23/16 21:18 • (MSD) R3158747-6 08/23/16 21:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	0.0500	0.00444	0.0553	0.0567	102	105	1	70-130			2	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

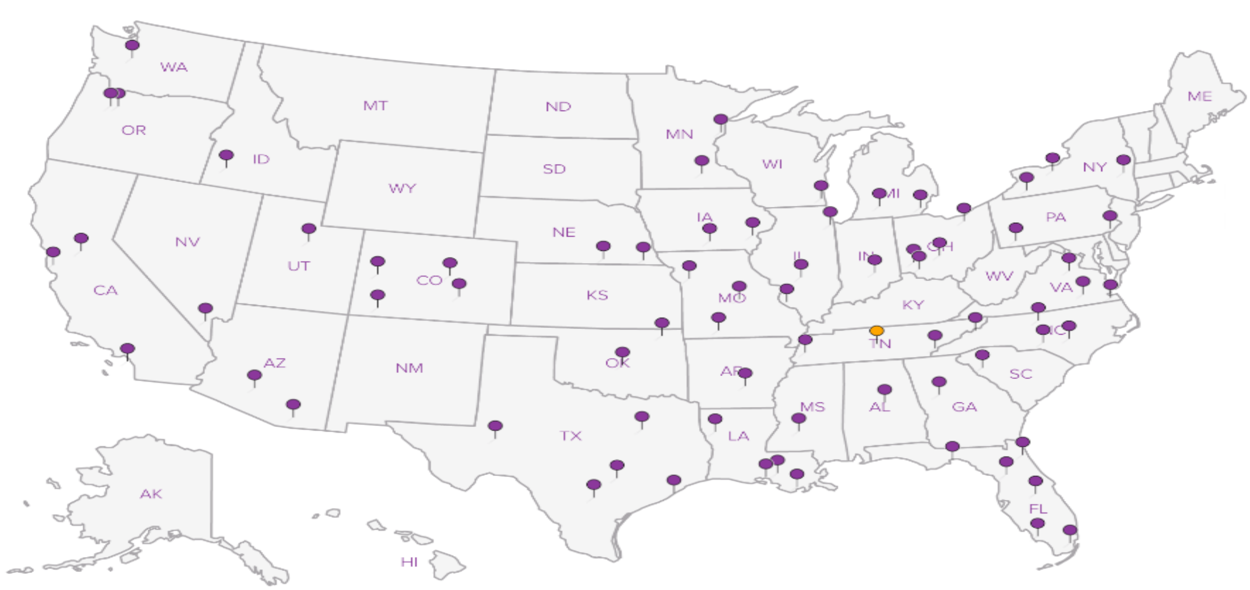
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains, NJ

L# 853750

K188

Phone: 609-947-7563
Fax:

Client Project # 61138115000

Lab Project # PARENGENJ-DW

Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Collected by (print): Matt Genna

Site/Facility ID # West Hall

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
017-POE Boiler BR		DW	250mL	8/12/16	7:58	1			01
018-POE Boiler BRF					7:59				
019-POE BR Sink					7:58				02
020-POE BR Sink F					7:59				
021-Rm 308A					8:03				03
022 Rm 308A Flush					8:04				
023-Outside 308A					8:06				04
024-Outside 308A flush					8:07				
025-outside 307					8:12				05
026 Outside 307 flush					8:13				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

Remarks: If initial Sample comes back above action level analyze flush

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date: 8/15/16	Time: 11:15	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only) MIL OR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 9 BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: 0900	pH Checked: <2 NCF:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains, NJ

L# 853750

Phone: 609-947-7563
Fax:

Client Project # 61138115000

Lab Project # PARENGENJ-DW

Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Collected by (print): Matt Genna

Site/Facility ID # West Hall

P.O. #

Collected by (signature):
Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed
Email? ___No X Yes
FAX? X No ___Yes

PBG--250mL HDPE HNO3

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
027-outside 307(2)		DW	250ml	8/12/16	8:14	1			06
028-outside 307(2)flush					8:15				
029-outside 314					8:19				07
030 outside 314(flush)					8:20				
031-Rm 312 WF					8:23				08
032 Rm 312 WF f					8:24				
033 Rm 313 WF					8:28				09
034 Rm 313 WF f					8:29				
035 Rm 317					8:32				10
036 Rm 317					8:33				

-51 TAH 8/24

6617 3604 1384

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other___________

pH ________ Temp ________
Flow ________ Other ________

Hold #

Remarks: If initial Sample comes back above action level - analyze flush Samples

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Condition: (lab use only) MI2C

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	8/15/16	11:15	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Alexis

Temp: AMB °C Bottles Received: 9 1BR

COC Seal Intact: ✓ Y ___N ___NA

Date: 8/16/16 Time: 09:00

pH Checked: <2

NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: **Matt Genna**	Email To: mgenna@partneresi.com
Project Description: **Union County Vocational Tech School**	City/State Collected: Scotch Plains, NJ

Phone: 609-947-7563 Fax:	Client Project # 61138115000	Lab Project # **PARENGENJ-DW**
Collected by (print): Matt Genna	Site/Facility ID # ~~Baxel~~ West Hall	P.O. #
Collected by (signature): Immediately Packed on Ice N X Y ___	*Rush?* (Lab MUST Be Notified) ___ Same Day ....200% ___ Next Day ....100% ___ Two Day ....50% X Three Day 25%	Date Results Needed Email? ___No X Yes FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 853780
Table #
Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
037- Room 319		DW	250mL	8/12/16	8:36				11
038- Room 319 Flush		↓	↓	↓	8:37				
039- hallway outside 318 WFL					8:40				12
040- hall outside 318 WFL Flush					8:41				
041- hall outside 318 WFL					8:42				13
042- hall outside 318 WFL Flush					8:43				
043- outside 325					8:52				14
044- outside 325F					8:53				
045 outside 325(2)					8:52				15
046 outside 325(2)F		↓	↓	↓	8:53				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Remarks: If initial Sample comes back above action level-analyze flush Sample

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	
	8/15/16	11:15		Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 98BR
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: @900

Condition: (lab use only) MM 02
COC Seal Intact: ✓ Y ___N ___NA
pH Checked: <2
NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: Matt Genna	Email To: mgenna@partneresi.com
Project Description: Union County Vocational Tech School	City/State Collected: Scotch Plains, NJ
Phone: 609-9477563 Fax:	Client Project # 61138115000
Lab Project # PARENGENJ-DW	
Collected by (print): Matt Genna	Site/Facility ID # West Hall
P.O. #	
Collected by (signature):	Immediately Packed on Ice N ✓ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 853750
Table #
Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
047-331 Culinary Sink 1		DW	250mL	8/12/16	8:55				
048-331 Culinary Sink 1F		↓	↓	↓	8:58				16
049-331 Culinary Sink 2					8:56				
050-331 Culinary Sink 2F					8:59				17
051-331 Culinary Sink 3					8:57				
052-331 Culinary Sink 3F					9:00				18
053-331 Culinary Sink 4					9:01				
054-331 Culinary Sink 4F					9:03				19
055-331 Culinary Sink 5					9:02				
056-331 Culinary Sink 5F		DW	250mL	8/12/16	9:04				20

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other________

Remarks: If Initial sample comes back above action level analyze flush sample

pH ________ Temp ________
Flow ________ Other ________

6617 7604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
	8/15/16	11:15			OK
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 9 BR	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: 0900	pH Checked: <2 NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: Matt Genna	Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains, NJ

Phone: 609-947-7563
Fax:

Client Project #: 61138115000

Lab Project #: PARENGENJ-DW

Collected by (print): Matt Genna

Site/Facility ID #: West Hall

P.O. #:

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

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Fax: 615-758-5859

L # 853780
Table #
Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
057-330 Culinary Sink1		DW	250mL	8/12/16	9:15	1			21
058-330 Culinary Sink1F					9:19				
059-330 Culinary Sink2					9:16				22
060-330 Culinary Sink2F					9:20				
061-330 Culinary Sink3					9:17				23
062-330 Culinary Sink3F					9:21				
063-330 Culinary Sink4					9:18				24
064-330 Culinary Sink4F					9:22				
065-Wf across Caf1					9:25				25
066-Wf across Caf1F					9:26				

-52 TAH 8/24

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other___________

Remarks: If initial Sample comes back above action level - analyze flush

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	8/15/16	11:15	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____

Temp: Amb °C Bottles Received: 98BR

Date: 8/16/16 Time: 0900

Condition: (lab use only)

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: <2

NCF:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna
Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School
City/State Collected: Scotch Plains NJ

L# 853750

Phone: 609-947-7563
Fax:
Client Project #: 61138115000
Lab Project #: PARENGENJ-DW

Table #

Collected by (print): Matt Genna
Site/Facility ID #: West Hall
P.O. #

Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Collected by (signature):
Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed
Email? ___No X Yes
FAX? X No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
067-WF across Caf 2		DW	250mL	8/12/16	9:26	1			26
068-WF across Caf 2F					9:27				
069-Caf prep sink 1					9:29				27
070 Caf prep sink F1					9:30				
071 Caf prep sink 2					9:30				28
072 Caf prep sink F2					9:31				
073 Caf prep sink 3					9:31				29
074 Caf prep sink 3F					9:32				
075-Caf sink serve					9:36				30
076-Caf sink serve F					9:37				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

Remarks: If initial sample comes back above action level - analyze flush sample

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	
	8/15/16	11:15		Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 98 BR
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/16/16 Time: 0900

Condition: (lab use only)
COC Seal Intact: ✓ Y ___N ___NA
pH Checked: <2
NCF:

Company Name/Address:	Billing Information:
Partner Engineering- Eatontown NJ 611 Industrial Way W Eatontown, NJ 07724	Matt Genna 611 Industrial Way W Eatontown, NJ 07724
Report to: **Matt Genna**	Email To: mgenna@partneresi.com
Project Description: **Union County Vocational Tech School**	City/State Collected: Scotch Plains NJ

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

ESC LAB SCIENCES — YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Phone: 609-947-7563 Fax:	Client Project # West Hall	Lab Project # **PARENGENJ-DW**
Collected by (print): Matt Genna	Site/Facility ID # 6113811S000	P.O. #
Collected by (signature): [signature] Immediately Packed on Ice N X Y ___	*Rush?* (Lab MUST Be Notified) ___ Same Day ....200% ___ Next Day ....100% ___ Two Day ....50% X Three Day 25%	Date Results Needed Email? ___No X Yes FAX? X No ___Yes

L# 853750
Table #
Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
077-outside Caferia WF1		DW	250mL	8/12/16	9:42	1			31
078-outside caf WF1F					9:43				
079-outside caf WF2					9:43				32
080-outside caf WF2F					9:44				
081-342 WF					9:53				33
082-342 WF flush					9:54				
083-outside 341					9:53				34
084-outside 341 flush					9:54				
085-outside 341 (2)					9:54				35
086 outside 341 flush					9:55				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other__________

Remarks: If initial sample comes back above action level - analyze flush

pH ________ Temp ________
Flow ________ Other ________

6617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
[signature]	8/15/16	11:15	[signature]		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 18 BR	MRU COC Seal Intact: ✓ Y ___ N ___ NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 8/16/16 Time: 0900	pH Checked: <2 NCF:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Report to: **Matt Genna**

Email To: mgenna@partneresi.com

Project Description: **Union County Vocational Tech School**

City/State Collected: Scotch Plains NJ

Phone: 609 947 7563
Fax:

Client Project #: 61138115000

Lab Project #: **PARENGENJ-DW**

Collected by (print): Matt Genna

Site/Facility ID #: West Hall

P.O. #:

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative: PBG--250mL HDPE HNO3

Chain of Custody Page ___ of ___

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 853750
Table #
Acctnum: **PARENGENJ**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
087-Rm 343 Sink		DW	250mL	8/12/16	9:59				
088-Rm 343 Sink flush					10:00				35
089-344 gym					10:02				
090-344 gym flush					10:03				37
091-outside 346(1)					10:12				
092-outside 346(1)F					10:13				38
093-outside 346(2)					10:13				
094-outside 346(2)F					10:14				39
095-Rm 345 WF					10:15				
096-Rm 345 WF flush					10:16				40

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other___________

Remarks: If initial comes back above action level analyze flush

pH ________ Temp ________
Flow ________ Other ________

0617 3604 1384

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	8/15/16	1115	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Temp: AMB °C Bottles Received: 98 BR

Date: 8/16/16 Time: 0900

Condition: (lab use only)

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: <2

NCF:

Company Name/Address:

Partner Engineering- Eatontown NJ

611 Industrial Way W
Eatontown, NJ 07724

Billing Information:

Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

ESC LAB SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Matt Genna**

Email To: mgenna@partneresi.com

Project Description: **Union County Vocational Tech School**

City/State Collected: Scotch Plains NJ

L# 853780

Phone: 609 947 7563
Fax:

Client Project # 6113811500CO

Lab Project # **PARENGENJ-DW**

Table #

Collected by (print): Matt Genna

Site/Facility ID # West Hall

P.O. #

Acctnum: **PARENGENJ**

Collected by (signature):

Rush? (Lab MUST Be Notified)
____ Same Day 200%
____ Next Day 100%
____ Two Day 50%
✓ Three Day 25%

Date Results Needed

Email? ___No ✓Yes
FAX? ✓No ___Yes

Template:
Prelogin:
TSR:
PB:
Shipped Via:

Immediately Packed on Ice N X Y ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
097-Rm 366 WF		DW	250mL	8/12	10:19	1			41
098-Rm 366 WF flush		↓	↓	↓	10:20	↓			
099-outside 363(1)					10:23				42
100-outside 363(1) F					10:24				
101-outside 363(2)					10:24				43
102-outside 363(2) F					10:25				
103-Rm 4 bakery (1)					10:32				44
104-Rm 4 bakery (1) F					10:33				
105-Rm 4 bakery 2					10:33				45
106-Rm 4 bakery 2F					10:34				

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other__________

pH ________ Temp ________

6617 3604 1384

Remarks: If initial comes back above action level analyze flush sample

Flow ________ Other ________

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
[signature]	8/15/16	11:15	[signature]		mrm
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 98BR	COC Seal Intact: ✓Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 8/16/16 Time: 0900	pH Checked: <2 NCF:

Company Name/Address:
Partner Engineering- Eatontown NJ
611 Industrial Way W
Eatontown, NJ 07724

Billing Information:
Matt Genna
611 Industrial Way W
Eatontown, NJ 07724

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Matt Genna

Email To: mgenna@partneresi.com

Project Description: Union County Vocational Tech School

City/State Collected: Scotch Plains NJ

L# 853750

Phone: 6099447763
Fax:

Client Project # 61138115006

Lab Project # PARENGENJ-DW

Table #

Collected by (print): Matt Genna

Site/Facility ID #

P.O. #

Acctnum: PARENGENJ
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
X Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? X No ___Yes

PBG--250mL HDPE HNO3

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PBG--250mL HDPE HNO3	Rem./Contaminant	Sample # (lab only)
107-Rm 6 Supermarket 1		DW	250mL	8/12/16	10:39	1			46
108 Rm 6 Supermarket 1F					10:40				
109 Rm 6 Supermarket 2					10:41				47
110 Rm 6 Supermarket 2F					10:42				
111 - outside rm 6 (1)					10:45				48
112 - outside rm 6(1)F					10:46				
113 - outside rm 6(2)					10:45				49
114 - outside rm 6(2)F					10:46				

6617 3604 1384

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other________

Remarks: If sample comes back above action level - analyze flush Sample

pH ______ Temp ______
Flow ______ Other ______

Hold #

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ______

Condition: (lab use only)

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	8/15/16	11:15	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Alexis

Temp: Amb °C Bottles Received: 48 BR

COC Seal Intact: ✓ Y ___N ___NA

Date: 8/16/16 Time: 0900

pH Checked: <2

NCF:

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: PARENGENS SDG# 853750

Cooler Received/Opened On: 8/ 16 /16 By: _Alex_Schulert____

Temperature Upon Receipt: AMB °c

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out (ink, signed, etc.)?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?	✓		
Were all applicable sample containers checked for preservation?	✓		
(Any samples not in accepted pH range noted on COC .)			
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)		✓	

Andy Vann

From: Alan Harvill
Sent: Friday, August 19, 2016 9:23 AM
To: Login; Metals; Metals Prep
Subject: L853750 PARENGENJ ** Log DW RUSH HOLD samples**

Importance: High

Please add PBG to the following HOLD samples to L853750, log R3 due Wednesday 8/24

034 RM313 WF F
064 330 Culinary Sink 4 F

Thanks,

Alan Harvill
Technical Service Representative
Phone: 615-773-9787
Toll Free: 1-800-767-5859 ext:9787
Email: aharvill@esclabsciences.com

APPENDIX B: SAMPLE LOCATIONS

LEAD IN DRINKING WATER TESTING SAMPLING PLAN

Union County Vocational Technical Schools

1776 Raritan Road
Scotch Plains, NJ 07076

August 4, 2016

PARTNER Project No. 61138115000

Prepared for:

Union County Vocational Technical Schools

Contents

1. INTRODUCTION

This Lead Drinking Water Testing Sampling Plan (Sampling Plan) was developed by the Union County Vocational Technical Schools, (District), based on guidance developed by the New Jersey Department of Environmental Protection (NJDEP) and the United States Environmental Protection Agency (USEPA), to establish a plan for sampling lead at drinking water outlets used for consumption or food preparation in every school within the District (See Attachment A for full school listing). The data collected through the execution of this Sampling Plan will determine if immediate remedial measures are necessary and will assist in the prioritization of future water testing for lead in accordance with this Sampling Plan.

This Sampling Plan is based on the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools" and NJDEP guidance.

The District has also developed a Quality Assurance Project Plan (QAPP) for the sampling program which is available under separate cover.

2. OBJECTIVE

The 1988 Lead Contamination Control Act (LCCA) is aimed at identifying and reducing lead (Pb) in drinking water in schools and child care facilities. In response, the USEPA prepared guidance documents to assist school districts in meeting the requirements of the LCCA. The guidance documents were used as a resource in developing this Sampling Plan.

It should be noted, for the purpose of determining immediate remedial measures (i.e. taking drinking water outlets out of service and notifying parents/guardians of results), the District is required to utilize the lead action level established in the SDWA rules by the USEPA at 40 CFR 141.80 for lead in drinking water. At the time of development of this Sampling Plan, the lead action level is 15 µg/L, which is more stringent than the guidance provided by USEPA in their Lead in Schools Guidance which recommends action be taken at drinking water outlets greater than 20 µg/L. Schools in New Jersey that are served by their own well (not public water), which are regulated pursuant to the Federal and New Jersey SDWA, must adhere to the 15 µg/L value for determining compliance.

3. SAMPLING PROJECT COORDINATION

Testing for lead in schools requires a coordinated effort especially when multiple schools are to be included in the testing effort. Designated personnel and set protocols are essential to ensuring a coordinated effort.

3.1 School District Program Manager (Program Manager)

Union County Vocational Technical Schools Program Manager:
Janet Behrmann
(908) 889-8288 x115

The School District Program Manager (Program Manager) is the overall authority in the execution of the District's lead sampling project. He/she is responsible for the initial notification to the District of the testing program, obtaining funds for testing, assigning the Sampling Project Manager, requesting/enlisting the assistance from other District departments if needed, approving the District's QAPP(s), approving the Final Report for each school and coordinating with other District officials to make the results of the testing available to the public.

3.2 Sampling Project Manager (Project Manager)

Union County Vocational Technical Schools Sampling Project Manager:
Matt Genna, Partner Engineering and Science
(609) 947-7563

The Sampling Plan Project Manager (Project Manager) is responsible for overseeing the execution of lead sampling at each of the district's schools. This involves the prioritization of schools to be sampled, and adherence with the District's Sampling Plan and QAPP. He/she serves as the liaison between the District, State agencies, local Health Departments, laboratories and public water systems (if applicable). He/she reports to the Program Manager.

Project Manager Responsibilities

- Prepare the District's Specific Quality Assurance Project Plan (QAPP) and Sampling Plan;
- Manage the Sampling Plan and QAPP;
- Oversight of Individual School Project Officers (Project Officers) to ensure that they adhere to the Sampling Plan procedures and the QAPP;
- Purchase of equipment needed for district lead sampling;
- Coordinate with New Jersey laboratories certified for lead testing in drinking water;
- Coordinate with Project Officers to establish sampling schedules;
- Ensure properly signed QAPPs are in place prior to initiation of sampling;
- Verify that officials from each school are aware when sampling is scheduled and the expected duration;
- Review of the School Field Sampling Summary Reports prepared by Project Officers;
- Review of Laboratory Data Reports (LDR) from Laboratory Managers;
- Review of Final Project Reports prepared by Project Officers;
- Identify limitations in the use of any laboratory data due to information provided in the accompanying School Field Sampling Summary Report;
- Maintain the original signed QAPP(s);
- Maintain documents, reports and records listed in QAPP, including:
    - Laboratory Data Reports (LDR)
    - Copy of Field Sampling Summary Report with copies of field logbooks,
    - Field Walk-Through reports including Attachments B, C, D E and F of this Sampling Plan,
    - Chain of custody forms and flush tags.
    - Copy of Final Project Report
- Maintenance of other relevant records, such as:
    - Purchase orders for analytical costs (copy).
    - Agreement with laboratory to sample, analyze, and report with details for payment
    - Receipts (originals or copies)

3.2 Individual School Sampling Project Officers (Project Officers)

An Individual School Sampling Project Officer (Project Officer) shall be assigned for each school. A Project

Officer should be someone who is familiar with the school building layout and plumbing system. See District's QAPP for a list of the Project Officers.

Project Officer Responsibilities

- General project oversight for assigned school(s).
- Generate field log book for each assigned school. Document field activities including any changes to procedures outlined in the Sampling Plan or QAPP.
- Ensure proper completion of the Plumbing Profile Form for assigned school(s) - See Attachment B.
- Oversight of completion of the following reports found in the Sampling Plan which require sign–off by Project Officer:
  - Water Outlet Inventory (Attachment C)
  - Filter Inventory (Attachment D)
  - Flushing Log (Attachment E)
  - Pre Sampling Water Use Certification (Attachment F).
- Prepare labels for outlets to be sampled.
- Prepare for Walk-Through including acquisition of School Floor Plan.
- Attend school Walk-Through.
- Ensure proper completion of Walk-Through documentation including identification of outlets on Floor Plan, and Sampling Location Inventory with coding according to the Sampling Plan (Attachment C).
- Supervision of field activities such as Walk- Through, flushing (if required), locking school prior to sampling, and sample collection.
- Identify low use water outlets requiring flushing and attach flush tag (Attachment G).
- Ensure that Field Sampling Team has all relevant sampling supplies including sampling bottles, labels, proper reagent water and chain of custody forms prior to collection of samples.
- Ensure that all water outlets to be sampled prior to sampling event are labeled.
- Ensure that all low use outlets identified for sampling had been flushed.
- Remove flush tags from outlet once sampling is completed.
- Responsible for ensuring water remains motionless for a minimum of eight hours (last to leave the school) prior to sampling event by following procedures in Section 8.
- Verify that the Sampling Plan was followed prior to initiating sampling by completing the Pre-Sampling Water Use Certification (Attachment F).
- Provide supervision of sampling event.
- Document issues during sampling event in field log book.
- Prepare Field Walk-Through Report, School Field Sampling Summary Report and Final Project Report for assigned school(s).
- Maintain field log books for each school.
- Prepare samples for shipment and delivery to laboratory per certified laboratory instructions.
- Ensure that samples are delivered to laboratory within the time period specified by the certified laboratory

3.3 Individual School Protocols

A separate log book and supporting documentation shall be kept for each school. The contents of the log book are to include the Attachments A through F found at the end of this plan. A field log book should include but not be limited to: a material evaluation, filter log, drinking water outlet inventory, flushing log, and label identification codes.

4. SCHOOL SAMPLING PRIORITY

The District developed a list of all school facilities scheduled for sampling. See Attachment A for the school sampling listing. Please note that the list may be updated based on conditions at the school, which prevent sampling from occurring or scheduling issues. Accordingly, the list should include a revision date.

5. PLUMBING SURVEY

Prior to a sampling event, documentation of various aspects of each school's water system needs to be completed. This following information needs to be compiled and the attachments completed including:

5.1 Plumbing Profile

The purpose of a Plumbing Profile (Attachment B) is to identify and categorize plumbing and infrastructure in order to prioritize schools/outlets for testing, and to identify potential sources of lead (i.e. lead service lines, or lead piping or solder). The results of the Plumbing Profile determine the sampling locations and priority within the individual school facilities.

A Plumbing Profile should include all of the following:

- Year school built and dates of any additions
- Building blue prints and floor diagrams
- Service line material;
- Material of internal plumbing, this is an important part of a plumbing profile, and whether it meets the current New Jersey "lead-free" plumbing code;
- Point-of-entry or point-of-use treatment being used;
- All drinking water outlets including fountains that are permanently out of service;
- All drinking water outlets including fountains that are temporarily out of service;
- All drinking water outlets including drinking water fountains that are leaking or evidence of staining and in need of repair;
- Type (make and model) and location of all drinking water fountains, including detailed description that identifies of whether they are lead-lined or if they have been involved in any recalls, (See USEPA Fact Sheet at http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=30005UPU.txt);
- Locations of all drinking water outlets including fountains;
- All plumbing repairs and replacements needed for internal plumbing;
- All plumbing repairs and replacements conducted within the past year;
- Locations of any electrical wires grounded to water pipes

5.2 Filter Inventory (If Applicable)

A Filter Inventory (Attachment D) shall be prepared, including the following information:

- Location (school and outlet);
- Make and model;
- Installation date (last replaced);

- Replacement frequency;
- Documentation of repairs; and
- Contaminants the filter is capable of and/or NSF-certified for the removing e.g. lead and others

6. PLANNING

6.1 Walk –Through

A Walk-Through must be conducted by the Project Officer prior to sampling as part of the planning process. The Walk-Through must include every room (including but not limited to classrooms, offices, bathrooms, kitchens and recreational areas) in the facility. During the Walk- Through, all drinking water and food preparation outlets to be sampled will be labeled by the Project Officer on the Floor Diagram (6.2).

The Project Officer will also conduct an onsite assessment of each sample outlet to document (using Attachment C) specific characteristics of the outlet (e.g. leaking outlets; staining). During this assessment, the water should be turned on to determine the spray pattern, whether there is adequate flow to collect samples or if any odor or color differences are present and whether the cold water faucet is functioning properly. Only cold water faucets are to be sampled. For motion sensor and metered sinks, the hot water valve will be shut off on the day of sampling. All outlets in need of repair must be repaired prior to sampling or documented on the temporary out of service list in the Plumbing Profile (Attachment B).

6.2 Floor Diagram

Each drinking water outlet shall be identified on the school schematic (floor diagram). The floor diagram should have the classroom numbers and the following locations labeled:

- Service Line = SL
- Point of Entry (The closest water outlet to the entrance of the service line into the school)
- Food preparation outlets (i.e. cafeteria, kitchen and home economics class faucets);
- Drinking Water Fountains; and
- Other drinking water outlets to be sampled (i.e. nurse's office, teacher's lounge, home economics, etc.), and any other room or outside facility used for water consumption.

The Project Officer must date and sign the floor diagram.

7. SAMPLE LOCATIONS

7.1 Sample Locations

The following locations shall be identified and labeled for each school:

- Kitchen outlets
- Food Preparation outlets
- Teacher Lounge outlets
- Nurse's Office outlets

- Home Economic Sink outlets
- Drinking Water Fountains – Bubblers and Water Coolers
- Outside drinking water fountains and food preparation areas
- Ice Machines
- Other drinking water outlets used for consumption

Examples of outlets that do not need to be sampled include utility sinks, outside spigots, bathroom sinks and classroom sinks, unless any of these sinks are used routinely for consumption.

7.2 Sample Location Codes

Each sampling location shall be identified by its location and type using the following coding system (Note additional codes as needed):

KC = Kitchen Outlet, Cold
CT= Cafeteria Outlet
FP= Food Preparation Sink
TL= Teacher Lounge Sink
NS = Nurse's Office Sink
EC = Home Economics Outlet, Cold
DW= Drinking Water Bubbler
WC = Water Cooler (Chiller Unit)
IM = Ice Machine

7.3 Sampling Location Inventory

Attachment C shall be used to develop a detailed inventory of each drinking water outlet in the school to be sampled. The inventory must be completed and signed by the Project Officer.

The Drinking Water Outlet Inventory shall include the following information:

- All drinking water outlets in the school
- The type, location, and sample location code of each drinking water outlet
- If the drinking water outlet has a chiller unit
- If the drinking water outlet has an aerator/screen
- If the drinking water outlet is motion activated, in which the hot water at the outlet must be turned off prior to sampling
- If the drinking water outlet is operational
- If the drinking water outlet has not been used frequently
- If the drinking water outlet is leaking
- If the drinking water outlet has a filter
- The make and model of all drinking water fountains and water coolers

8. SAMPLING PROCEDURES

8.1 Timeline

Samples should be collected before the facility opens in the morning and before any water is used in the building. The water shall sit in the pipes unused for at least 8 hours, but no more than 48 hours, before a sample is collected.

At no time should filters, aerators and screens be removed prior to or during the sampling event.

Prior to Sampling

- For buildings that have not been used for more than 48 hours, the District will perform systematic flushing 48 hours prior to the sampling event, as described in the USEPA's "3Ts For Reducing Lead in Drinking Water in Schools" (revised October 2006, see page 56). This flushing event and locations shall be documented in a log (Attachment E).
  - The flushing log must be completed and signed by the Project Officer.
- The Project Officer will contact the laboratory to confirm sample bottles, weatherproof labels, chain of custody forms and coolers are available and ready for the sampling event.
- Every drinking water outlet to be sampled (previously identified in Attachment C) will be labeled with a specific Sample Location Code in indelible marker on the underside of the sampling fixture in the event the District has to re-visit the sample location.
- A communication will be sent out to all staff in schools being sampled explaining what time all staff must exit the building.
- After this time, signs shall be posted to indicate that water should not be used and access to the building shall be restricted to ensure that water sits undisturbed for a minimum of 8 hours.
- Turn off all irrigation and outdoor water features.

Day of Sampling

The Project Officer will use Attachment F to document when the water was last used and when sampling began.

8.2 Sample Collection

Sample Collection Highlights

- All samples shall be collected in a pre-cleaned HDPE 250mL wide mouth single use rigid sample container.
- Identify on the Sampling Plan the outlet closest to the water service line(s) entry point to be collected first, then identify the next closest outlet as second, and move away from the water service line(s) entry point until the outlet farthest away is identified to be sampled last on the sampling plan. This will minimize the chance that a sampling location will be flushed by an upstream fixture. Sampling will begin at the outlet closest to the point of entry and continue to the furthest outlet to ensure the water remains motionless in the plumbing.

Sample Collection Method

USEPA recommends a two-step sampling process to be followed for identifying lead contamination. Lead in a water sample taken from an outlet can originate from the outlet fixture (the faucet, bubbler etc.), plumbing upstream of the outlet fixture (pipe, joints, valves, fittings etc.), or it can already be in the water that is entering the facility. The two-step sampling process helps to identify the actual source(s) of lead.

All sampling must be conducted in accordance with this Sampling Plan and the District's QAPP.

1. For each drinking water outlet sampled, a new pair of non-colored latex or nitrile gloves shall be used to collect both the first draw and flush follow-up samples. This is to minimize the potential for cross contamination of outlets by sampling personnel.
2. First draw samples (i.e. samples collected from outlets where water sat undisturbed for a minimum of 8 hours) will be collected from a cold water outlet at each location identified in 7.3 above. The sample must be collected by placing the bottle under the outlet before turning the cold water on. No water should be allowed to run prior to collecting a sample. For motion-activated faucets, the hot water valve must be turned off prior to sampling.
3. Immediately after the first draw sample is collected, the sampler will collect a follow-up flush sample.
4. When collecting the follow-up flush sample, the outlet will be turned on and allowed to run for 30 seconds then the water will be captured in a pre-cleaned 250 mL container.
5. If the drinking water outlet is a water cooler with a cooler unit, DO NOT COLLECT A FOLLOW-UP FLUSH SAMPLE UNTIL ALL FIRST DRAW SAMPLES ARE COLLECTED IN THE SCHOOL.
6. After all sampling is completed, return to the water coolers to collect a follow-up flush sample, again starting at the water cooler located in closest proximity to the POE and then move outward. Allow the water to run for 15 minutes, then sample the drinking water outlet utilizing a pre-cleaned 250 mL container.
7. Each sample collected shall be properly identified on the sample bottle and chain of custody using the Sample Location Code previously identified by the District (as identified on the label on the outlet and on the floor diagram). In addition, follow-up flush samples shall be identified by noting "FLUSH" after the Sample Location Code on the sample bottle and on the chain of custody (e.g. MM-2F-DW-01 and MM-2F-DW-01 FLUSH).

Additional Sampling Event

Upon receiving the results of the initial and follow-up flush samples at all outlets, the District will conduct additional sampling events for the following situations: any location required to be sampled previously but was not sampled (not operational during initial sampling event), where there was a possible lab error or sample collection error, and any location that was not sampled but could help pinpoint the source of lead in a sampled outlet.

8.3 New Jersey Certified Laboratories

Laboratory Responsibilities

Certify to the District that they have received, and will follow, the Sampling Plan and QAPP.

- Each laboratory must document that laboratory personnel have previous experience sampling for lead and have been properly trained to conduct USEPA Method 200.8 or other methods that are approved sampling methods. Approved sampling methods are USEPA methods for the analysis of lead in drinking water (USEPA Method 200.9, USEPA Method 200.5, SM3113B, ASTM3559-D) provided that the reporting limit used by the laboratory for that method is less than or equal to 2 µg/L.

- The laboratory will conduct analysis of a laboratory fortified blank (Field Blank) to assess the accuracy. The acceptance criteria for accuracy for the results will be within plus or minus 15% recovery of the known value.
- Laboratories must provide the results to the District within timeframe required under contract (14 day is average).
- Laboratories will report in µg/L (ppb) and to at least three significant figures.

Sampling Personnel Responsibilities

Each sampler will be responsible for the following:

- Preparation of pre-printed waterproof labels, which will include, the sampler's name, the school name, the Sample Location Code, parameter to be analyzed (lead), date of collection and any preservation technique used;
- Preparation of a chain of custody to include the field sample information;
- Obtaining from the laboratory, prior to the sampling event, ASTM Type I reagent-grade water (RGW) to be used as Field Reagent Blanks (FRB). The sampler will transport this RGW to the school to be sampled. Before the first sample is collected the RGW collected at the Laboratory will be transferred to a sample container near the first sample location inside the school building. This FRB sample will be stored and transported in the same cooler, handled and preserved in the same manner as samples collected at that school.
- Documentation of any and all observations such as automatic sensors, odors, change in water color, low water flow, water outlet leaks (i.e. 1 second drip), irregular water spray, attached filter(s), if the screen/aerator is on/off the water outlet or if the water becomes warm/hot.
- Minimizing the potential for cross contamination of sample outlets by sampling personnel. The water will be collected from the outlet directly into each container.
- Following all of the sampling procedures outlined in the Sampling Plan and QAPP.

8.4 Sampling Results

The laboratories will provide the lead sample results to the District in electronic format within the timeframe required under the contract. A spreadsheet of all results, the analytical results report, and the chain of custody forms must be included.

Within 24 hours after the District has reviewed and verified the final laboratory results, the District will make the results publically available and if any results exceed the action level provide written notification to the parents/guardians of all students as well as to the Department of Education.

8.5 Intermediate Remedial Measures

Upon receiving sample results, the District will turn off all outlets with results that exceed 15 µg/L (as defined as greater than or equal to 15.5 μg/L). If these locations must remain on for non-drinking purposes, a “DO NOT DRINK – SAFE FOR HANDWASHING ONLY” sign will be posted (Attachment H.v).

Glossary

Drinking Water Outlet- an outlet that can be used for the consumption of water, such as, water fountains, water coolers, bubblers, kitchen sinks and food preparation sinks; however, classroom, bathroom, and outlets used for washing dishes are not drinking water outlets.

Action Level (AL)- The lead level established by the USEPA at 40 CFR 141.80 for lead in drinking water.

Bottled Water- includes sealed purchased water from an external company (individual bottles or dispensers). Drinking water dispensers that utilize purchased water are not required to be sampled.

First Draw Sample – a sample that is collected from outlets where water sat undisturbed for a minimum of 8 hours.

Follow-up Flush Sample - sample that is collected from outlets after they have been manually flushed.

Low-Use Outlets- outlets that are not used routinely and may sit for periods of time with minimal or no use. Examples include those outlets in a wing of a school that is temporarily closed off and are not being used, or fountains and food preparation outlets that are only used during sporting or other events.

Out of Service Outlets- drinking water outlets as identified on Attachment C that are not operational.

a. **Permanently Out of Service Outlets**- outlets that are not being used and the District plans to decommission.
b. **Temporarily Out of Service Outlets**- outlets that require repair or replacement and will be put back in service once they are repaired. For example, an outlet with a broken handle.

Point of entry (POE)- The point at which the service line enters the building. For the purposes of sample collection, the POE sample location is the closest water outlet to the entrance of the service line into the school.

Quality Assurance Project Plan (QAPP) Template- describes the planning, implementation, and evaluation steps that will be consistently applied by those involved in a School District's Sampling Plan. The QAPP will provide a high level of confidence in the results of this sampling and aide in meeting the overall goal of ensuring any appropriate remediation measures are quickly identified and implemented.

Sampler- personnel responsible for collecting the drinking water outlet samples for a school. The individual is required to review and understand their roles and responsibilities under the District's Quality Assurance Program Plan and be able to collect samples in accordance with the District's Sampling Plan.

Service Line- the pipe that carries water to the school from the public water system's main in the street.

School Wide Systematic Flush- system flushing is required if the school has been dormant for greater than 48 hours (holiday or seasonal break). A Flushing Log (Attachment E) needs to be completed for each school flushed.

Water Cooler- any mechanical device affixed to drinking water supply plumbing that actively cools water for human consumption. The reservoir can consist of a small tank or a pipe coil.

Attachment A - List of Union County Vocational Technical Schools

Priority for Sampling

SCHOOL NAME/FACILITY NAME	DATE OF SAMPLING	CERTIFIED LABORATORY	NOTES
Administration Building	8/12/2016	EMSL	
Academy of Performing Arts	8/12/2016	EMSL	
Baxel Hall	8/12/2016	EMSL	
Bistocci Hall	8/12/2016	EMSL	
Mancuso Hall	8/12/2016	EMSL	
West Hall	8/12/2016	EMSL	

Attachment B – Plumbing Profile

***Note**: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools"*

Name of School: Union County Vo-Tech, Academy for Performing Arts Hall Grade Levels: 9-12

Address: 1776 Raritan Road, Scotch Plains, New Jersey

Individual school project officer Signature: Mark Leary Mark S Leary Date: 8/12

Questions	Answers	
Background Information		
1. What year was the original building constructed? Were any buildings or additions added to the original facility?	2009 NO	
2. If the building was constructed or repaired after 1986, was lead-free plumbing and solder utilized? What type of solder was used? Document all locations where lead solder was used.	YES	
3. Where are the most recent plumbing repairs and replacements?	Location: NONE	Description:
4. With what materials is the service connection (the pipe that carries water to the school from the public water system's main in the street) made? Where is the Service Line located? (This is the POE location.)	Material: COOPER Location: MECH RM 1ST FL	
5. Is there point of entry (POE) or point of use (POU) treatment in use?	Y / N Type:	Location:

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	Y / N
7. Does the school have a filter maintenance and operation program? If so, who is responsible for this program? What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned? Does the school have a screen or aerator maintenance program?	Y / N
9. Have there been any complaints about bad (metallic) taste? Note location(s).	Y / N Location:
10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify: • Name of contaminant(s) • Concentrations found • pH level Is testing done regularly at the building?	NO
11. Other plumbing background questions include: • Are blueprints of the building available? • Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"? Are renovations planned for any of the plumbing system?	YES NO DEAD ENDS

Questions	Answers
Walk-Through *These questions should be addressed during the walk-through of the facility, while Attachment C- Drinking Water Outlet Inventory is being completed.*	
1. Confirm the material of Service Line visually.	COOPER
2. Confirm the presence of POE or POU treatment.	UNKNOWN
3. What are the potable water pipes made of in your facility? • Lead • Plastic • Galvanized Metal • Cast Iron • Copper • Other Note the water flow through the building and the areas that receive water first, and which areas receive water last.	COPPER
4. Are electrical wires grounded to Water Pipes? Note location(s).	Y / N Location: MECH RM
5. Are brass fittings, faucets, or valves used in your drinking water system? Note that most faucets are brass on the inside. Document the locations of any brass water outlet to be sampled.	Complete in "Brass" Column in Attachment C- Water Outlet Inventory. UNKNOWN
6. Locate all drinking water outlets (i.e. water coolers, bubblers, ice machines, kitchen/ food prep sinks, etc.) in the facility.	Complete in Attachment C-Water Outlet Inventory.

Questions	Answers	
7. Have the brands and models of the water coolers in the school been compared to the list of recalled water coolers in the Toolkit? Recalled Drinking Water Fountains Make and Model	Y / N NONE Type	
8. Have signs of corrosion, such as frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry been detected? Note the locations of water outlets.	Complete in "Signs of Corrosion" column in Attachment C- Drinking Water Outlet Inventory. NO	
9. Are there any outlets that are not operational and therefore out of service? Permanently? Temporarily? Permanently Temporarily	Y / N Complete "Operational Column" in Attachment C- Drinking Water Outlet Inventory. Type/ Location	Description

Attachment B – Plumbing Profile

***Note**: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools"*

Name of School: Union County Vo-Tech, Administration Building Grade Levels: N/A

Address: 1776 Raritan Road, Scotch Plains, New Jersey

Individual school project officer Signature: Mark Leary Mark Leary Date: 8/12

Questions	**Answers**	
Background Information		
1. What year was the original building constructed? Were any buildings or additions added to the original facility?	2009 NO	
2. If the building was constructed or repaired after 1986, was lead-free plumbing and solder utilized? What type of solder was used? Document all locations where lead solder was used.	YES	
3. Where are the most recent plumbing repairs and replacements?	Location: NONE	Description:
4. With what materials is the service connection (the pipe that carries water to the school from the public water system's main in the street) made? Where is the Service Line located? (This is the POE location.)	Material: COPPER Location: MAINTENCE ROOM BY FRONT DOOR	
5. Is there point of entry (POE) or point of use (POU) treatment in use?	Y / N Type:	Location:

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	Y / N
7. Does the school have a filter maintenance and operation program? If so, who is responsible for this program? What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned? Does the school have a screen or aerator maintenance program?	Y / N
9. Have there been any complaints about bad (metallic) taste? Note location(s).	Y / N Location:
10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify: • Name of contaminant(s) • Concentrations found • pH level Is testing done regularly at the building?	NO
11. Other plumbing background questions include: • Are blueprints of the building available? • Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"? Are renovations planned for any of the plumbing system?	YES NO

Questions	Answers
Walk-Through *These questions should be addressed during the walk-through of the facility, while Attachment C- Drinking Water Outlet Inventory is being completed.*	
1. Confirm the material of Service Line visually.	COPPER
2. Confirm the presence of POE or POU treatment.	UNKNOWN
3. What are the potable water pipes made of in your facility? • Lead • Plastic • Galvanized Metal • Cast Iron • Copper • Other Note the water flow through the building and the areas that receive water first, and which areas receive water last.	COPPER
4. Are electrical wires grounded to Water Pipes? Note location(s).	Y / N Location: MECH ROOM
5. Are brass fittings, faucets, or valves used in your drinking water system? Note that most faucets are brass on the inside. Document the locations of any brass water outlet to be sampled.	Complete in "Brass" Column in Attachment C- Water Outlet Inventory. YES
6. Locate all drinking water outlets (i.e. water coolers, bubblers, ice machines, kitchen/ food prep sinks, etc.) in the facility.	Complete in Attachment C-Water Outlet Inventory.

Questions	Answers	
7. Have the brands and models of the water coolers in the school been compared to the list of recalled water coolers in the Toolkit? Recalled Drinking Water Fountains Make and Model	Y / N Type	
8. Have signs of corrosion, such as frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry been detected? Note the locations of water outlets.	Complete in "Signs of Corrosion" column in Attachment C- Drinking Water Outlet Inventory. NO	
9. Are there any outlets that are not operational and therefore out of service? Permanently? Temporarily? Permanently Temporarily	Y / N Complete "Operational Column" in Attachment C- Drinking Water Outlet Inventory. Type/ Location	Description

Attachment B – Plumbing Profile

***Note**: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools"*

Name of School: Union County Vo-Tech, Baxel Hall Grade Levels: 9-12

Address: 1776 Raritan Road, Scotch Plains, New Jersey

Individual school project officer Signature: Mark Leary Date: 8/12

Mark S Leary

Questions	Answers	
Background Information		
1. What year was the original building constructed? Were any buildings or additions added to the original facility?	1964 YES	
2. If the building was constructed or repaired after 1986, was lead-free plumbing and solder utilized? What type of solder was used? Document all locations where lead solder was used.	UNKNOWN UNKNOWN	
3. Where are the most recent plumbing repairs and replacements?	Location: NEW PLUMBING IN 2007	Description:
4. With what materials is the service connection (the pipe that carries water to the school from the public water system's main in the street) made? Where is the Service Line located? (This is the POE location.)	Material: UNSURE Location: CLOSET 121 OFF MAIN	
5. Is there point of entry (POE) or point of use (POU) treatment in use?	Y / N Type:	Location:

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	Y / N
7. Does the school have a filter maintenance and operation program? If so, who is responsible for this program? What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned? Does the school have a screen or aerator maintenance program?	Y / N
9. Have there been any complaints about bad (metallic) taste? Note location(s).	Y / N Location:
10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify: • Name of contaminant(s) • Concentrations found • pH level Is testing done regularly at the building?	NO
11. Other plumbing background questions include: • Are blueprints of the building available? • Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"? Are renovations planned for any of the plumbing system?	NO NO

Questions	Answers
Walk-Through *These questions should be addressed during the walk-through of the facility, while Attachment C- Drinking Water Outlet Inventory is being completed.*	
1. Confirm the material of Service Line visually.	COOPER
2. Confirm the presence of POE or POU treatment.	
3. What are the potable water pipes made of in your facility? • Lead • Plastic • Galvanized Metal • Cast Iron • Copper • Other Note the water flow through the building and the areas that receive water first, and which areas receive water last.	COOPER
4. Are electrical wires grounded to Water Pipes? Note location(s).	Y / N Location: MECH. ROOMS
5. Are brass fittings, faucets, or valves used in your drinking water system? Note that most faucets are brass on the inside. Document the locations of any brass water outlet to be sampled.	Complete in "Brass" Column in Attachment C- Water Outlet Inventory. UNKNOWN
6. Locate all drinking water outlets (i.e. water coolers, bubblers, ice machines, kitchen/ food prep sinks, etc.) in the facility.	Complete in Attachment C-Water Outlet Inventory.

<table>
<tr><th>Questions</th><th colspan="2">Answers</th></tr>
<tr><td>7. Have the brands and models of the water coolers in the school been compared to the list of recalled water coolers in the Toolkit?

Recalled Drinking Water Fountains

Make and Model</td><td colspan="2">Y / N UNKNOWN

UNKNOWN

Type</td></tr>
<tr><td>8. Have signs of corrosion, such as frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry been detected?
Note the locations of water outlets.</td><td colspan="2">Complete in “Signs of Corrosion” column in Attachment C- Drinking Water Outlet Inventory.
NO</td></tr>
<tr><td>9. Are there any outlets that are not operational and therefore out of service? Permanently? Temporarily?

Permanently

Temporarily</td><td>Y / N
Complete “Operational Column” in Attachment C- Drinking Water Outlet Inventory.

Type/ Location</td><td>

Description</td></tr>
</table>

Attachment B – Plumbing Profile

Note: *Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools"*

Name of School: Union County Vo-Tech, Bistocci Hall Grade Levels: 9-12

Address: 1776 Raritan Road, Scotch Plains, New Jersey

Individual school project officer Signature: Mark Leary Mark S Leary Date: 8/12

Questions	Answers	
Background Information		
1. What year was the original building constructed? Were any buildings or additions added to the original facility?	2004 NO	
2. If the building was constructed or repaired after 1986, was lead-free plumbing and solder utilized? What type of solder was used? Document all locations where lead solder was used.	YES	
3. Where are the most recent plumbing repairs and replacements?	Location: NONE	Description:
4. With what materials is the service connection (the pipe that carries water to the school from the public water system's main in the street) made? Where is the Service Line located? (This is the POE location.)	Material: COPPER Location: WEST HALL BOILER RM	
5. Is there point of entry (POE) or point of use (POU) treatment in use?	Y / N Type:	Location:

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	Y / N
7. Does the school have a filter maintenance and operation program? If so, who is responsible for this program? What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned? Does the school have a screen or aerator maintenance program?	Y / N
9. Have there been any complaints about bad (metallic) taste? Note location(s).	Y / N Location:
10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify: • Name of contaminant(s) • Concentrations found • pH level Is testing done regularly at the building?	NO
11. Other plumbing background questions include: • Are blueprints of the building available? • Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"? Are renovations planned for any of the plumbing system?	NO NO

Questions	Answers
Walk-Through *These questions should be addressed during the walk-through of the facility, while Attachment C- Drinking Water Outlet Inventory is being completed.*	
1. Confirm the material of Service Line visually.	COPPER
2. Confirm the presence of POE or POU treatment.	UNKNOWN
3. What are the potable water pipes made of in your facility? • Lead • Plastic • Galvanized Metal • Cast Iron • Copper • Other Note the water flow through the building and the areas that receive water first, and which areas receive water last.	COPPER
4. Are electrical wires grounded to Water Pipes? Note location(s).	Y / N Location: MECH RM MAIN FLOOR
5. Are brass fittings, faucets, or valves used in your drinking water system? Note that most faucets are brass on the inside. Document the locations of any brass water outlet to be sampled.	Complete in "Brass" Column in Attachment C- Water Outlet Inventory. UNKNOWN
6. Locate all drinking water outlets (i.e. water coolers, bubblers, ice machines, kitchen/ food prep sinks, etc.) in the facility.	Complete in Attachment C-Water Outlet Inventory.

Questions	Answers	
7. Have the brands and models of the water coolers in the school been compared to the list of recalled water coolers in the Toolkit? Recalled Drinking Water Fountains Make and Model	Y / N Type	
8. Have signs of corrosion, such as frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry been detected? Note the locations of water outlets.	Complete in "Signs of Corrosion" column in Attachment C- Drinking Water Outlet Inventory. NO	
9. Are there any outlets that are not operational and therefore out of service? Permanently? Temporarily? Permanently Temporarily	Y / N Complete "Operational Column" in Attachment C- Drinking Water Outlet Inventory. Type/ Location	Description

Attachment B – Plumbing Profile

***Note**: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools"*

Name of School: Union County Vo-Tech, Mancuso Hall Grade Levels: 9-12

Address: 1776 Raritan Road, Scotch Plains, New Jersey

Individual school project officer Signature: Mark Leary Date: 8/12

Mark S Leary

Questions	Answers	
Background Information		
1. What year was the original building constructed? Were any buildings or additions added to the original facility?	1964 NO	
2. If the building was constructed or repaired after 1986, was lead-free plumbing and solder utilized? What type of solder was used? Document all locations where lead solder was used.	NON-PLUMBING RENO IN 1996	
3. Where are the most recent plumbing repairs and replacements?	Location: NONE	Description:
4. With what materials is the service connection (the pipe that carries water to the school from the public water system's main in the street) made? Where is the Service Line located? (This is the POE location.)	Material: COPPER Location: WEST HALL BOILER RM	
5. Is there point of entry (POE) or point of use (POU) treatment in use?	Y / N Type:	Location:

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	Y / N
7. Does the school have a filter maintenance and operation program? If so, who is responsible for this program? What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned? Does the school have a screen or aerator maintenance program?	Y / N
9. Have there been any complaints about bad (metallic) taste? Note location(s).	Y / N Location:
10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify: • Name of contaminant(s) • Concentrations found • pH level Is testing done regularly at the building?	NO
11. Other plumbing background questions include: • Are blueprints of the building available? • Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"? Are renovations planned for any of the plumbing system?	NO NO

Questions	Answers
Walk-Through *These questions should be addressed during the walk-through of the facility, while Attachment C- Drinking Water Outlet Inventory is being completed.*	
1. Confirm the material of Service Line visually.	COPPER
2. Confirm the presence of POE or POU treatment.	UNKNOWN
3. What are the potable water pipes made of in your facility? • Lead • Plastic • Galvanized Metal • Cast Iron • Copper • Other Note the water flow through the building and the areas that receive water first, and which areas receive water last.	COPPER
4. Are electrical wires grounded to Water Pipes? Note location(s).	Y / N Location: ELECTRICAL ROOM
5. Are brass fittings, faucets, or valves used in your drinking water system? Note that most faucets are brass on the inside. Document the locations of any brass water outlet to be sampled.	Complete in "Brass" Column in Attachment C- Water Outlet Inventory. UNKNOWN
6. Locate all drinking water outlets (i.e. water coolers, bubblers, ice machines, kitchen/ food prep sinks, etc.) in the facility.	Complete in Attachment C-Water Outlet Inventory.

Questions	Answers	
7. Have the brands and models of the water coolers in the school been compared to the list of recalled water coolers in the Toolkit? Recalled Drinking Water Fountains Make and Model	Y / N Type	
8. Have signs of corrosion, such as frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry been detected? Note the locations of water outlets.	Complete in “Signs of Corrosion” column in Attachment C- Drinking Water Outlet Inventory. NO	
9. Are there any outlets that are not operational and therefore out of service? Permanently? Temporarily? Permanently Temporarily	Y / N Complete “Operational Column” in Attachment C- Drinking Water Outlet Inventory. Type/ Location	 Description

Attachment B – Plumbing Profile

***Note**: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools"*

Name of School: Union County Vo-Tech, West Hall Grade Levels: 9-12

Address: 1776 Raritan Road, Scotch Plains, New Jersey

Individual school project officer Signature: Mark Leary Mark S Leary Date: 8/12

Questions	Answers	
Background Information		
1. What year was the original building constructed? Were any buildings or additions added to the original facility?	1964 YES	
2. If the building was constructed or repaired after 1986, was lead-free plumbing and solder utilized? What type of solder was used? Document all locations where lead solder was used.	YES UNKNOWN	
3. Where are the most recent plumbing repairs and replacements?	Location: NONE	Description:
4. With what materials is the service connection (the pipe that carries water to the school from the public water system's main in the street) made? Where is the Service Line located? (This is the POE location.)	Material: COPPER Location: WEST HALL BOILER RM	
5. Is there point of entry (POE) or point of use (POU) treatment in use?	Y / N Type:	Location:

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	Y / N
7. Does the school have a filter maintenance and operation program? If so, who is responsible for this program? What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned? Does the school have a screen or aerator maintenance program?	Y / N
9. Have there been any complaints about bad (metallic) taste? Note location(s).	Y / N Location:
10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify: • Name of contaminant(s) • Concentrations found • pH level Is testing done regularly at the building?	NO
11. Other plumbing background questions include: • Are blueprints of the building available? • Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"? Are renovations planned for any of the plumbing system?	NO RMS. 311, 318, 325, 326, 335 334, 388, 345, 365

Questions	Answers
Walk-Through *These questions should be addressed during the walk-through of the facility, while Attachment C- Drinking Water Outlet Inventory is being completed.*	
1. Confirm the material of Service Line visually.	COPPER
2. Confirm the presence of POE or POU treatment.	UNKNOWN
3. What are the potable water pipes made of in your facility? • Lead • Plastic • Galvanized Metal • Cast Iron • Copper • Other Note the water flow through the building and the areas that receive water first, and which areas receive water last.	COPPER
4. Are electrical wires grounded to Water Pipes? Note location(s).	Y / N Location: IN VARIOUS ELECTRIAL RMS + BOILER RM
5. Are brass fittings, faucets, or valves used in your drinking water system? Note that most faucets are brass on the inside. Document the locations of any brass water outlet to be sampled.	Complete in "Brass" Column in Attachment C- Water Outlet Inventory. UNKNOWN
6. Locate all drinking water outlets (i.e. water coolers, bubblers, ice machines, kitchen/ food prep sinks, etc.) in the facility.	Complete in Attachment C-Water Outlet Inventory.

Questions	Answers	
7. Have the brands and models of the water coolers in the school been compared to the list of recalled water coolers in the Toolkit? Recalled Drinking Water Fountains Make and Model	Y / N UNKNOWN Type	
8. Have signs of corrosion, such as frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry been detected? Note the locations of water outlets.	Complete in "Signs of Corrosion" column in Attachment C- Drinking Water Outlet Inventory. NO	
9. Are there any outlets that are not operational and therefore out of service? Permanently? Temporarily? Permanently Temporarily	Y / N Complete "Operational Column" in Attachment C- Drinking Water Outlet Inventory. Type/ Location 338 NON-OPERATIONAL PERMANENTLY	Description

Attachment B.i: Plumbing Profile Instructions

Plumbing Profile Questions	**What Your Answers to the Plumbing Profile Questions Mean**
The questions in this column will help you determine whether lead is likely to be a problem in your facility, and will enable you to prioritize your sampling effort.	*This column discusses the significance of possible answers to the plumbing profile questions.*
Background Information	
1. When was the original building constructed? Were any buildings or additions added to the original facility? If so, complete a separate plumbing profile for each building, addition, or wing.	Older Buildings – Through the early 1900s, lead pipes were commonly used for interior plumbing in certain parts of the country in public buildings and private homes. Plumbing installed before 1930 is more likely to contain lead than newer pipes. Between 1920 and 1950, galvanized pipes were also used for plumbing. After 1930, copper generally replaced lead as the most commonly used material for water pipes. Up until the mid- to late-1980s (until the lead-free requirements of the 1986 Safe Drinking Water Act Amendments took effect), lead solder was typically used to join these copper pipes. The efforts of your public water supplier over the years to minimize the corrosiveness of the water may have resulted in mineral deposits forming a coating on the inside of the water pipes (passivation). This coating insulates the water from the plumbing and results in decreased lead levels in water. If the coating does not exist or is disturbed, the water is in direct contact with any lead in the plumbing system. Newer Buildings – New buildings are not likely to have lead pipes in their plumbing systems, but they are very likely to have copper pipes with solder joints. Buildings constructed prior to the late 1980s, before the lead-free requirements of the 1986 Safe Drinking Water Act Amendments, may have joints made of lead solder. Buildings constructed after this period should have joints made of lead-free solders. Even if "lead-free" materials were used in new construction and/or plumbing repairs, lead leaching may occur.

Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
2. If built or repaired after 1986, were lead-free plumbing and solder used in accordance with the lead-free requirements of the 1986 Safe Drinking Water Act Amendments? What type of solder has been used? Was lead solder used in your plumbing system? Note the locations of lead solder.	The 1986 Amendments to the Safe Drinking Water Act banned plumbing components that contained elevated levels of lead. Lead-free solder and flux (not more than 0.2% lead) and pipe, pipe fittings, and fixtures (not more than 8% lead) must now be used. The leaching potential of lead-free (i.e., tin-antimony) solder is much less than lead solder. The leaching potential of lead-free pipe, pipe fittings, and fixtures is also less, but leaching is still possible. If lead-free materials were not used in new construction and/or plumbing repairs, elevated lead levels can be produced. If the film resulting from passivation does not exist or has not yet adequately formed, any lead that is present is in direct contact with the water. In some areas of the country, it is possible that high-lead materials were used until 1988 or perhaps even later. Your local plumbing code authority or building inspector may be able to provide guidance regarding when high-lead materials were last used on a regular basis in your area.
3. When were the most recent plumbing repairs and replacements made (note locations)?	Corrosion occurs (1) as a reaction between the water and the pipes and (2) as a reaction between the copper and solder (metal-to-metal). This latter reaction is known as galvanic corrosion, which can be vigorous in new piping. If lead solders were used in the piping or if brass faucets, valves, and fittings containing alloys of lead were installed *(see response to Walk Through Question 5 below for further discussion of brass)*, lead levels in the water may be high. After about 5 years, however, this type of reaction (galvanic corrosion) slows down and lead gets into water mainly as a result of water being corrosive. If the water is non-corrosive, passivation is likely to have occurred and to have reduced opportunities for lead to get into the water system. For these reasons, if the building (or an addition, new plumbing, or repair) is less than 5 years old and lead solder or other materials (e.g., brass faucets containing lead alloys) were used, you may have elevated lead levels. If water supplied to the building is corrosive, lead can remain a problem regardless of the plumbing's age.
4. With what materials is the service connection (the pipe that carries water to the school from the public water system's main in the street) made? Note the location where the service connection enters the building and connects to the interior plumbing. (This is the POE location)	Lead piping was often used for the service connections that join buildings to public water systems. The service connection is the pipe that carries drinking water from a public water main to a building. Some localities actually required the use of lead service connections up until the lead-free requirements of the 1986 Safe Drinking Water Act Amendments took effect. Although a protective layering of minerals may have formed on these pipes, vibrations can cause flaking of any protective build-up and, allowing lead contamination to occur.

Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
5. Is there point of entry (POE) or point of use (POU) treatment in use?	Are there water treatment units in your plumbing system? Treatment units could be, but are not limited to, ion exchange units, filter cartridge, reserve osmosis, etc.
6. Do you have tanks in your plumbing system (pressure tanks, gravity storage tanks)? Note the location of any tanks, and any available information about the tank; e.g., manufacturer, date of installation.	Some older tanks may contain coatings that are high in lead content. Tanks may accumulate sediment that could be flushed back into the plumbing system under certain circumstances. You may wish to contact the supplier or manufacturer to obtain information about coatings. You may also wish to hire a plumber or tank service contractor to inspect your tanks, especially gravity storage tanks that are located outside of the building.
7. Does the school have a filter maintenance and operation program? If so, who is responsible for this program? What is the process for adding filters?	A program for the maintenance and the upkeep of filters on drinking water outlets is necessary to ensure the effectiveness of the filters. Most filters recommend replacement after six months. If the filters need replacement every six months, the program will include a procedure for ensuring that every six month old filter is replaced. An individual should be responsible for ensuring that this filter maintenance program is followed. If the school would like to add a filter to a water outlet, what is the process? Does a request form have to be completed and submitted to the individual in charge of maintenance? Do all filters need to be added at a certain time of year to follow the maintenance program?
8. Do outlets that provide drinking water have accessible screens or aerators? (Standard faucets usually have screens. Many coolers and bubblers also have screens.) Note the locations. Have these screens been cleaned? Note the locations.	Lead-containing sediments that are trapped on screens can be a significant source of lead contamination. Sediments should be tested for the presence of lead, and your facility should create a routine maintenance program to clean the screens frequently. If sediment has been a reoccurring problem regular cleaning of the screens and additional investigating into why the debris is accumulating is appropriate. However, the manufacturer or water service provider should be contacted to obtain instructions.
9. Have there been any complaints about water taste (metallic, etc.) or rusty appearance? Note the locations.	Although you cannot see, taste, or smell lead dissolved in water, the presence of a metallic taste or rusty appearance may indicate corrosion and possible lead contamination.

Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
10. Check building files to determine whether any water samples have been taken from your building for any contaminants (also check with your public water supplier). • Name of contaminant(s)? • What concentrations of these contaminants were found? • What was the pH level of the water? • Is testing done regularly at your facility?	Lead testing may have previously been done voluntarily under the Lead Contamination Control Act. Results of analyses of general water quality, such as measures of pH, calcium hardness, and carbonate alkalinity, can provide important clues about the corrosiveness of the water. Generally, the higher the values of these parameters, the less likely it is that your water is corrosive. If you have no data from your school, your public water system should at least be able to provide information about the general water quality.
11. Other plumbing questions: • Are blueprints of the building available? • Are there known plumbing "dead• ends," low use areas, existing leaks or other "problem areas"? • Are renovations being planned for part or all of the plumbing system?	You should incorporate this information into decisions regarding sample locations and sampling protocol. You may wish to note the direction of water flow and the location of fixtures, valves, tanks, areas of sediment accumulation, areas of corrosion, etc., on a sketch or blueprint of the plumbing.
Walk-Through	
1. Confirm the material that the service line is made of visually	See Background Information Question #4.
2. Confirm the presence of POE or POU treatment.	See Background Information Question #5

<table>
<tr><th>Plumbing Profile Questions</th><th>What Your Answers to the Plumbing Profile Questions Mean</th></tr>
<tr><td>3. Specifically, what are the potable water pipes made of in your facility (note the locations)?

• Lead
• Plastic
• Galvanized Metal
• Cast Iron
• Copper
• Other

Note the location of the different types of pipe, if applicable, and the direction of water flow through the building. Note the areas of the building that receive water first, and which areas receive water last.</td><td>Survey your building for exposed pipes, preferably accompanied by an experienced plumber who should be able to readily identify the composition of pipes on site. Most buildings have a combination of different plumbing materials:

• Lead pipes are dull gray in color and may be easily scratched by an object such as a knife or key. Lead pipes are a major source of lead contamination in drinking water.

• Galvanized metal pipes are gray or silver-gray in color and are usually fitted together with threaded joints. In some instances, compounds containing lead have been used to seal the threads joining the pipes. Debris from this material, which has fallen inside the pipes, may be a source of contamination.

• Copper pipes are red-brown in color. Corroded portions may show green deposits. Copper pipe joints were typically joined together with lead solders until the lead-free requirements of the 1986 Safe Drinking Water Act Amendments took effect.

• Plastic pipes, especially those manufactured abroad, may contain lead. If plastic pipes are used, be sure they meet NSF International standards. (Note: NSF International is an independent, third-party testing organization. Product listings can be obtained by visiting their Web site at http://www.nsf.org/ business/search_listings/index/asp.)</td></tr>
<tr><td>4. Is any electrical equipment grounded to water pipes? Note the locations.</td><td>If electrical equipment, such as telephones, has been installed using water pipes as a ground, the electric current traveling through the ground wire will accelerate the corrosion of any interior plumbing containing lead. The practice should be avoided, if possible. However, if existing wires are already grounded to water pipes, the wires should not be removed from the pipes unless a qualified electrician installs an alternative grounding system. Check with your local building inspector on this matter. Your state or local building code may require grounding of the wires to the water pipes. Improper grounding of electrical equipment may cause severe shock.</td></tr>
</table>

Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
5. Are brass fittings, faucets, or valves used in your drinking water system? (Note: Most faucets are brass on the inside.) You may want to note the locations on a map or diagram of your facility and make extensive notes that would facilitate future analysis of lead sample results.	Brass fittings, faucets, and valves are golden yellow in color, similar to copper in appearance, or are plated with chrome. Brass is composed primarily of two metals, copper and zinc. Most brasses contain lead ranging from 2 percent to 8 percent. That lead can contaminate the water contact surface when it is smeared on the machined surfaces during production. After 1996, brass fittings installed in drinking water outlets such as faucets and water coolers must meet NSF standards for lead content. While this percentage is considered lead-free under the 1986 Safe Drinking Water Act Amendments, some contamination problems still may occur. Older brass faucets may contain higher percentages of lead and lead solder in their interior construction and pose contamination problems. Note that your state or local government may have imposed this standard prior to 1988. The degree to which lead will leach from brass products containing alloys with less than 8 percent lead is dependent upon the corrosiveness of the water and the manufacturing process used to develop the product. A study revealed that fabricated faucets tend to contribute less lead to the water than faucets manufactured by the permanent mold process, regardless of the amount of lead in the alloy. In response to a requirement of the 1996 SDWA, EPA worked with the plumbing industry and NSF International to develop a voluntary industry standard that is designed to minimize the amounts of lead being leached from these products. This standard is NSF/ANSI Standard 61, Section 9. Since 1998, all plumbing fixtures for use as drinking water supply must meet this standard. You should require NSF/ ANSI 61 certification on all drinking water system products purchased. Include a copy of the NSF/ ANSI 61 certificate as a requirement on your purchase orders. The distributor or manufacturer can provide you with a list of certified products. You should require NSF/ANSI 61 certification on all drinking water system products used in new construction and inform your architects and revise your building specifications.
6. How many of the following outlets provide water for consumption? Note the locations. • Water Coolers • Bubblers • Ice Makers • Kitchen Taps • Drinking Fountains or Taps	In addition to lead components in the plumbing system, lead solders or lead in the brass fittings and valves used in some taps, bubblers, and refrigerated water coolers may be sources of lead. It is important to identify the locations of all such drinking water outlets. Faucets in restrooms should not be used to obtain water for drinking. Although they may be adequate for washing hands, they may not be appropriate for drinking purposes. You may consider posting “do not drink” signs.

Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
7. Has your school checked the brands and models of water coolers and compared them to the list of recalled water coolers in Appendix H.i Note the locations of any recalled coolers.	Water coolers may be a major source of lead contamination. The Federal Consumer Product Safety Commission negotiated an agreement with Halsey Taylor through a consent order agreement published in June 1990 to provide a replacement or refund program that addresses all the water coolers listed by EPA as having lead-lined tanks. Halsey Taylor was the only company identified by EPA as manufacturing some water coolers with lead-lined tanks. Additionally, some coolers manufactured by EBCO had a bubbler valve and one soldered joint that contained lead. See Attachment H.i of this document for a summary of EPA's list of water coolers found to contain lead. Use the list to help prioritize your sampling. If your water cooler is listed as having a lead-lined tank, you should not use the water for drinking, and you should remove the cooler immediately as these coolers pose the highest risk of contamination.
8. Are there any signs of corrosion, such as frequent leaks, rust-colored water, or stained dishes or laundry? Note the locations.	Frequent leaks, rust-colored water, and stains on fixtures, dishes, and laundry are signs of corrosive water. Blue-green deposits on pipes and sinks indicate copper corrosion; brown stains result from the corrosion of iron. Where such signs occur, high levels of lead, copper, and iron may be present in the water. Lead can accumulate with iron, which can form sediments that are hard to remove.
9. Are there any outlets that are not operational and therefore out of service? Permanently? Temporarily?	Permanently out of service water outlets are outlets that are no longer being used and the facility plans to decommission in the future. Temporarily out of service water outlets are outlets that require repair or replacement and will be put back in service once they are operational.

Attachment C – Drinking Water Outlet Inventory

Name of School: __Administration Building____________________ Address: 1776 Raritan Road, Scotch Plains, NJ____

Grade Levels: _9-12 Year School Constructed: _____ Renovated/Additions: __________________________________

Individual school project officer Name/Signature: _____________________________ Date Completed: _____________

#[1]	Type	Location	Code	Operational[2] (Y/N)	Signs of Corrosion [3] (Y/N)	Filter[4] (Y/N)	Brass Fittings, Faucets or valves? (Y/N)	Aerator/ Screen (Y/N)	Motion Activated (Y/N)	Chiller (Y/N)	Water Cooler		Comments
											Make	Model	
1	POE			Y	N	N	N	N	N				
2	WF	Kitchen		Y	N	N	N	N	N				
3	S	Kitchen		Y	N	N	N	N	N				

[1] Number outlets starting at the closest outlet to the Point of Entry (POE).
[2] Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.
[3] Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.
[4] Document on Attachment D- Filter Inventory.

Attachment C – Drinking Water Outlet Inventory

Name of School: __Academy for Performing Arts Hall________________ Address: 1776 Raritan Road, Scotch Plains, NJ

Grade Levels: _9-12_ Year School Constructed: ______ Renovated/Additions: ___________________

Individual school project officer Name/Signature: ______________________________ Date Completed: _______________

#[1]	Type	Location	Code	Operational[2] (Y/N)	Signs of Corrosion[3] (Y/N)	Filter[4] (Y/N)	Brass Fittings, Faucets or valves? (Y/N)	Aerator/ Screen (Y/N)	Motion Activated (Y/N)	Chiller (Y/N)	Water Cooler		Comments
											Make	Model	
1	POE		009	Y	N	N	N	N	N				
2	WF	Outside Bathroom	011	Y	N	N	N	N	N				
3	WF	Outside 208	013	Y	N	N	N	N	N				
4	S	Rm 208	015	Y	N	N	N	N	N				

[1] Number outlets starting at the closest outlet to the Point of Entry (POE).
[2] Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.
[3] Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.
[4] Document on Attachment D- Filter Inventory.

Attachment C – Drinking Water Outlet Inventory

Name of School: __Baxel Hall____________________ Address: __1776 Raritan Road, Scotch Plains, NJ__________

Grade Levels: _9-12____ Year School Constructed: ______ Renovated/Additions: ______________________________

Individual school project officer Name/Signature: _______________________________ Date Completed: ______________

#[1]	Type	Location	Code	Operational[2] (Y/N)	Signs of Corrosion[3] (Y/N)	Filter[4] (Y/N)	Brass Fittings, Faucets or valves? (Y/N)	Aerator/ Screen (Y/N)	Motion Activated (Y/N)	Chiller (Y/N)	Water Cooler		Comments
											Make	Model	
1	POE		115	Y	N	N	N	N	N				
2	S	Faculty Lounge	117	Y	N	N	N	N	N				
3	WF	Outside 121	119	Y	N	N	N	N	N				
4	WF	Outside 121	121	Y	N	N	N	N	N				
5	WF	Across Office	123	Y	N	N	N	N	N				
6	WF	Across Office	125	Y	N	N	N	N	N				
7	WF	Outside 219	127	Y	N	N	N	N	N				
8	WF	Outside 219	129	Y	N	N	N	N	N				

[1] Number outlets starting at the closest outlet to the Point of Entry (POE).
[2] Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.
[3] Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.
[4] Document on Attachment D- Filter Inventory.

Attachment C – Drinking Water Outlet Inventory

Name of School: __Bistocci Hall______________________ Address: __1776 Raritan Road, Scotch Plains, NJ__________

Grade Levels: _9-12___ Year School Constructed: ______ Renovated/Additions: ____________________________

Individual school project officer Name/Signature: _______________________________ Date Completed: _______________

#[1]	Type	Location	Code	Operational[2] (Y/N)	Signs of Corrosion[3] (Y/N)	Filter[4] (Y/N)	Brass Fittings, Faucets or valves? (Y/N)	Aerator/ Screen (Y/N)	Motion Activated (Y/N)	Chiller (Y/N)	Water Cooler		Comments
											Make	Model	
1	POE		157	Y	N	N	N						
2	WF	Outside Student BR(Fl 1)	161	Y	N	N	N						
3	WF	Outside Student BR	163	Y	N	N	N						
4	S	Rm 501D	159	Y	N	N	N						
5	S	Rm 511	167	Y	N	N	N						
6	S	Rm 503D	165	Y	N	N	N						
7	WF	Outside Student BR(Fl 2)	169	Y	N	N	N						

[1] Number outlets starting at the closest outlet to the Point of Entry (POE).
[2] Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.
[3] Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.
[4] Document on Attachment D- Filter Inventory.

8	S	Rm 619	173	Y	N	N	N						
9	WF	Outside Rm 400 Gym	175	Y	N	N	N						
10	WF	Outside Rm 400 Gym	177	Y	N	N	N						
11	WF	Rm 401	183	Y	N	N	N						
12	WF	Rm 401	183	Y	N	N	N						
13	WF	Rm 402	179	Y	N	N	N						
14	WF	Rm 402	181	Y	N	N	N						

Attachment C – Drinking Water Outlet Inventory

Name of School: __Mancusco Hall______________________ Address: __1776 Raritan Road, Scotch Plains, NJ________

Grade Levels: _9-12____ Year School Constructed: ______ Renovated/Additions: _________________________

Individual school project officer Name/Signature: ______________________________ Date Completed: ______________

#[1]	Type	Location	Code	Operational[2] (Y/N)	Signs of Corrosion[3] (Y/N)	Filter[4] (Y/N)	Brass Fittings, Faucets or valves? (Y/N)	Aerator/ Screen (Y/N)	Motion Activated (Y/N)	Chiller (Y/N)	Water Cooler		Comments
											Make	Model	
1	POE		131	Y	N	N	N	N	N				
2	WF	Rm 131	143	Y	N	N	N	N	N				
3	WF	Rm 131	145	Y	N	N	N	N	N				
4	WF	Outside Rm 112	133	Y	N	N	N	N	N				
5	WF	Outside Rm 112	135	Y	N	N	N	N	N				
6	WF	Outside Rm 128	137	Y	N	N	N	N	N				
7	WF	Outside Rm 128	139	Y	N	N	N	N	N				
8	S	Rm 127	141	Y	N	N	N	N	N				

[1] Number outlets starting at the closest outlet to the Point of Entry (POE).
[2] Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.
[3] Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.
[4] Document on Attachment D- Filter Inventory.

9	S	Rm 223	151	Y	N	N	N	N	N				
10	WF	Outside Rm 208A	153	Y	N	N	N	N	N				
11	WF	Outside Rm 208A	155	Y	N	N	N	N	N				
12	WF	Outside Rm 219	147	Y	N	N	N	N	N				
13	WF	Outside Rm 219	149	Y	N	N	N	N	N				

Attachment C – Drinking Water Outlet Inventory

Name of School: __West Hall____________________ Address: __1776 Raritan Road, Scotch Plains, NJ________

Grade Levels: _9-12____ Year School Constructed: ______ Renovated/Additions: ___________________________

Individual school project officer Name/Signature: ______________________________ Date Completed: ______________

#[1]	Type	Location	Code	Operational[2] (Y/N)	Signs of Corrosion[3] (Y/N)	Filter[4] (Y/N)	Brass Fittings, Faucets or valves? (Y/N)	Aerator/ Screen (Y/N)	Motion Activated (Y/N)	Chiller (Y/N)	Water Cooler		Comments
											Make	Model	
1	POE (1981 Main)	Boiler Rm Bathroom	017	Y	N	N	N	N	N				
2	POE (1964 Main)	Sink in Boiler Room Office	019	Y	N	N	N	N	N				
3	S	Room 004	103	Y	N	N	N	N	N				
4	S	Room 004	105	Y	N	N	N	N	N				
5	S	Room 006	107	Y	N	N	N	N	N				
6	S	Room 006	109	Y	N	N	N	N	N				
7	WF	Outside 002	111	Y	N	N	N	N	N				

[1] Number outlets starting at the closest outlet to the Point of Entry (POE).
[2] Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.
[3] Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.
[4] Document on Attachment D- Filter Inventory.

8	S	Outside 002	113	Y	N	N	N	N	N				
9	WF	Outside 307	025	Y	N	N	N	N	N				
10	WF	Outside 307	027	Y	N	N	N	N	N				
11	WF	Rm 308A	021	Y	N	Y	N	N	N				
12	WF	Outside 308A	023	Y	N	N	N	N	N				
13	WF	Rm 311	Removed										
15	WF	Rm 312	031	Y	N	N	N	N	N				
16	WF	Rm 313	033		N	N	N	N	N				
17	WF	Rm 317	035	Y	N	N	N	N	N				
18	WF	Outside Rm 318	039	Y	N	N	N	N	N				
19	WF	Outside Rm 318	041	Y	N	N	N	N	N				
20	WF	Rm 319	037	Y	N	N	N	N	N				
21	WF	Rm 325	Removed										
22	WF	Outside 325	043	Y	N	N	N	N	N				
23	WF	Outside 325	045	Y	N	N	N	N	N				
24	WF	Rm 326	Removed										
25	S	Rm 330	057	Y	N	N	N	N	N				Back
26	S	Rm 330	059	Y	N	N	N	N	N				
27	S	Rm 330	061	Y	N	N	N	N	N				
28	S	Rm 330	063	Y	N	N	N	N	N				Front
29	S	Rm 331	047	Y	N	N	N	N	N				Back
30	S	Rm 331	049	Y	N	N	N	N	N				
31	S	Rm 331	051	Y	N	N	N	N	N				
32	S	Rm 331	053	Y	N	N	N	N	N				
33	S	Rm 331	055	Y	N	N	N	N	N				Front

34	WF	Outside 341	083	Y	N	N	N	N	N					
35	WF	Outside 341	085	Y	N	N	N	N	N					
36	WF	Rm 335	Removed											Y
37	WF	Rm 334	Removed											Y
38	WF	Rm 338	Out of Service											Y
39	WF	Rm 342	081	Y	N	N	N	N	N					
40	S	Rm 343	087	Y	N	N	N	N	N					
41	WF	Rm 344	089	Y	N	Y	N	N	N					
42	WF	Rm 345	095	Y										
43	WF	Rm 365	Removed											Y
44	WF	Rm 366	097	Y	N	N	N	N	N					
45	WF	Outside 363	099	Y	N	N	N	N	N					
46	WF	Outside 363	101	Y	N	N	N	N	N					
47	WF	Outside 346	091	Y	N	N	N	N	N					
48	WF	Outside 346	093	Y	N	N	N	N	N					
49	WF	Outside 314	029	Y	N	N	N	N	N					
50	WF	Across Cafeteria	065	Y	N	N	N	N	N					
51	WF	Across Cafeteria	067	Y	N	N	N	N	N					
52	S	Cafeteria Prep	069	Y	N	N	N	N	N					
53	S	Cafeteria Prep	071	Y	N	N	N	N	N					
54	S	Cafeteria Prep	073	Y	N	N	N	N	N					
55	S	Cafeteria Server	075	Y	N	N	N	N	N					

Attachment D - Filter Inventory

(Complete for each school)

Name of School: _Administration Building________________ Grade Levels: _NA____

Address: _____1776 Raritan Road, Scotch Plains, NJ_________________________

Individual School Project Officer Signature: ___________________Date: ___________

Sample Location / Code	Brand	Type (Make & Model)	Date Installed or Replaced	Replacement Frequency	NSF Certified for Lead Reduction Y/N

Not Applicable

Attachment D - Filter Inventory

(Complete for each school)

Name of School: _APA________________ Grade Levels: _NA____

Address: _____1776 Raritan Road, Scotch Plains, NJ_________________________

Individual School Project Officer Signature: ___________________Date: ___________

Sample Location / Code	Brand	Type (Make & Model)	Date Installed or Replaced	Replacement Frequency	NSF Certified for Lead Reduction Y/N

Not Applicable

Attachment D - Filter Inventory

(Complete for each school)

Name of School: _Baxel Hall________________ Grade Levels: _NA____

Address: _____1776 Raritan Road, Scotch Plains, NJ_________________________

Individual School Project Officer Signature: ___________________Date: ___________

Sample Location / Code	Brand	Type (Make & Model)	Date Installed or Replaced	Replacement Frequency	NSF Certified for Lead Reduction Y/N

Not Applicable

Attachment D - Filter Inventory

(Complete for each school)

Name of School: _Mancuso Hall________________ Grade Levels: _9-12____

Address: _____1776 Raritan Road, Scotch Plains, NJ_________________________

Individual School Project Officer Signature: ___________________Date: ___________

Sample Location / Code	Brand	Type (Make & Model)	Date Installed or Replaced	Replacement Frequency	NSF Certified for Lead Reduction Y/N

Not Applicable

Attachment D - Filter Inventory

(Complete for each school)

Name of School: _West Hall________________ Grade Levels: _9-12____

Address: _____1776 Raritan Road, Scotch Plains, NJ_________________________

Individual School Project Officer Signature: ___________________Date: ___________

Sample Location / Code	Brand	Type (Make & Model)	Date Installed or Replaced	Replacement Frequency	NSF Certified for Lead Reduction Y/N
Room 308A/ 021	Everpure	440	Unknown	As Needed	N
Room 344/ 089	Brita	Bottle Filling Station	Unknown	As Needed	unknown

Attachment E – Flushing Log

(Complete for each school as applicable)

Name of School: ____

Address: ____

Grade Levels: ____

Individual School Project Officer Signature: ____________________ Date: _________

Sample Location Description	Sample Location Code	Date	Time	Duration of Flushing	Reason for Flushing

Not Applicable

Attachment F - Pre – Sampling Water Use Certification

(Complete for each school)

TO BE COMPLETED BY THE PVRHS DISTRICT REPRESENTATIVE:		
School Name: Union County Vocational Technical Schools		
Sample collection address:		
Water was last used:	Time:	Date:
Sample commencement:	Time:	Date:
I have read the Union County Vocational Technical Schools Lead Drinking Water Testing Sampling Plan and Quality Assurance Project Plan and I am certifying that samples were collected in accordance with these plans.		
Signature		Date

Attachment G - Example of a Sample Flush Tag

FLUSH TAG

Water outlet sampling in progress. Please do not use water

School District Name: **Union County Vocational Technical Schools** Date Flushed:

School Name: Flushing Process
School Address: Start Time:
Location of flushed outlet: End Time:

Is the fountain front cover removed for the sampler to determine the reservoir type (circle one):
YES / NO

Person responsible for the flushing process (print name): ________________________

Signature: ____

* Water within the school distribution system should sit in the pipes unused for at least eight (8) hours after flushing but not more than 48 hours before a sample is taken.*

Note to the person responsible for the flushing process:

A. Turn-off lawn sprinkler outlet(s) until water sampling is complete.
B. Make sure sampling outlets are accessible.

Attachment H – Sampling Toolkit

H.i: Recalled Water Cooler List

USEPA's Water Cooler Recall List

Tables from EPA's 3Ts for Reducing Lead in Drinking Water in Schools Revised Technical Guidance

Table E-1
Halsey Taylor Water Coolers With Lead-Lined Tanks[2]

The following six model numbers have one or more units in the model series with lead-lined tanks:

WM8A	WT8A	GC10ACR	GC10A	GC5A	RWM13A

The following models and serial numbers contain lead-lined tanks:

WM14A Serial No. 843034	WM14A Serial No. 843006	WT11A Serial No. 222650
WT21A Serial No. 64309550	WT21A Serial No. 64309542	LL14A Serial No. 64346908

[2] Based upon an analysis of 22 water coolers at a US Navy facility and subsequent data obtained by EPA, EPA believes the most serious cooler contamination problems are associated with water coolers that have lead-lined tanks.

Table E-2
Water Coolers With Other Lead Components

EBCO Manufacturing

All pressure bubbler water coolers with shipping dates from 1962 through 1977 have a bubbler valve containing lead. The units contain a single, 50-50 tin-lead solder joint on the bubbler valve. Model numbers for coolers in this category are not available.

The following models of pressure bubbler coolers produced from 1978 through 1981 contain one 50-50 tin-lead solder joint each.

CP3	DP15W	DPM8	7P	13P	DPM8H	DP15M	DP3R	DP8A
DP16M	DP5S	C10E	PX-10	DP7S	DP13SM	DP7M	DP7MH	DP7WMD
WTC10	DP13M-60	DP14M	CP10-50	CP5	CP5M	DP15MW	DP3R	DP14S
DP20-50	DP7SM	DP10X	DP13A	DP13A-50	EP10F	DP5M	DP10F	CP3H
CP3-50	DP13M	DP3RH	DP5F	CP3M	EP5F	13PL	DP8AH	DP13S
CP10	DP20	DP12N	DP7WM	DP14A-50/60				

Halsey Taylor

1. Lead solder was used in these models of water coolers manufactured between 1978 and the last week of 1987:

WMA-1	SCWT/SCWT-A	SWA-1	DC/DHC-1
S3/5/10D	BFC-4F/7F/4FS/7FS	S300/500/100D	

2. The following coolers manufactured for Haws Drinking Faucet Company (Haws) by Halsey Taylor from November 1984 through December 18, 1987, are not lead-free because they contain 2 tin-lead solder joints. The model designations for these units are as follows:

HC8WT	HC14F	HC6W	HWC7D	HC8WTH	HC14FH	HC8W	HC2F	HC14WT
HC14FL	HC14W	HC2FH	HC14WTH	HC8FL	HC4F	HC5F	HC14WL	HCBF7D
HC4FH	HC10F	HC16WT	HCBF7HO	HC8F	HC8FH	HC4W	HWC7	

.

APPENDIX C: CERTIFICATIONS

PARTNER
Engineering and Science, Inc.

QUALITY ASSURANCE PROJECT PLAN (QAPP)

FOR DRINKING WATER SAMPLING OF LEAD CONCENTRATIONS IN SCHOOL DRINKING WATER OUTLETS

Union County Vocational Technical Schools

1776 Raritan Road
Scotch Plains, NJ 07076

August 4, 2016

PARTNER Project No. 61138115000

Prepared for:

Union County Vocational Technical Schools

Approvals

Union County Vocational Technical Schools Representatives:

Program Manager: ____________________ ____________________ ____________
Print Name | Signature | Date

Project Manager(s): ____________________ ____________________ ____________
Print Name | Signature | Date

Individual School Project Officer(s) (See page iii)

Third Party Sampling Firm: Partner Engineering & Science
Name of Firm

Matt Gemma ____________________ 8/12/16
Print Name | Signature | Date

Michelle Gomez ____________________ 8/12/16
Print Name | Signature | Date

Laboratory: ESC Labs
Name of Laboratory

Laboratory Manager: Johnny Mitchell ____________________ 8/16/16
Print Name | Signature | Date

Laboratory QA Officer: STEVE MILLER ____________________ 8/16/16
Print Name | Signature | Date

For additional laboratories conducting sampling and or analysis use additional sheet for sign-off.

Individual School Project Officers (ISPO)

School	Name	Title	Signature	Date
Administration Building	Mark Leary Phone: (908) 889-8288 x353	Maintenance Engineer	Mark S Leary	8/12/16
APA Hall	Mark Leary Phone: (908) 889-8288 x353	Maintenance Engineer	Mark S Leary	8/12/16
Baxel Hall	Mark Leary Phone: (908) 889-8288 x353	Maintenance Engineer	Mark S Leary	8/12/16
Bistocci Hall	Mark Leary Phone: (908) 889-8288 x353	Maintenance Engineer	Mark S Leary	8/12/16
Mancuso Hall	Mark Leary Phone: (908) 889-8288 x353	Maintenance Engineer	Mark S Leary	8/12/16
West Hall	Mark Leary Phone: (908) 889-8288 x353	Maintenance Engineer	Mark S Leary	8/12/16
	Phone:			
	Phone:			
	Phone:			
	Phone:			
	Phone:			
	Phone:			
	Phone:			
	Phone:			
	Phone:			
	Phone:			
	Phone:			

Table of Contents

1. Objective & Goals/Background

1.1 Objective and Goals

A Quality Assurance Project Plan is a document that describes the planning, implementation and evaluation steps involved in the acquisition of data that will be used to arrive at a specific goal. The overall objective for this QAPP is to determine the lead concentration at drinking water outlets within the District's schools so that corrective action(s) may be implemented at any drinking water outlets sampled found to exceed the US Environmental Protection Agency (USEPA) drinking water lead action level of 15 micrograms per liter (µg/L). For the purposes of compliance, any concentration greater than 15 µg/L (as defined as greater than or equal to 15.5 µg/L) is considered to exceed the lead action level.

The lead sampling will consist of the collection of a first draw (initial) sample according to this QAPP and the *Union County Vocational Technical Schools Lead Water Testing Sampling Plan* (Sampling Plan). The drinking water outlets can be faucets, drinking water fountains (or bubblers) and water coolers (see Sampling Plan for details).

Follow-up sampling will also be covered by this QAPP and the Sampling Plan. An optional follow-up flushed sample may be analyzed at selected drinking water outlets after flushing for 30 seconds. (An exception to the 30 second follow-up flushed sample is for a water cooler which requires a different follow-up sampling timeframe).

The analytical results and field data will be used by the Project Manager and the District (See Section 2.2) to determine whether drinking water distributed from drinking water outlets such as water fountains (bubblers), faucets, food preparation areas and water coolers have concentrations of lead that exceed 15 µg/L. If a first draw (initial) or follow-up flushed cold water sample is found to contain lead at a concentration greater than 15 µg/L, the Project Manager will instruct the Individual School Project Officer (Project Officer) (See Section 2.3) to isolate the source of drinking water by turning off the device or providing a barrier to the consumption of the water (tape and bag) until appropriate remediation is determined.

1.2 Background

Lead is a toxic metal that can be harmful to human health when ingested. Young children are particularly sensitive to the effects of lead because their bodies are still undergoing development. Lead can get into drinking water by being present in the source water or by interaction of the water with plumbing materials containing lead (through corrosion). Common sources of lead in drinking water include: solder, fluxes, pipes and pipe fittings, fixtures, and sediments. It is possible that different drinking water outlets in a given building could have dissimilar concentrations of lead.

In April 1994, USEPA prepared two guidance documents to assist municipalities in meeting the requirements of the Lead Contamination and Control Act (LCCA): *Lead in Drinking Water in Schools and Non-Residential Buildings (*EPA 812-B-94-002) and *Sampling for Lead in Drinking Water in Nursery Schools and Day Care Facilities* (EPA 812-B-94-003). In December 2005, amended October 2006, EPA issued the revised technical guidance document *3Ts for Reducing Lead in Drinking Water in Schools (EPA 816-B-05-008)* which replaced the *Lead in Drinking Water in Schools and Non-Residential Buildings* (EPA 812-B-94-002). The 3Ts Revised Technical Guidance document is meant to assist school officials in implementing programs and policies to reduce children's exposure to lead in drinking water in schools.

2. Project/Task Organization

2.1 Union County Vocational Technical Schools Program Manager (Program Manager)

The Union County Vocational Technical Schools Program Manager is the overall authority in the execution of the District's lead sampling project. He/she is responsible for the initial notification to the District of the testing program, obtaining funds for testing, assigning the Project Manager, requesting/enlisting the assistance from other District departments if needed, approving the District's QAPP(s), approving the Final Report for each school and coordinating with other District officials to make the results of the testing available to the public. The Project Manager reports to the Program Manager.

2.2 Union County Vocational Technical Schools Project Manager (Project Manager)

The Project Manager is responsible for overseeing the execution of lead sampling at each of the district's schools. This involves the prioritization of schools to be sampled, and adherence with the District's Sampling Plan and QAPP. He/she serves as the liaison between the School District, State agencies, local Health Departments, laboratories and public water systems (if applicable). He/she reports to the Program Manager.

The Project Manager's responsibilities include:

- Preparing the District's Specific QAPP
- Managing the Sampling Plan and QAPP.
- Oversight of Individual School Project Officers (Project Officers) to ensure that they adhere to the Sampling Plan procedures and the QAPP.
- Purchasing of equipment needed for district lead sampling
- Coordination with New Jersey laboratories certified for lead in drinking water
- Coordination with Project Officers to establish sampling schedules
- Ensuring properly signed QAPPs are in place prior to initiation of sampling
- Verify that officials from each school are aware when sampling is scheduled and the expected duration
- Review of the School Field Sampling Summary Reports prepared by Project Officers
- Review of Laboratory Data Reports (LDR) from Laboratory Managers

- Review of Final Project Reports prepared by Project Officers. Identify limitations in the use of any laboratory data due to information provided in the accompanying School Field Sampling Summary Report.
- Maintain the original signed QAPP(s)
- Maintain documents, reports and records listed in Section 14 of the QAPP
  - Laboratory Data Reports (LDR)
  - Copy of Field Sampling Summary Report with copies of field logbooks, field Walk-Through reports including Attachments B, C, D, E, and F of the Lead Sampling Plan, chains of custody and flush tags.
  - Copy of Final Project Report
- Maintenance of other relevant records such as:
  - Purchase orders for analytical costs (copy).
  - Agreement with laboratory to sample/analyze/report with details for payment
  - Receipts (originals or copies)

2.3 Individual School Project Officer(s)

The Individual School Project Officer's responsibilities include:

- General project oversight for assigned school(s).
- Generate field log book for each assigned school. Document field activities including any changes to procedures outlined in the Sampling Plan or QAPP.
- Ensure proper completion of the Plumbing Profile for assigned school(s) - See Attachment B of the Sampling Plan.
- Oversight of completion of the following reports found in the Sampling Plan which require sign–off by Project Officer:
  - Drinking Water Outlet Inventory (Sampling Plan Attachment C)
  - Filter Inventory Report (Sampling Plan Attachment D)
  - Flushing Log (Sampling Plan Attachment E)
  - Pre Sampling Water Use Certification (Sampling Plan Attachment F).
- Prepare labels for drinking water outlets to be sampled.
- Prepare for Walk-Thru including acquisition of School Floor Plan.
- Attend school Walk-Thru.
- Ensure proper completion of Walk-Thru documentation including identification of drinking water outlets on Floor Plan, and Sampling Location Inventory with coding according to the Sampling Plan (Attachment C of Sampling Plan).
- Supervision of field activities such as Walk- Thru, flushing (if required), locking school prior to sampling, and sample collection.
- Identify drinking water outlets to be flushed and attach flush tag.
- Ensure that Field Sampling Team has all relevant sampling supplies including sampling bottles, labels, proper reagent water and chains of custody prior to collection of samples.
- Ensure that all drinking water outlets to be sampled prior to sampling event are labeled.
- Ensure that any low-use drinking water outlets identified for sampling had been flushed.
- Remove flush tags from drinking water outlet once sampling is completed.

- Responsible for ensuring water remains motionless for a minimum of eight hours (last to leave the school) prior to sampling event by following procedures in Section 8 of Sampling Plan.
- Verify that the Sampling Plan was followed prior to initiating sampling by completing the Pre-Sampling Water Use Certification (Attachment F in Sampling Plan).
- Supervision of sampling event.
- Documentation of issues during sampling event in field log book.
- Preparation of Field Walk-Thru Report, School Field Sampling Summary Report and Final Project Report for assigned school(s).
- Maintenance of field log books for each school.
- Prepare samples for shipment and delivery to laboratory per certified laboratory instructions.
- Ensure that samples are delivered to laboratory within the time period specified by the certified laboratory

2.4 Laboratory Manager

The Laboratory Manager is responsible for:

- Supervising laboratory analyses to be performed in the Laboratory. This includes oversight of all QA requirements in the laboratory, data review, and qualification of the data.
- Providing the Laboratory Data Report Package to the Project Manager and Project Officer.

2.5 Laboratory's Quality Assurance Officer (LQAO)

The Laboratory's Quality Assurance Officer (LQAO) is responsible for reviewing the QAPP and resolving any QA issues that may arise during the project.

2.6 Field Sampler or Field Sampling Team

The Field Sampler or Field Sampling Team, whether affiliated with the Passaic Valley Regional High School, ESC Labs, and/or Partner Engineering and Science, is responsible for ensuring that field activities are conducted in accordance with this QAPP and the Sampling Plan.

3. Special Training Needs/Certification

Sampling will be performed by Partner Engineering and Science.

Laboratory personnel designated to analyze the samples will have successfully completed required demonstrations of capability for the methods used. The Laboratory must be a drinking water laboratory certified by New Jersey for the analysis and reporting of lead using USEPA drinking water methods which are listed in Section 8.

Assessments of the Laboratory capability are conducted on a bi-annual basis by the NJDEP Office of

Quality Assurance. The Laboratory Manager has responsibility for correction of all deficiencies in their laboratory program.

4. Project/Task Description

Drinking water samples will be collected from drinking water outlets including water fountains (bubblers), food preparation outlets (located in the cafeteria, kitchen, and home economics classrooms) and other outlets where there is the possibility of drinking the water such as in the special education classrooms, the medical office, the teachers' lounge, and ice machines. Concession stands and outside water fountains (such as in playgrounds and athletic fields) may also be considered for sampling. The custodian sink faucet may also be considered for sampling if it is used for filling large water coolers to provide water at school events. Outside hose spigots are not appropriate sampling locations for the purpose of this QAPP. The Sampling Plan provides more detail on appropriate sampling locations.

The Field Sampler or Team will conduct first draw (initial) sample collection and, as appropriate, follow-up flushed sample collection at the drinking water outlets specified in the Sampling Plan. The Sampling Team will consist of the Project Officer and the Sampler from Partner Engineering and Science. The NJ Certified Laboratory specified in the QAPP will perform the analysis for lead.

5. Lead Data Quality Objectives and Criteria for Measurement

5.1 Precision

The NJ Certified Laboratory will perform replicate analysis of the Laboratory Control Standard (LCS) for every set of individual school samples to assess method precision. This is not a requirement of any of the USEPA approved methods for lead analysis. The acceptance criterion for replicate analysis is a maximum of 20 percent (%) Relative Percent Difference (RPD). In addition to the LCS data, a duplicate laboratory fortified blank (LFB) or a matrix spike and a matrix spike duplicate (MS/MSD) will also provide precision information.

5.2 Bias

As part of the analytical methodology, the NJ Certified Laboratory will perform analysis of laboratory fortified blanks (LFB) to assess accuracy/bias. The acceptance criterion for accuracy is for the results to be within plus or minus 15% recovery of the known value.

A field reagent blank (FRB) must be collected for each school. The FRB is normally only a requirement for USEPA Method 200.8, however the collection of a FRB is required with any of the other approved lead methods for this sampling event. The information provided by the results is used to determine whether the field or sample transporting procedures and environmental effects have contributed to contamination of the sample.

If any sample result(s) are qualified, this must be clearly indicated on the report and all final reports such as the field summary report. The Project Manager must be consulted to determine how to deal with the qualified results.

5.3 Representativeness

The sampling effort is designed to identify all drinking water outlets, within a school, where there is a potential for water consumption such as at water fountains (bubblers) that may require corrective action due to first draw and/or follow-up flushed sample results that exceed 15 µg/L of lead (as defined as greater than or equal to 15.5 µg/L or greater). Food preparation outlets and other potential ingestion outlets such as special education classrooms, the medical office and bathroom sinks are to be considered for sampling.

5.4 Comparability

The analytical methods for lead analysis in drinking water are found in the federal Safe Drinking Water Regulations at 40 CFR141.86 and 40 CFR 141 Appendix A to Subpart C. Use of these methods allows for the comparison of data to USEPA's drinking water action level for lead of greater than 15 µg/L.

Analytical results from the first draw (initial) and the follow-up flushed samples will be compared to assist in determining the source of lead contamination. Appropriate corrective measures must then be taken by the Passaic Valley Regional High School.

5.5 Completeness

In order to satisfy the objective of the project, samples will be collected from drinking water outlets according to the sampling plan established in this QAPP.

One hundred percent (100%) of collected and verified initial draw samples will be analyzed and reported. In the event that an initial draw sample is determined to have a lead content above 15 µg/L, the flush sample for that water outlet will be analyzed and reported.

5.6 Sensitivity

The Laboratory's Reporting Limit (RL) for the determination of lead in drinking water samples must be no higher than 2 µg/L which is lower than the regulatory Practical Quantitation Level for lead of 5 µg/L. The Practical Quantitation Level for Lead is stated in the National Primary Drinking Water Contaminant Regulations 40 CFR141 Subpart I. The required reporting limit of 2 µg/L for this QAPP is achievable with any of the approved USEPA methods listed in 11.1.

6. Secondary Data

Secondary data for the District would be their historical lead data.

7. Field Monitoring Requirements

Sampling may occur in the morning hours before schools are open or on weekdays or weekends when no school activities are expected. This will minimize the potential for people in the building to use water during the sampling survey. While sampling is underway it is advisable to prohibit any persons other than the sampling team to enter the building in order to ensure that no toilets or water outlets are being used.

7.1 Monitoring Process Design

The sampling design, described in detail in the Sampling Plan (Appendix B) is based in part upon the 3T's Guidance for Reducing Lead in Drinking Water in Schools:
Revised Technical Guidance, December 2005; Errata to 3Ts, October 2006 (see Appendix A).

7.2 Monitoring Methods

Equipment and supplies that will be needed to perform the sampling survey are ASTM Type I reagent-grade water for the field reagent blank (FRB), latex non-colored gloves, pre-cleaned HDPE wide-mouth 250 mL single use rigid sample containers ("sample container") and chain of custody (COC forms-Appendix C or lab may use their own) and indelible ink/marker.

For sampling events where the Laboratory will collect the samples, the nitric acid can be either added to the collection bottle at the Laboratory and prior to collection or the nitric acid can be added at the school after collection of the sample. If the water samples are not acidified at the time of collection, the Laboratory will preserve all samples with laboratory grade concentrated nitric acid ($HNO3$) to a pH of 2 standard units (SU) or less within 48 hours of sample receipt.

Each school will have a separate sample cooler or box which will contain the field reagent blank (FRB) and the other samples collected. Samples will be transported by Laboratory or Samplers or appropriate representative to the Laboratory.

7.3 Field Quality Control

The analytical results obtained from the FRB will determine whether field or sample transporting procedures is a cause of sample contamination.

Prior to the sampling event, the Sampler will collect a 250 mL ASTM Type I reagent-grade water from the Laboratory which will be used for the FRB. At the school and prior to the first sample collected at a school, the ASTM Type I reagent-grade water will be transferred into a sample container which will be identified as the FRB sample.

The ASTM Type I reagent-grade water will either be supplied by the Laboratory or purchased through a vendor. The 250 mL sample containers are purchased pre-cleaned. Sample containers are not to be reused.

8. Analytical Requirements

8.1 Analytical Methods

The Union County Vocational Technical Schools must use one of the USEPA approved drinking water methods listed in the table below for the analysis of lead. Any of these methods can be used provided that the Laboratory is certified to analyze and report lead by that method and that the Laboratory has a reporting limit no greater than 2 µg/L.

For the purposes of the School District's QAPP, the analytical performance information is as follows:

Analyte	Analytical Method	Sample Matrix	Recommended Guidance Level	Reporting Level
Lead (Pb)	USEPA Method 200.8 USEPA Method 200.9 USEPA Method 200.5 SM 3113B ASTM D3559-D	Drinking Water	Greater than 15 µg/L (15.5 µg/L and above) first draw (initial) sample	2.0 µg/L (ppb)

The pH of all samples must be checked at the time of receipt at the Laboratory. If the pH is not less than 2, the pH must be adjusted with the addition of nitric acid. Samples that require the addition of nitric acid must sit for 16 hours prior to digestion (if applicable) or analysis. The pH of each sample must be documented.

The turbidity of each sample must also be checked at the time of receipt at the Laboratory. If the turbidity of the sample is greater than 1 NTU, the sample must be digested prior to analysis. The turbidity of each sample must be documented and those samples digested must be recorded by the Laboratory.

If a sample result exceeds 90% of the linear dynamic range, the sample must be diluted and re-analyzed. The dilution factor must be included in the Laboratory report for each sample that is diluted.

8.2 Analytical Quality Control

The USEPA has established protocols for the analysis of Quality Control (QC) samples with each analytical batch of samples, generally defined as a maximum of twenty samples. All QC results must be assessed and evaluated on an on-going basis and QC acceptance criteria must be used to determine the validity of the data.

For analytical testing, the laboratory includes positive control samples Laboratory Control Sample (LCS) or

Analytical Quality Control (AQC)] to evaluate the total analytical system. Negative control samples (Method Blanks) are used to assess the preparation batch for possible contamination during the preparation and processing steps. A blank is considered contaminated with any result at or above the analyte reporting limit. Specific control samples (Matrix Spikes) are used to indicate the effect of the sample matrix and replicates (matrix spike, LCS replicate) are performed to assess the precision of the results generated.

Specific information regarding acceptance criteria and corrective actions is documented in the Laboratory's SOP for any of the analytical methods listed in the table above.

9. Sample Handling and Custody Requirements

All samples are aqueous and will be collected and labeled by the laboratory.
Standard USEPA Chain of Custody (COC) procedures will be followed according to the information provided in the District's Sampling Plan (Appendix B). The COC form found in Appendix C or equivalent is to be used for this project.

Samples will be transported by Laboratory or Samplers or appropriate representative to the Laboratory.

Analyte	Sample Volume	Container	Preservation (Note1)	Holding Time
Lead (Pb)	250 mL	unused 250 mL rigid plastic wide-mouth – clean	Reagent Grade Nitric Acid (HNO_3) pH < 2	6 months

Note 1. Sample preservation will be conducted either in the field or by the Laboratory upon receipt.

9.1 Sample Archive/Disposal

The samples received by the Laboratory for each school, including any digestates, will be eligible for disposal at a minimum 30 days unless otherwise directed by the District after the final report has been distributed. Samples including any digestates will not be archived unless a written request is provided to the Laboratory.

10. Instrument/Equipment Testing, Inspection, Maintenance & Calibration Requirements

10.1 Instrument/Equipment Testing, Inspection and Maintenance

All laboratory equipment will be tested, calibrated, and maintained in accordance with existing SOPs approved by the laboratory.

There are no field instruments anticipated for this project.

10.2 Instrument/Equipment Calibration and Frequency

The USEPA approved analytical methods for lead listed in the National Primary Drinking Water Contaminant Regulations at 40 CFR 141.23 and Appendix A to Subpart C require that the instrument calibration be performed on a daily basis.

10.3 Inspection/Acceptance of Supplies and Consumables

250 mL sample containers are purchased pre-cleaned. Sample containers are not to be reused. Sample gloves are to be disposable, non-colored and not reused.

11. Data Management

The Laboratory will immediately notify the Project Manager and Project Officer of the affected school(s) upon receipt of any validated laboratory results that exceed the action level for lead in drinking water that is greater than 15 µg/L (as defined as greater than or equal to 15.5 µg/L). For all results, the Laboratory will provide the result in micrograms per liter (µg/L) and to at least three (3) significant figures (i.e.19.6 µg/L or 20.4 µg/L).

The Laboratory will provide a final electronic copy of the Lead Data Report Package (LDR) for each school that will consist of: 1) PDF cover sheet that identifies the school name and all qualifiers with a description for that qualifier used by the laboratory, 2) laboratory report of the analytical results in PDF format, 3) the chain of custody in PDF format and 4) a spreadsheet of the results. The spreadsheet must include the information outlined in the template provided in Appendix D. Information required to be included in separate columns includes but is not limited to; the field ID (sample location identifier and/or code), the Laboratory sample ID, the Laboratory Name and Laboratory certification number, whether the sample was flushed, the date and time of collection and analysis, the analytical method, the analytical result in µg/L, the reporting limit in µg/L, and whether the sample was diluted or digested and any qualifiers.

The LDR Package will include the analytical results, appropriate qualifiers and reporting limits for analyses of submitted samples as requested by the District. The LDR Package must include explanations of any relevant procedural deviations or anomalies associated with the sample handling and analysis of the project. This report will be completed within the timeframe indicated in the contract. (see Section 5).

12. Assessments/Oversight

Formal field audits by QA personnel may be conducted for this project. However, identification of problems related to technical performance will be the responsibility of the staff working on this project.

The Project Officer(s) will assess any problem that arises in the field. If necessary, modifications to technical procedures may be considered. Any changes in technical procedures will be documented in the field logbook, evaluated to determine if there will be any impact to the data and then highlighted in the Final Project Report.

The Laboratory personnel will perform self-audits and institute corrective actions in accordance with their respective written procedures.

13. Data Review, Verification, Validation, and Usability

13.1 Data Review, Verification and Validation

The Project Manager will evaluate the School Field Sampling Summary Reports against the final analytical results to determine if any field observations may have contributed to lower or higher analytical results.

The Project Manager will review the analytical report and determine any limitations on the use of the data (see Section 5.2 Bias of this QAPP) and include these limitations in the Final Project Report.

Data review of all laboratory generated data is performed by the Laboratory Quality Assurance Officer (LQAO) who is not associated with the actual measurement operations for the given analytical batch but knowledgeable in the analytical processes employed. It is the responsibility of the LQAO to ensure that all data generated are correct and of known and documented quality. Once the review is completed, the LQAO will sign and date the appropriate QA/QC checklist according to the Laboratory's SOP. Any limitations on the use of data (e.g. data qualifiers) will be included in the Final Project Report.

13.2 Reconciliation with User Requirements

As long as the Field Sampling Summary Report, LDR Package and Final Project Report of this QAPP are satisfied, the data will be useable for the purpose intended and no further assessment is required. If any data are determined to be unusable by the Project Manager, re-sampling may be required.

14. Reporting, Documents and Records

Original documents (X) will be stored as follows:

Document:	**Individual School *Project Officer***	**Union County Vocational Technical Schools*Project Manager***	**Union County Vocational Technical Schools*Program Manager***
QAPP	Copy	X	Copy
Field Walk-Thru Report	X	Copy	Copy
Field Logbook	X		
Chains of Custody	X	Copy	Copy
Flushing Notification/ Flushing Log Tags/Procedure	X	Copy	Copy
Field Sampling Summary Report	X	Copy	Copy
• Flush Tags	X	Copy	Copy
• Floor Diagrams	X	Copy	Copy
• Plumbing Profile	X	Copy	Copy
• Filter Inventory	X	Copy	Copy
• Drinking Water Outlet Inventory	X	Copy	Copy
• Pre Sampling Water Use Certification	X	Copy	Copy
Laboratory Data Report	X	Copy	Copy
Final Project Report	Copy	X	Copy

Appendix A
3Ts for Reducing Lead in Drinking Water in Schools:

Revised Technical Guidance, December 2005; Errata to 3Ts, October 2006

Available online at:

https://www.epa.gov/sites/production/files/2015-09/documents/toolkit_leadschools_guide_3ts_leadschools.pdf

http://www.nj.gov/dep/watersupply/dwc-lead-schools.html

Appendix B

School District Lead Water Testing Sampling Plan

8/4/2016

Available under separate cover

POTABLE WATER SAMPLING FOR LEAD CONCENTRATION SAMPLE COLLECTION FORM

CLIENT INFORMATION

Name:
Address:
Client Rep:

LAB INFORMATION

Name:
Address:
Proj.Mgr:

SCHOOL/PROJECT INFORMATION

BLDG ID:				
BLDG No/Name:				
BLDG Address:				
Contact Name & Numbers:				
(0) Yr. Built:	(1) Yr.1st Add.:	(2) Yr. 2nd Add.:	(3) Yr. 1st Mod.:	(4) Yr. 2nd Mod.:

SAMPLING TEAM: **DATE OF SAMPLING:**

SAMPLE DATA

Sample Description ID (ID must match container label)						Drinking Water Outlet Information				
Sample #	Floor	Functional Space Code	IN/BY	Room Number	Sample/Outlet Code	Sampled Outlet Location/Coordinates/number	0 Seconds	30 Seconds	Time of collection (24hr)	

All containers are pre-cleaned/ 250 ml plastic bottles preserved w HNO_3 @ pH<2 by field__ or to be preserved by lab____________

CHAIN OF CUSTODY

Relinquished By:	**Received By:**	**Time:**
I.		
II.		
III.		

Method of shipment/delivery: ___Fed-Ex _ _Hand Delivery __US Mail ____UPS ___Courier ___Other:_____

INSTRUCTIONS TO THE LABORATORY

__ __Analyze both initial and follow up samples ___Other: _Follow QAPP instructions	**Lab:** **Contact:**	**Report Results to:** __Phone __Email: __Fax

PARTNER

Comments: Provide Laboratory Data Report (LDR) Package and Chain of Custody

Appendix D: Excel Template for Lead Results

Field ID	Flushed Y/N	Laboratory sample ID	Laboratory Name	Lab Certification ID	Date Sampled	Time Sampled	Analytical Method	Date of Analysis	Time of Analysis	Concentration in ug/L	Reporting Limit (ug/L)	Dilution Factor	Digested (Y/N)	Qualifier
01 AC-HS-1FL-N-1-OFFICE	N	DWS-1234-01	LAB	01234	3/19/2016	9:15	200.8	3/22/2016	22:44	235	0.2	1	Y	

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Any and all reliance on this report shall expire after the duration of six (6) months immediately following the time of its completion.

No portion of this report is to be relied upon or used in any way by any person, business, or entity that was not a party to the original agreement.

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Company Name: ______________________

Contact Name: ______________________

Telephone Number: ______________________

Email Address: ______________________

Subject Property Address: 1776 Raritan Road

Scotch Plains, New Jersey

2154 Torrance Blvd., Suite 200, Torrance, CA 90501 ◊ Phone 800-419-4923 ◊ Fax 866-928-7418

Partner Project Number:	61138115000