

September 12, 2018

ESC - Decatur Lab

Sample Delivery Group: L1023900

Samples Received: 09/07/2018

Project Number: 1811921

Description:

Report To: ESC Decatur
2220 Beltline Road SW
Decatur, AL 35601

Entire Report Reviewed By:



Kelly Mercer
Project Manager

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 Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
1811921-01 CHILTON VERBENA HIGH - 1 L1023900-01	5
1811921-02 CHILTON VERBENA HIGH - 2 L1023900-02	6
1811921-03 CHILTON VERBENA HIGH - 3 L1023900-03	7
1811921-04 CHILTON VERBENA HIGH - 4 L1023900-04	8
1811921-05 CHILTON VERBENA HIGH - 5 L1023900-05	9
1811921-06 CHILTON VERBENA HIGH - 6 L1023900-06	10
1811921-07 CHILTON VERBENA HIGH - 7 L1023900-07	11
1811921-08 CHILTON VERBENA HIGH - 8 L1023900-08	12
Gl: Glossary of Terms	13
Al: Accreditations & Locations	14
Sc: Sample Chain of Custody	15



SAMPLE SUMMARY



1811921-01 CHILTON VERBENA HIGH - 1 L1023900-01 DW

Collected by: R. McWhorter
 Collected date/time: 09/06/18 05:30
 Received date/time: 09/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG1163193	1	09/10/18 13:26	09/11/18 20:11	LD

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Gl

7
Al

8
Sc

1811921-02 CHILTON VERBENA HIGH - 2 L1023900-02 DW

Collected by: R. McWhorter
 Collected date/time: 09/06/18 05:32
 Received date/time: 09/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG1163193	1	09/10/18 13:26	09/11/18 20:15	LD

1811921-03 CHILTON VERBENA HIGH - 3 L1023900-03 DW

Collected by: R. McWhorter
 Collected date/time: 09/06/18 05:34
 Received date/time: 09/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG1163193	1	09/10/18 13:26	09/11/18 20:20	LD

1811921-04 CHILTON VERBENA HIGH - 4 L1023900-04 DW

Collected by: R. McWhorter
 Collected date/time: 09/06/18 05:36
 Received date/time: 09/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG1163193	1	09/10/18 13:26	09/11/18 20:34	LD

1811921-05 CHILTON VERBENA HIGH - 5 L1023900-05 DW

Collected by: R. McWhorter
 Collected date/time: 09/06/18 05:40
 Received date/time: 09/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG1163193	1	09/10/18 13:26	09/11/18 20:39	LD

1811921-06 CHILTON VERBENA HIGH - 6 L1023900-06 DW

Collected by: R. McWhorter
 Collected date/time: 09/06/18 05:50
 Received date/time: 09/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG1163193	1	09/10/18 13:26	09/11/18 20:43	LD

1811921-07 CHILTON VERBENA HIGH - 7 L1023900-07 DW

Collected by: R. McWhorter
 Collected date/time: 09/06/18 05:54
 Received date/time: 09/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG1163193	1	09/10/18 13:26	09/11/18 20:48	LD

1811921-08 CHILTON VERBENA HIGH - 8 L1023900-08 DW

Collected by: R. McWhorter
 Collected date/time: 09/06/18 06:01
 Received date/time: 09/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 200.8	WG1163193	1	09/10/18 13:26	09/11/18 20:53	LD



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, 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.

Kelly Mercer
Project Manager

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



Collected date/time: 09/06/18 05:30

L1023900

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Lead	ND		0.00100	1	09/11/2018 20:11	WG1163193

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc



Collected date/time: 09/06/18 05:32

L1023900

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Lead	ND		0.00100	1	09/11/2018 20:15	WG1163193

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc



Collected date/time: 09/06/18 05:34

L1023900

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Lead	ND		0.00100	1	09/11/2018 20:20	WG1163193

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc



Collected date/time: 09/06/18 05:36

L1023900

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Lead	0.00196		0.00100	1	09/11/2018 20:34	WG1163193

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc



Collected date/time: 09/06/18 05:40

L1023900

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Lead	ND		0.00100	1	09/11/2018 20:39	WG1163193

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc



Collected date/time: 09/06/18 05:50

L1023900

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Lead	ND		0.00100	1	09/11/2018 20:43	WG1163193

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc



Collected date/time: 09/06/18 05:54

L1023900

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Lead	ND		0.00100	1	09/11/2018 20:48	WG1163193

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc



Collected date/time: 09/06/18 06:01

L1023900

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Lead	ND		0.00100	1	09/11/2018 20:53	WG1163193

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Gl
- 7 A
- 8 Sc

Qualifier Description

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



Pace National 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.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

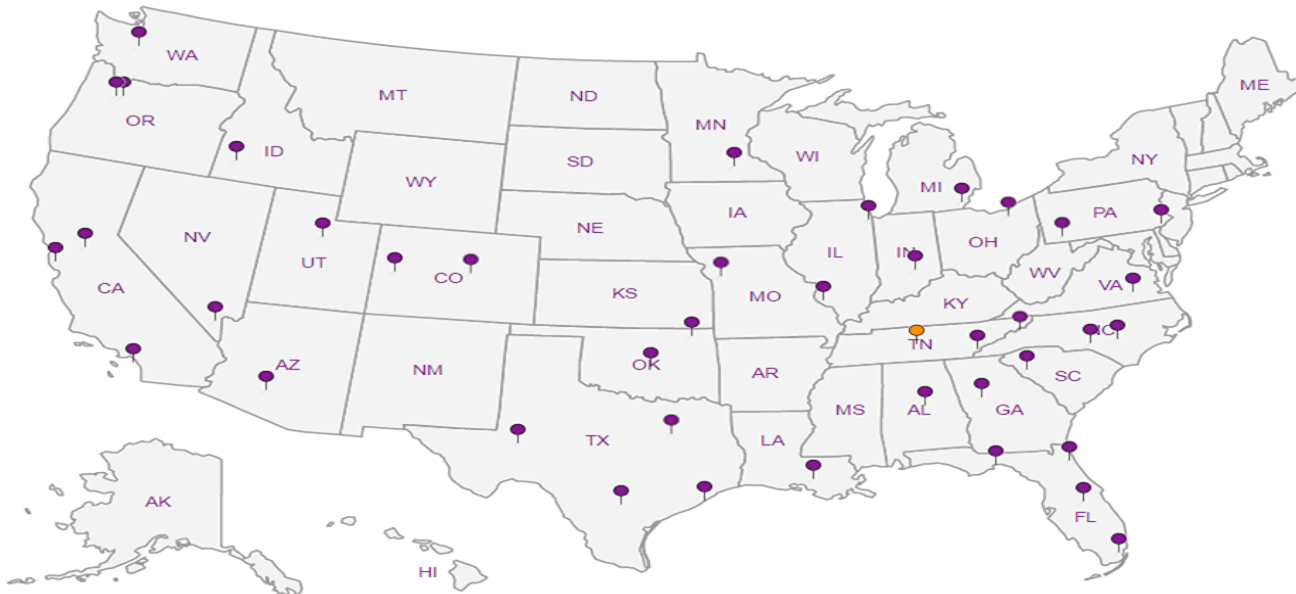
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National 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. Pace National performs all testing at our central laboratory.





1242

SUBCONTRACT ORDER

Sending Laboratory:

ESC - Decatur
2220 Beltline Road SW
Decatur, AL 35601
Phone: 256-350-0846
Fax: 256-350-0686

Subcontracted Laboratory:

ESC
12065 Lebanon Road
Mount Juliet, TN 37122
Phone: (615) 758-5858
Fax:

L1023900

Work Order: 1811921

Analysis Code	Analysis Description	Due	Comments
Sample ID: 1811921-01 Sampled: 09/06/2018	Chilton Verbena High - 1		Matrix: <i>Drinking Water</i> -01
PB ICPMS	Total Lead	09/13/2018	
<i>Containers Supplied:</i>			
Sample ID: 1811921-02 Sampled: 09/06/2018	Chilton Verbena High - 2		Matrix: <i>Drinking Water</i> -02
PB ICPMS	Total Lead	09/13/2018	
<i>Containers Supplied:</i>			
Sample ID: 1811921-03 Sampled: 09/06/2018	Chilton Verbena High - 3		Matrix: <i>Drinking Water</i> -03
PB ICPMS	Total Lead	09/13/2018	
<i>Containers Supplied:</i>			
Sample ID: 1811921-04 Sampled: 09/06/2018	Chilton Verbena High - 4		Matrix: <i>Drinking Water</i> -04
PB ICPMS	Total Lead	09/13/2018	RAD SCREEN: <0.5 mR/hr
<i>Containers Supplied:</i>			
Sample ID: 1811921-05 Sampled: 09/06/2018	Chilton Verbena High - 5		Matrix: <i>Drinking Water</i> -05
PB ICPMS	Total Lead	09/13/2018	
<i>Containers Supplied:</i>			
Sample ID: 1811921-06 Sampled: 09/06/2018	Chilton Verbena High - 6		Matrix: <i>Drinking Water</i> -06

The appropriate credentials and accreditations of the subcontract laboratory have been verified for the analyses to be performed on the samples included in this document as of the date samples were shipped to the subcontract laboratory.

Yes No

Released By Shaul Date 9.6.18

Received By [Signature] Date 9/17/18

tot = 8BR 12



SUBCONTRACT ORDER (Continued)

U1023900

Work Order: 1811921 (Continued)

Analysis Code	Analysis Description	Due	Comments
Sample ID: 1811921-06 Sampled: 09/06/2018 PB ICPMS	2 Chilton Verbena High - 6 Total Lead	09/13/2018	Matrix: <i>Drinking Water</i> -06
<i>Containers Supplied:</i>			
Sample ID: 1811921-07 Sampled: 09/06/2018 PB ICPMS	Chilton Verbena High - 7 Total Lead	09/13/2018	Matrix: <i>Drinking Water</i> -97
<i>Containers Supplied:</i>			
Sample ID: 1811921-08 Sampled: 09/06/2018 PB ICPMS	Chilton Verbena High - 8 Total Lead	09/13/2018	Matrix: <i>Drinking Water</i> -08
<i>Containers Supplied:</i>			

RAD SCREEN: <0.5 mR/hr

2 Cans

The appropriate credentials and accreditations of the subcontract laboratory have been verified for the analyses to be performed on the samples included in this document as of the date samples were shipped to the subcontract laboratory.

Yes No

12 OK

Released By Shauls Date 9.6.18

Received By [Signature] Date 9/7/18



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
 2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
 (256) 350-0846

L1023900

www.enersolv.com

CLIENT NAME: Chilton County Schools	CLIENT CONTACT NAME: R. McWhorter	ENE Project # 14063
CLIENT BILLING ADDRESS: ENERSOLV	CLIENT CONTACT PHONE #: 256-566-9220	
SCHOOL NAME: Verbena High School	BILLING CLIENT EMAIL: rmcwhorter@enersolv.com	

Sample Type: Grab		Container : Plastic WM/250ml				Preservation: Nitric Acid < 2.0 s.u./Ice		Sample Collector	
Lab ID Number <small>Lab Use Only</small>	Sample Identification Number & Location	Analyses		Source Taken Out of Service		Sample Collection	Sample Collection	Name	
		Lead Pb	Copper Cu	Date	Time	Date	Time		
181921-01	VH-1	X		9/5/18	1800	9/6/18	0530	R. McWhorter -01	
02	VH-2	X		↓	↓	↓	0532	R. McWhorter -02	
03	VH-3	X		↓	↓	↓	0534	R. McWhorter -03	
04	VH-4	X		↓	↓	↓	0536	R. McWhorter -04	
05	VH-5	X		↓	↓	↓	0540	R. McWhorter -05	
06	VH-6	X		↓	↓	↓	0550	R. McWhorter -06	
07	VH-7	X		↓	↓	↓	0554	R. McWhorter -07	
08	VH-8	X		↓	↓	↓	0601	R. McWhorter -08	

For Lab Use Only: Sample Status
 Accepted Rejected Accepted w/Exceptions

24005
 Relinquished By: R. McWhorter
 Received By: Smith
 Relinquished By: _____
 Received By: Smith


Date: 9/6/18 Time: 1340
 Date: 9/6/18 Time: 1340
 Date: _____ Time: _____
 Date: 9/17/18 Time: 845

SAMPLE TEMPERATURE
 RECEIVED @ _____

Methods for the Determination of Metals in Environmental Samples—Supplement I," EPA/600/R-94/111, May 1994. Available at NTIS, PB95-125472.

RAD SCREEN: <0.5 mR/hr

Pace Analytical National Center for Testing & Innovation Cooler Receipt Form

Client: ENERSOLV	SDG#	L1023900		
Cooler Received/Opened On: 09/ 7 /18	Temperature:	2.4		
Received By: Kelsey Stephenson				
Signature: 				
Receipt Check List		NP	Yes	No
COC Seal Present / Intact?			X	
COC Signed / Accurate?			X	
Bottles arrive intact?			X	
Correct bottles used?			X	
Sufficient volume sent?			X	
If Applicable				
VOA Zero headspace?				
Preservation Correct / Checked?			X	



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
(256) 350-0846

www.enersolv.com

CLIENT NAME: Chilton County Schools	CLIENT CONTACT NAME: R. McWhorter	ENE Project # 14063
CLIENT BILLING ADDRESS: ENERSOLV	CLIENT CONTACT PHONE #: 256-566-9220	
SCHOOL NAME: Verbena High School	BILLING CLIENT EMAIL: rmcwhorter@enersolv.com	

Lab ID Number <small>Lab Use Only</small>	Sample Identification Number & Location	Analyses		Source Taken Out of Service		Sample Collection		Sample Collector		
		Lead	Pb	Copper	Cu	Date	Time	Date	Time	Name
181927-01	VH-1	X				9/5/08	1800	9/6/08	0530	R. McWhorter
02	VH-2	X							0532	R. McWhorter
03	VH-3	X							0534	R. McWhorter
04	VH-4	X							0536	R. McWhorter
05	VH-5	X							0540	R. McWhorter
06	VH-6	X							0550	R. McWhorter
07	VH-7	X							0554	R. McWhorter
08	VH-8	X							0601	R. McWhorter

Container : Plastic WM/250ml

Preservation: Nitric Acid < 2.0 s.u./lce

For Lab Use Only: Sample Status
 Accepted Rejected Accepted w/Exceptions

Relinquished By: R. McWhorter
 Received By: J. Mark
 Relinquished By: _____
 Received By: _____

Date: 9/6/08 Time: 1340
 Date: 9/6/08 Time: 1340
 Date: _____ Time: _____
 Date: _____ Time: _____

SAMPLE TEMPERATURE
RECEIVED @ _____

Methods for the Determination of Metals in Environmental Samples—Supplement I,” EPA/600/R-94/111, May 1994. Available at NTIS, PB95-125472.