

May 17, 2018

## Weston Solutions - CO

Sample Delivery Group: L993515

Samples Received: 05/12/2018

Project Number:

Description: State Painting RS

Report To:

James Fieman

1435 Garrison St., Ste 100

Denver, CO 80215

Entire Report Reviewed By:



Shane Gambill

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.



Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	6
Sr: Sample Results	7
SPRS-SO-AREA1 L993515-01	7
SPRS-SO-AREA1D L993515-02	8
SPRS-SO-AREA2 L993515-03	9
SPRS-SO-AREA3 L993515-04	10
SPRS-SO-BACKGROUND1 L993515-05	11
SPRS-SO-AREA1 L993515-06	12
SPRS-SO-AREA1D L993515-07	13
SPRS-SO-AREA2 L993515-08	14
SPRS-SO-AREA3 L993515-09	15
SPRS-SO-BACKGROUND1 L993515-10	16
SPRS-SO-HOPPER L993515-11	17
SPRS-SO-AREA2-2 L993515-12	18
Qc: Quality Control Summary	19
Total Solids by Method 2540 G-2011	19
Wet Chemistry by Method 3060A/7196A	20
Mercury by Method 7470A	21
Mercury by Method 7471A	22
Metals (ICP) by Method 6010B	23
Gl: Glossary of Terms	26
Al: Accreditations & Locations	27
Sc: Sample Chain of Custody	28



# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## SPRS-SO-AREA1 L993515-01 Solid

Collected by  
James Fieman

Collected date/time  
05/10/18 09:00

Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1111590	1	05/16/18 13:45	05/16/18 13:55	KDW
Wet Chemistry by Method 3060A/7196A	WG1111103	1	05/14/18 12:56	05/15/18 11:44	ITB
Mercury by Method 7471A	WG1110919	1	05/14/18 04:39	05/14/18 10:09	EL
Metals (ICP) by Method 6010B	WG1110846	1	05/14/18 15:35	05/15/18 17:27	TRB
Metals (ICP) by Method 6010B	WG1110846	5	05/14/18 15:35	05/16/18 04:22	TRB

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

## SPRS-SO-AREA1D L993515-02 Solid

Collected by  
James Fieman

Collected date/time  
05/10/18 09:00

Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1111590	1	05/16/18 13:45	05/16/18 13:55	KDW
Wet Chemistry by Method 3060A/7196A	WG1111103	1	05/14/18 12:56	05/15/18 11:44	ITB
Mercury by Method 7471A	WG1110919	1	05/14/18 04:39	05/14/18 10:11	EL
Metals (ICP) by Method 6010B	WG1110846	1	05/14/18 15:35	05/15/18 17:30	TRB
Metals (ICP) by Method 6010B	WG1110846	5	05/14/18 15:35	05/16/18 04:25	TRB

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

## SPRS-SO-AREA2 L993515-03 Solid

Collected by  
James Fieman

Collected date/time  
05/10/18 12:00

Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1111590	1	05/16/18 13:45	05/16/18 13:55	KDW
Wet Chemistry by Method 3060A/7196A	WG1111103	1	05/14/18 12:56	05/15/18 11:45	ITB
Mercury by Method 7471A	WG1110919	1	05/14/18 04:39	05/14/18 13:19	EL
Metals (ICP) by Method 6010B	WG1110846	1	05/14/18 15:35	05/15/18 16:29	TRB
Metals (ICP) by Method 6010B	WG1110846	5	05/14/18 15:35	05/16/18 04:18	TRB

<sup>9</sup> Sc

## SPRS-SO-AREA3 L993515-04 Solid

Collected by  
James Fieman

Collected date/time  
05/10/18 09:30

Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1111590	1	05/16/18 13:45	05/16/18 13:55	KDW
Wet Chemistry by Method 3060A/7196A	WG1111103	1	05/14/18 12:56	05/15/18 11:50	ITB
Mercury by Method 7471A	WG1110919	1	05/14/18 04:39	05/14/18 10:14	EL
Metals (ICP) by Method 6010B	WG1110846	1	05/14/18 15:35	05/15/18 17:40	TRB
Metals (ICP) by Method 6010B	WG1110846	5	05/14/18 15:35	05/16/18 04:28	TRB

## SPRS-SO-BACKGROUND1 L993515-05 Solid

Collected by  
James Fieman

Collected date/time  
05/10/18 15:30

Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1111590	1	05/16/18 13:45	05/16/18 13:55	KDW
Wet Chemistry by Method 3060A/7196A	WG1111103	1	05/14/18 12:56	05/15/18 11:52	ITB
Mercury by Method 7471A	WG1110919	1	05/14/18 04:39	05/14/18 10:16	EL
Metals (ICP) by Method 6010B	WG1110846	1	05/14/18 15:35	05/15/18 17:44	TRB



## SPRS-SO-AREA1 L993515-06 Waste

Collected by  
James FiemanCollected date/time  
05/10/18 09:00Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Preparation by Method 1311	WG1111368	1	05/15/18 09:10	05/15/18 09:10	TM
Mercury by Method 7470A	WG1111866	1	05/16/18 07:19	05/16/18 11:08	ABL
Metals (ICP) by Method 6010B	WG1111913	1	05/16/18 09:06	05/16/18 15:07	ST

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

## SPRS-SO-AREA1D L993515-07 Waste

Collected by  
James FiemanCollected date/time  
05/10/18 09:00Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Preparation by Method 1311	WG1111368	1	05/15/18 09:10	05/15/18 09:10	TM
Mercury by Method 7470A	WG1111866	1	05/16/18 07:19	05/16/18 11:10	ABL
Metals (ICP) by Method 6010B	WG1111913	1	05/16/18 09:06	05/16/18 15:10	ST

## SPRS-SO-AREA2 L993515-08 Waste

Collected by  
James FiemanCollected date/time  
05/10/18 12:00Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Preparation by Method 1311	WG1111368	1	05/15/18 09:10	05/15/18 09:10	TM
Mercury by Method 7470A	WG1111866	1	05/16/18 07:19	05/16/18 11:17	ABL
Metals (ICP) by Method 6010B	WG1111913	1	05/16/18 09:06	05/16/18 15:14	ST

## SPRS-SO-AREA3 L993515-09 Waste

Collected by  
James FiemanCollected date/time  
05/10/18 09:30Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Preparation by Method 1311	WG1111368	1	05/15/18 09:10	05/15/18 09:10	TM
Mercury by Method 7470A	WG1111866	1	05/16/18 07:19	05/16/18 11:19	ABL
Metals (ICP) by Method 6010B	WG1111913	1	05/16/18 09:06	05/16/18 15:17	ST

## SPRS-SO-BACKGROUND1 L993515-10 Waste

Collected by  
James FiemanCollected date/time  
05/10/18 15:30Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Preparation by Method 1311	WG1111368	1	05/15/18 09:10	05/15/18 09:10	TM
Mercury by Method 7470A	WG1111866	1	05/16/18 07:19	05/16/18 11:21	ABL
Metals (ICP) by Method 6010B	WG1111913	1	05/16/18 09:06	05/16/18 15:20	ST

## SPRS-SO-HOPPER L993515-11 Waste

Collected by  
James FiemanCollected date/time  
05/10/18 09:56Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Preparation by Method 1311	WG1111368	1	05/15/18 09:10	05/15/18 09:10	TM
Mercury by Method 7470A	WG1111866	1	05/16/18 07:19	05/16/18 11:23	ABL
Metals (ICP) by Method 6010B	WG1111913	1	05/16/18 09:06	05/16/18 15:24	ST

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



SPRS-SO-AREA2-2 L993515-12 Waste

Collected by  
James Fieman

Collected date/time  
05/10/18 12:15

Received date/time  
05/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Preparation by Method 1311	WG1111368	1	05/15/18 09:10	05/15/18 09:10	TM
Mercury by Method 7470A	WG1111866	1	05/16/18 07:19	05/16/18 11:26	ABL
Metals (ICP) by Method 6010B	WG1111913	1	05/16/18 09:06	05/16/18 15:27	ST

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

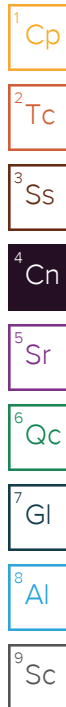
<sup>8</sup>Al

<sup>9</sup>Sc



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 radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Shane Gambill  
Technical Service Representative





## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	05/16/2018 13:55	<a href="#">WG1111590</a>

## Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chromium, Hexavalent	0.847	J	0.677	2.12	1	05/15/2018 11:44	<a href="#">WG1111103</a>

## Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.00642	J	0.00296	0.0212	1	05/14/2018 10:09	<a href="#">WG1110919</a>

## Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	5160		3.70	10.6	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Antimony	U		0.794	2.12	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Arsenic	1.00	J	0.688	2.12	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Barium	254		0.180	0.529	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Beryllium	0.0852	J	0.0741	0.212	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Cadmium	U		0.0741	0.529	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Calcium	16400		4.90	106	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Chromium	2460		0.148	1.06	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Cobalt	33.0		0.243	1.06	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Copper	20.1		0.561	2.12	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Iron	57600		7.46	52.9	5	05/16/2018 04:22	<a href="#">WG1110846</a>
Lead	8.32		0.201	0.529	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Magnesium	81500		1.17	106	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Manganese	804		0.127	1.06	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Nickel	1010		0.519	2.12	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Potassium	661		10.8	106	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Selenium	U		0.783	2.12	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Silver	U		0.296	1.06	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Sodium	256		10.4	106	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Thallium	U		0.688	2.12	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Vanadium	26.4		0.254	2.12	1	05/15/2018 17:27	<a href="#">WG1110846</a>
Zinc	57.1		0.624	5.29	1	05/15/2018 17:27	<a href="#">WG1110846</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.2		1	05/16/2018 13:55	<a href="#">WG1111590</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chromium, Hexavalent	0.925	J	0.672	2.10	1	05/15/2018 11:44	<a href="#">WG1111103</a>

## Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.00533	J	0.00294	0.0210	1	05/14/2018 10:11	<a href="#">WG1110919</a>

## Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	5220		3.68	10.5	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Antimony	U		0.788	2.10	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Arsenic	1.28	J	0.683	2.10	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Barium	248		0.179	0.525	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Beryllium	0.106	J	0.0735	0.210	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Cadmium	0.0817	J	0.0735	0.525	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Calcium	16900		4.86	105	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Chromium	2240		0.147	1.05	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Cobalt	31.2		0.242	1.05	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Copper	21.3		0.557	2.10	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Iron	53500		7.41	52.5	5	05/16/2018 04:25	<a href="#">WG1110846</a>
Lead	10.1		0.200	0.525	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Magnesium	73700		1.17	105	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Manganese	740		0.126	1.05	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Nickel	1010		0.515	2.10	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Potassium	763		10.7	105	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Selenium	U		0.778	2.10	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Silver	U		0.294	1.05	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Sodium	248		10.3	105	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Thallium	U		0.683	2.10	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Vanadium	24.9		0.252	2.10	1	05/15/2018 17:30	<a href="#">WG1110846</a>
Zinc	52.7		0.620	5.25	1	05/15/2018 17:30	<a href="#">WG1110846</a>





## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.1		1	05/16/2018 13:55	<a href="#">WG1111590</a>

<sup>1</sup> Cp<sup>2</sup> Tc

## Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chromium, Hexavalent	1.33	<u>J</u>	0.666	2.08	1	05/15/2018 11:45	<a href="#">WG1111103</a>

<sup>3</sup> Ss<sup>4</sup> Cn

## Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	U		0.00291	0.0208	1	05/14/2018 13:19	<a href="#">WG1110919</a>

<sup>5</sup> Sr<sup>6</sup> Qc

## Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	4670		3.64	10.4	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Antimony	2.29	<u>J6</u>	0.781	2.08	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Arsenic	18.5		0.677	2.08	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Barium	304	<u>J3 J5 J6</u>	0.177	0.520	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Beryllium	0.110	<u>J</u>	0.0729	0.208	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Cadmium	0.397	<u>J</u>	0.0729	0.520	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Calcium	17200	<u>J3 V</u>	4.82	104	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Chromium	2130	<u>O1 V</u>	0.146	1.04	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Cobalt	30.1		0.239	1.04	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Copper	60.7		0.552	2.08	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Iron	54000	<u>V</u>	7.34	52.0	5	05/16/2018 04:18	<a href="#">WG1110846</a>
Lead	35.8		0.198	0.520	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Magnesium	70900	<u>O1 V</u>	1.16	104	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Manganese	729	<u>O1 V</u>	0.125	1.04	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Nickel	885	<u>V</u>	0.510	2.08	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Potassium	960		10.6	104	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Selenium	U		0.770	2.08	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Silver	U		0.291	1.04	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Sodium	364		10.3	104	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Thallium	U		0.677	2.08	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Vanadium	24.4		0.250	2.08	1	05/15/2018 16:29	<a href="#">WG1110846</a>
Zinc	754	<u>O1 V</u>	0.614	5.20	1	05/15/2018 16:29	<a href="#">WG1110846</a>

<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.2		1	05/16/2018 13:55	<a href="#">WG1111590</a>

## Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chromium, Hexavalent	1.41	J	0.665	2.08	1	05/15/2018 11:50	<a href="#">WG1111103</a>

## Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.00405	J	0.00291	0.0208	1	05/14/2018 10:14	<a href="#">WG1110919</a>

## Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	4610		3.64	10.4	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Antimony	U		0.779	2.08	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Arsenic	1.25	J	0.675	2.08	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Barium	521		0.177	0.520	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Beryllium	0.0751	J	0.0727	0.208	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Cadmium	0.0812	J	0.0727	0.520	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Calcium	12000		4.81	104	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Chromium	2410		0.145	1.04	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Cobalt	34.4		0.239	1.04	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Copper	25.8		0.551	2.08	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Iron	56600		7.33	52.0	5	05/16/2018 04:28	<a href="#">WG1110846</a>
Lead	62.6		0.197	0.520	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Magnesium	79600		1.15	104	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Manganese	787		0.125	1.04	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Nickel	1090		0.509	2.08	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Potassium	744		10.6	104	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Selenium	U		0.769	2.08	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Silver	U		0.291	1.04	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Sodium	229		10.2	104	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Thallium	U		0.675	2.08	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Vanadium	24.9		0.249	2.08	1	05/15/2018 17:40	<a href="#">WG1110846</a>
Zinc	79.2		0.613	5.20	1	05/15/2018 17:40	<a href="#">WG1110846</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.8		1	05/16/2018 13:55	<a href="#">WG1111590</a>

## Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chromium,Hexavalent	U		0.675	2.11	1	05/15/2018 11:52	<a href="#">WG1111103</a>

## Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0277		0.00295	0.0211	1	05/14/2018 10:16	<a href="#">WG1110919</a>

## Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	7320		3.69	10.6	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Antimony	U		0.791	2.11	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Arsenic	9.87		0.686	2.11	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Barium	112		0.179	0.528	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Beryllium	0.337		0.0739	0.211	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Cadmium	0.829		0.0739	0.528	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Calcium	63200		4.89	106	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Chromium	19.9		0.148	1.06	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Cobalt	0.739	J	0.243	1.06	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Copper	84.0		0.559	2.11	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Iron	9110		1.49	10.6	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Lead	46.5		0.200	0.528	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Magnesium	16000		1.17	106	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Manganese	274		0.127	1.06	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Nickel	9.95		0.517	2.11	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Potassium	2620		10.8	106	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Selenium	U		0.781	2.11	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Silver	U		0.295	1.06	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Sodium	738		10.4	106	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Thallium	U		0.686	2.11	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Vanadium	17.8		0.253	2.11	1	05/15/2018 17:44	<a href="#">WG1110846</a>
Zinc	105		0.623	5.28	1	05/15/2018 17:44	<a href="#">WG1110846</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		5/15/2018 9:10:29 AM	WG1111368
Fluid	1		5/15/2018 9:10:29 AM	WG1111368
Initial pH	9.08		5/15/2018 9:10:29 AM	WG1111368
Final pH	5.92		5/15/2018 9:10:29 AM	WG1111368

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	05/16/2018 11:08	<a href="#">WG1111866</a>

## Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	05/16/2018 15:07	<a href="#">WG1111913</a>
Barium	1.18		0.100	100	1	05/16/2018 15:07	<a href="#">WG1111913</a>
Cadmium	ND		0.100	1	1	05/16/2018 15:07	<a href="#">WG1111913</a>
Chromium	ND		0.100	5	1	05/16/2018 15:07	<a href="#">WG1111913</a>
Lead	ND		0.100	5	1	05/16/2018 15:07	<a href="#">WG1111913</a>
Selenium	ND		0.100	1	1	05/16/2018 15:07	<a href="#">WG1111913</a>
Silver	ND		0.100	5	1	05/16/2018 15:07	<a href="#">WG1111913</a>

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



## Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		5/15/2018 9:10:29 AM	WG1111368
Fluid	1		5/15/2018 9:10:29 AM	WG1111368
Initial pH	9.13		5/15/2018 9:10:29 AM	WG1111368
Final pH	5.78		5/15/2018 9:10:29 AM	WG1111368

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	05/16/2018 11:10	<a href="#">WG1111866</a>

## Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	05/16/2018 15:10	<a href="#">WG1111913</a>
Barium	1.38		0.100	100	1	05/16/2018 15:10	<a href="#">WG1111913</a>
Cadmium	ND		0.100	1	1	05/16/2018 15:10	<a href="#">WG1111913</a>
Chromium	ND		0.100	5	1	05/16/2018 15:10	<a href="#">WG1111913</a>
Lead	ND		0.100	5	1	05/16/2018 15:10	<a href="#">WG1111913</a>
Selenium	ND		0.100	1	1	05/16/2018 15:10	<a href="#">WG1111913</a>
Silver	ND		0.100	5	1	05/16/2018 15:10	<a href="#">WG1111913</a>

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



## Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		5/15/2018 9:10:29 AM	WG1111368
Fluid	1		5/15/2018 9:10:29 AM	WG1111368
Initial pH	9.11		5/15/2018 9:10:29 AM	WG1111368
Final pH	5.79		5/15/2018 9:10:29 AM	WG1111368

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	05/16/2018 11:17	<a href="#">WG1111866</a>

## Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	05/16/2018 15:14	<a href="#">WG1111913</a>
Barium	0.703		0.100	100	1	05/16/2018 15:14	<a href="#">WG1111913</a>
Cadmium	ND		0.100	1	1	05/16/2018 15:14	<a href="#">WG1111913</a>
Chromium	ND		0.100	5	1	05/16/2018 15:14	<a href="#">WG1111913</a>
Lead	ND		0.100	5	1	05/16/2018 15:14	<a href="#">WG1111913</a>
Selenium	ND		0.100	1	1	05/16/2018 15:14	<a href="#">WG1111913</a>
Silver	ND		0.100	5	1	05/16/2018 15:14	<a href="#">WG1111913</a>

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



## Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		5/15/2018 9:10:29 AM	WG1111368
Fluid	1		5/15/2018 9:10:29 AM	WG1111368
Initial pH	9.09		5/15/2018 9:10:29 AM	WG1111368
Final pH	5.39		5/15/2018 9:10:29 AM	WG1111368

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	05/16/2018 11:19	<a href="#">WG1111866</a>

## Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	05/16/2018 15:17	<a href="#">WG1111913</a>
Barium	0.744		0.100	100	1	05/16/2018 15:17	<a href="#">WG1111913</a>
Cadmium	ND		0.100	1	1	05/16/2018 15:17	<a href="#">WG1111913</a>
Chromium	ND		0.100	5	1	05/16/2018 15:17	<a href="#">WG1111913</a>
Lead	ND		0.100	5	1	05/16/2018 15:17	<a href="#">WG1111913</a>
Selenium	ND		0.100	1	1	05/16/2018 15:17	<a href="#">WG1111913</a>
Silver	ND		0.100	5	1	05/16/2018 15:17	<a href="#">WG1111913</a>

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



## Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		5/15/2018 9:10:29 AM	WG1111368
Fluid	1		5/15/2018 9:10:29 AM	WG1111368
Initial pH	9.00		5/15/2018 9:10:29 AM	WG1111368
Final pH	5.96		5/15/2018 9:10:29 AM	WG1111368

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

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	05/16/2018 11:21	<a href="#">WG1111866</a>

## Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	05/16/2018 15:20	<a href="#">WG1111913</a>
Barium	0.983		0.100	100	1	05/16/2018 15:20	<a href="#">WG1111913</a>
Cadmium	ND		0.100	1	1	05/16/2018 15:20	<a href="#">WG1111913</a>
Chromium	ND		0.100	5	1	05/16/2018 15:20	<a href="#">WG1111913</a>
Lead	ND		0.100	5	1	05/16/2018 15:20	<a href="#">WG1111913</a>
Selenium	ND		0.100	1	1	05/16/2018 15:20	<a href="#">WG1111913</a>
Silver	ND		0.100	5	1	05/16/2018 15:20	<a href="#">WG1111913</a>





## Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		5/15/2018 9:10:29 AM	WG1111368
Fluid	1		5/15/2018 9:10:29 AM	WG1111368
Initial pH	9.14		5/15/2018 9:10:29 AM	WG1111368
Final pH	5.03		5/15/2018 9:10:29 AM	WG1111368

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	05/16/2018 11:23	<a href="#">WG1111866</a>

## Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	05/16/2018 15:24	<a href="#">WG1111913</a>
Barium	0.199		0.100	100	1	05/16/2018 15:24	<a href="#">WG1111913</a>
Cadmium	ND		0.100	1	1	05/16/2018 15:24	<a href="#">WG1111913</a>
Chromium	ND		0.100	5	1	05/16/2018 15:24	<a href="#">WG1111913</a>
Lead	ND		0.100	5	1	05/16/2018 15:24	<a href="#">WG1111913</a>
Selenium	ND		0.100	1	1	05/16/2018 15:24	<a href="#">WG1111913</a>
Silver	ND		0.100	5	1	05/16/2018 15:24	<a href="#">WG1111913</a>

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



## Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		5/15/2018 9:10:29 AM	WG1111368
Fluid	1		5/15/2018 9:10:29 AM	WG1111368
Initial pH	8.83		5/15/2018 9:10:29 AM	WG1111368
Final pH	5.81		5/15/2018 9:10:29 AM	WG1111368

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	05/16/2018 11:26	<a href="#">WG1111866</a>

## Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	05/16/2018 15:27	<a href="#">WG1111913</a>
Barium	0.568		0.100	100	1	05/16/2018 15:27	<a href="#">WG1111913</a>
Cadmium	ND		0.100	1	1	05/16/2018 15:27	<a href="#">WG1111913</a>
Chromium	ND		0.100	5	1	05/16/2018 15:27	<a href="#">WG1111913</a>
Lead	ND		0.100	5	1	05/16/2018 15:27	<a href="#">WG1111913</a>
Selenium	ND		0.100	1	1	05/16/2018 15:27	<a href="#">WG1111913</a>
Silver	ND		0.100	5	1	05/16/2018 15:27	<a href="#">WG1111913</a>

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



Method Blank (MB)

(MB) R3310651-1 05/16/18 13:55

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000			

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

L993515-03 Original Sample (OS) • Duplicate (DUP)

(OS) L993515-03 05/16/18 13:55 • (DUP) R3310651-3 05/16/18 13:55

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	96.1	96.2	1	0.110		5

Laboratory Control Sample (LCS)

(LCS) R3310651-2 05/16/18 13:55

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3309856-1 05/15/18 11:24

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chromium,Hexavalent	U		0.640	2.00

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3309856-2 05/15/18 11:25 • (LCSD) R3309856-3 05/15/18 11:26

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Chromium,Hexavalent	24.0	23.8	23.8	99.3	99.2	80.0-120			0.168	20

L993515-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L993515-03 05/15/18 11:45 • (MS) R3309856-9 05/15/18 11:57

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Chromium,Hexavalent	676	1.33	571	84.4	50	75.0-125	

L993515-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L993515-03 05/15/18 11:45 • (MS) R3309856-5 05/15/18 11:46 • (MSD) R3309856-11 05/15/18 12:35

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chromium,Hexavalent	20.8	1.33	17.1	18.6	75.6	82.8	1	75.0-125			8.41	20



Method Blank (MB)

(MB) R3310285-1 05/16/18 10:40

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.00333	0.0100

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

(LCS) R3310285-2 05/16/18 10:42 • (LCSD) R3310285-3 05/16/18 10:49

	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	%	%	%			%	%
Mercury	0.0300	0.0280	0.0281	93.3	93.6	80.0-120			0.289	20

L992417-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L992417-01 05/16/18 10:52 • (MS) R3310285-4 05/16/18 10:54 • (MSD) R3310285-5 05/16/18 10:56

	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	%	%		%			%	%
Mercury	0.0300	ND	0.0285	0.0286	95.1	95.2	1	75.0-125			0.182	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3309569-1 05/14/18 09:00

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.00280	0.0200

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

(LCS) R3309569-2 05/14/18 09:03 • (LCSD) R3309569-3 05/14/18 09:05

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Mercury	0.300	0.264	0.264	88.1	88.0	80.0-120			0.0158	20

L993515-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L993515-03 05/14/18 13:19 • (MS) R3309569-4 05/14/18 09:11 • (MSD) R3309569-5 05/14/18 09:23

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.312	U	0.331	0.315	106	101	1	75.0-125			4.78	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3310084-1 05/15/18 16:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aluminum	U		3.50	10.0
Antimony	U		0.750	2.00
Arsenic	U		0.650	2.00
Barium	U		0.170	0.500
Beryllium	U		0.0700	0.200
Cadmium	U		0.0700	0.500
Calcium	U		4.63	100
Chromium	U		0.140	1.00
Cobalt	U		0.230	1.00
Copper	U		0.530	2.00
Iron	U		1.41	10.0
Lead	U		0.190	0.500
Magnesium	U		1.11	100
Manganese	U		0.120	1.00
Nickel	U		0.490	2.00
Potassium	U		10.2	100
Selenium	U		0.740	2.00
Silver	U		0.280	1.00
Sodium	U		9.85	100
Thallium	U		0.650	2.00
Vanadium	U		0.240	2.00
Zinc	U		0.590	5.00

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

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

(LCS) R3310084-2 05/15/18 16:23 • (LCSD) R3310084-3 05/15/18 16:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aluminum	1000	1030	1020	103	102	80.0-120			1.36	20
Antimony	100	99.2	97.7	99.2	97.7	80.0-120			1.58	20
Arsenic	100	100	99.3	100	99.3	80.0-120			0.885	20
Barium	100	104	103	104	103	80.0-120			1.65	20
Beryllium	100	104	102	104	102	80.0-120			1.68	20
Cadmium	100	98.7	97.3	98.7	97.3	80.0-120			1.39	20
Calcium	1000	1040	1020	104	102	80.0-120			1.38	20
Chromium	100	104	102	104	102	80.0-120			2.30	20
Cobalt	100	105	103	105	103	80.0-120			1.37	20
Copper	100	103	100	103	100	80.0-120			2.09	20
Iron	1000	1040	1020	104	102	80.0-120			1.61	20



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

(LCS) R3310084-2 05/15/18 16:23 • (LCSD) R3310084-3 05/15/18 16:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Lead	100	102	101	102	101	80.0-120			1.35	20
Magnesium	1000	1010	1000	101	100	80.0-120			1.26	20
Manganese	100	102	100	102	100	80.0-120			1.79	20
Nickel	100	103	102	103	102	80.0-120			1.07	20
Potassium	1000	995	982	99.5	98.2	80.0-120			1.29	20
Selenium	100	98.9	97.6	98.9	97.6	80.0-120			1.41	20
Silver	20.0	18.5	18.2	92.7	90.8	80.0-120			2.02	20
Sodium	1000	1020	1010	102	101	80.0-120			1.60	20
Thallium	100	101	99.8	101	99.8	80.0-120			1.34	20
Vanadium	100	104	103	104	103	80.0-120			1.67	20
Zinc	100	101	99.8	101	99.8	80.0-120			1.53	20

L993515-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L993515-03 05/15/18 16:29 • (MS) R3310084-6 05/15/18 16:40 • (MSD) R3310084-7 05/15/18 16:44

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Aluminum	1040	4670	5940	5820	122	110	1	75.0-125			2.18	20
Antimony	104	2.29	44.6	50.7	40.7	46.5	1	75.0-125	J6	J6	12.8	20
Arsenic	104	18.5	114	124	91.7	101	1	75.0-125			8.40	20
Barium	104	304	493	382	181	74.8	1	75.0-125	J5	J3 J6	25.3	20
Beryllium	104	0.110	102	108	98.0	104	1	75.0-125			5.54	20
Cadmium	104	0.397	105	112	101	107	1	75.0-125			5.78	20
Calcium	1040	17200	19900	38300	253	2030	1	75.0-125	V	J3 V	63.5	20
Chromium	104	2130	2370	2070	227	0.000	1	75.0-125	V	V	13.2	20
Cobalt	104	30.1	143	146	109	112	1	75.0-125			2.07	20
Copper	104	60.7	141	148	77.4	84.3	1	75.0-125			4.96	20
Iron	1040	48700	51000	45600	221	0.000	1	75.0-125	E V	V	11.1	20
Lead	104	35.8	126	131	86.3	91.8	1	75.0-125			4.44	20
Magnesium	1040	70900	76400	70000	525	0.000	1	75.0-125	V	V	8.68	20
Manganese	104	729	855	762	121	31.0	1	75.0-125			11.5	20
Nickel	104	885	1080	1060	184	165	1	75.0-125	V	V	1.79	20
Potassium	1040	960	2020	2240	102	123	1	75.0-125			10.2	20
Selenium	104	U	104	112	99.9	107	1	75.0-125			7.01	20
Silver	20.8	U	20.0	21.1	96.1	101	1	75.0-125			5.48	20
Sodium	1040	364	1450	1540	104	113	1	75.0-125			5.78	20
Thallium	104	U	103	108	99.3	104	1	75.0-125			4.50	20
Vanadium	104	24.4	128	133	99.6	104	1	75.0-125			3.56	20
Zinc	104	754	719	679	0.000	0.000	1	75.0-125	V	V	5.74	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc





Method Blank (MB)

(MB) R3310556-1 05/16/18 14:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.0333	0.100
Barium	U		0.0333	0.100
Cadmium	U		0.0333	0.100
Chromium	U		0.0333	0.100
Lead	U		0.0333	0.100
Selenium	U		0.0333	0.100
Silver	U		0.0333	0.100

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

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

(LCS) R3310556-2 05/16/18 14:22 • (LCSD) R3310556-3 05/16/18 14:25

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 %
Arsenic	10.0	9.66	9.68	96.6	96.8	80.0-120			0.189	20
Barium	10.0	10.1	10.2	101	102	80.0-120			0.809	20
Cadmium	10.0	9.69	9.77	96.9	97.7	80.0-120			0.822	20
Chromium	10.0	9.75	9.85	97.5	98.5	80.0-120			1.02	20
Lead	10.0	9.74	9.86	97.4	98.6	80.0-120			1.24	20
Selenium	10.0	9.91	10.0	99.1	100	80.0-120			1.06	20
Silver	2.00	1.82	1.83	91.1	91.5	80.0-120			0.470	20

L992668-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L992668-02 05/16/18 14:29 • (MS) R3310556-5 05/16/18 14:36 • (MSD) R3310556-6 05/16/18 14:39

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 %
Arsenic	10.0	ND	10.2	10.2	102	102	1	75.0-125			0.885	20
Barium	10.0	0.964	10.8	11.0	98.1	100	1	75.0-125			1.80	20
Cadmium	10.0	ND	9.97	10.1	99.7	101	1	75.0-125			1.42	20
Chromium	10.0	ND	9.86	9.86	98.6	98.6	1	75.0-125			0.0207	20
Lead	10.0	ND	9.87	10.0	98.7	100	1	75.0-125			1.78	20
Selenium	10.0	ND	10.5	10.7	105	107	1	75.0-125			1.33	20
Silver	2.00	ND	1.90	1.91	95.1	95.4	1	75.0-125			0.326	20



## 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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
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.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
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.
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.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
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.

## Qualifier Description

E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

## 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 <sup>1</sup>	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN2000002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1 6</sup>	90010	South Carolina	84004
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1 4</sup>	2006
Louisiana <sup>1</sup>	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater 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.



# Weston Solutions - CO

1435 Garrison St., Ste 100  
Denver, CO 80215

## Billing Information:

Mary Williams  
1435 Garrison St., Ste 100  
Denver, CO 80215

Pres  
Chk

## Analysis / Container / Preservative

Chain of Custody Page 1 of 1



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



Report to:  
James Fieman

Email To: James.Fieman@WestonSolutions.com

Project State Painting RS  
Description:

City/State  
Collected: West Valley, UT

Phone: 303-729-6146  
Fax:

Client Project #

Lab Project #  
WESSOLCO-SLC

Collected by (print):  
James Fieman

Site/Facility ID #

P.O. #

Collected by (signature):  
James Fieman

**RUSH** Lab MUST Be Notified  
Same Day Five Day  
Next Day Two Day (Rad Only)  
Two Day 10 Day (Rad Only)  
Three Day

Quote #

Date Results Needed

Immediately  
Packed on ice N Y

No.  
of  
Cnts

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts	RCRA 8 metals 250mlHDPE-HNO3	TCLP Metals 4ozClr-NoPres	V8260 40mlAmb-HCl	TAL Metals	Chromium Speciation
SPRS-SO-Area 1	Comp	SS	—	5/10/2018	09:00	3	X	X	X	X	
SPRS-SO-Area 1D	Comp	SS	—	5/10/2018	09:00	3	X	X	X	X	
SPRS-SO-Area 2	Comp	SS	—	5/10/2018	12:00	3	X	X	X	X	
SPRS-SO-Area 3	Comp	SS	—	5/10/2018	09:30	3	X	X	X	X	
SPRS-SO-Background 1	Comp	SS	—	5/10/2018	15:30	2	X	X	X	X	
SPRS-SO-Hopper	Grab	SS	—	5/10/2018	09:56	1	X				
SPRS-SO-Area 2-2	Comp	SS	—	5/10/2018	12:15	1	X				
		SS				1	X				
		SS				1	X				
		SS				1	X				

\* Matrix:  
SS - Soil AIR - Air F - Filter  
GW - Groundwater B - Bioassay  
WW - WasteWater  
DW - Drinking Water  
OT - Other

Remarks: MS/MSD on SPRS-SO-Area 2 so 9 jars for that sample. Jars with multiple analyses listed should just be analyzed for TAL Metals. 3 day TAT.

Samples returned via:  
UPS FedEx Courier

Tracking #

pH Temp  
Flow Other

Sample Receipt Checklist  
COC Seal Present/Intact: Y N  
COC signed/Accurate: Y N  
Bottles arrive intact: Y N  
Correct bottles used: Y N  
Sufficient volume sent: Y N  
If Applicable  
VQA Zero Headspace: Y N  
Preservation Correct/Checked: Y N

Relinquished by: (Signature) James Fieman	Date: 5/11/2018	Time: 09:06	Received by: (Signature) [Signature]	Trip Blank Received: Yes/No HCL / MeOH TBR
Relinquished by: (Signature) [Signature] ESCSLCUT	Date: 5/11/18	Time: 1700	Received by: (Signature) [Signature]	Temp: 4.0°C Bottles Received: 22
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) [Signature] 861	Date: 5/12/18 Time: 8:45

If preservation required by Login: Date/Time  
Hold:  
Condition:  
NCF / OK

Andy Vann

**ESC Lab Sciences**  
**Non-Conformance Form**

Login #:L993515	Client:WESSOLCO	Date:05/12/18	Evaluated by: Myra "Katie" Ingram
-----------------	-----------------	---------------	-----------------------------------

**Non-Conformance (check applicable items)**

Sample Integrity	Chain of Custody Clarification	If Broken Container:
Parameter(s) past holding time	X Login Clarification Needed	
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 / Courier)
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.	<b>If no Chain of Custody:</b>
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:**

Please clarify the analysis, Chromium Speciation.

Client informed by:	Call	Email	Voice Mail	Date: 05/14/18	Time:
TSR Initials: CSG	Client Contact: James Fieman				

**Login Instructions:**

Chromium Speciation = hexavalent chromium by 7196

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