The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

Weston Solutions, Inc.

A8U2

SGS Job Number: DA2722

Sampling Date: 02/14/18

Report to:

Weston Solutions, Inc.
1435 Garrison Street Suite 100
Lakewood, CO 80215
michael.worden@westonsolutions.com

ATTN: Michael Worden

Total number of pages in report: 25

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Scott Heideman
Laboratory Director

Client Service contact: Jen Jorschumb 303-425-6021

Certifications: CO (CO00049), ID (CO00049), NE (NE-OS-06-04), ND (R-027), NJ (CO007), OK (D9942) UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY (8TMS-L)

Sections:

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SGS North America Inc.

Sample Summary

Weston Solutions, Inc.

Job No: DA2722

A8U2

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
DA2722-1	02/14/18	13:55		02/15/18	SO	Soil	CAV-SP-01

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Weston Solutions, Inc.	**Job No**	DA2722
Site:	A8U2	**Report Date**	2/22/2018 3:48:13 PM

On 02/15/2018, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at SGS North America Inc. (SGS) at a temperature of 3.2 °C. The samples were intact and properly preserved, unless noted below. An SGS Job Number of DA2722 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals Analysis By Method SW846 6010C

Matrix: LEACHATE **Batch ID:** MP24226

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA2674-1SDL, DA2674-1MS, DA2674-1MSD were used as the QC samples for the metals analysis.

Metals Analysis By Method SW846 7470A

Matrix: LEACHATE **Batch ID:** MP24229

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA2674-1MS, DA2674-1MSD were used as the QC samples for the metals analysis.

SGS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting SGS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by SGS indicated via signature on the report cover.

Summary of Hits

Job Number: DA2722
Account: Weston Solutions, Inc.
Project: A8U2
Collected: 02/14/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
DA2722-1	**CAV-SP-01**					
Mercury		0.00010	0.00010		mg/l	SW846 7470A

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: CAV-SP-01
Lab Sample ID: DA2722-1
Matrix: SO - Soil
Project: A8U2

Date Sampled: 02/14/18
Date Received: 02/15/18
Percent Solids: n/a

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 0.025	D004	5.0	0.025	mg/l	1	02/20/18	02/21/18	AO	SW846 6010C [1]	SW846 3010A [3]
Barium	< 1.0	D005	100	1.0	mg/l	1	02/20/18	02/21/18	AO	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 0.010	D006	1.0	0.010	mg/l	1	02/20/18	02/21/18	AO	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	02/20/18	02/21/18	AO	SW846 6010C [1]	SW846 3010A [3]
Lead	< 0.050	D008	5.0	0.050	mg/l	1	02/20/18	02/21/18	AO	SW846 6010C [1]	SW846 3010A [3]
Mercury	0.00010	D009	0.20	0.00010	mg/l	1	02/21/18	02/21/18	AO	SW846 7470A [2]	SW846 7470A [4]
Selenium	< 0.050	D010	1.0	0.050	mg/l	1	02/20/18	02/21/18	AO	SW846 6010C [1]	SW846 3010A [3]
Silver	< 0.030	D011	5.0	0.030	mg/l	1	02/20/18	02/21/18	AO	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA9625
(2) Instrument QC Batch: MA9626
(3) Prep QC Batch: MP24226
(4) Prep QC Batch: MP24229

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 7/1/11)

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

USEPA
DateShipped: 2/15/2018
CarrierName:
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: A8U2
Contact Name: Michael Worden
Contact Phone: 303-729-6131

DA2722

No: 8-021418-214047-0001
Cooler #: 1
Lab: SGS Accutest Inc.
Lab Phone: 303-425-6021

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	CAV-SP-01	Stock Pile	RCRA Metals - TCLP	Soil	2/14/2018	13:55	1	8 oz glass jar	4 C	01

Mg 2/15/18

Special Instructions: e-mail results to michael.worden@westonsolutions.com

SAMPLES TRANSFERRED FROM HD
CHAIN OF CUSTODY # 3.2°C - T030

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Weston Solutions	2/15/18 1056		2/15/18 1056	

DA2722: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: DA2722 **Client:** WESTON SOLUTIONS **Project:**

Date / Time Received: 2/15/2018 10:56:00 AM **Delivery Method:** **Airbill #'s:** hd

Cooler Temps (Initial/Adjusted): #1: (3.2/3.2);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Comments

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

DA2722: Chain of Custody
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Metals Analysis

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/20/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.10	.046	.013		
Antimony	0.030	.014	.0087		
Arsenic	0.025	.022	.012	-0.0043	<0.025
Barium	1.0	.0003	.0013	0.052	<1.0
Beryllium	0.010	.001	.0016		
Boron	0.050	.0033	.0036		
Cadmium	0.010	.0019	.0019	0.00010	<0.010
Calcium	0.40	.0066	.01		
Chromium	0.010	.0011	.0011	0.00070	<0.010
Cobalt	0.0050	.0027	.0012		
Copper	0.010	.0046	.0038		
Iron	0.070	.0089	.0069		
Lead	0.050	.013	.0049	-0.0037	<0.050
Lithium	0.0050	.0006	.0007		
Magnesium	0.20	.05	.039		
Manganese	0.0050	.0005	.0009		
Molybdenum	2000	.0085	.0036		
Nickel	0.030	.0062	.0027		
Phosphorus	0.10	.091	.034		
Potassium	1.0	.084	.071		
Selenium	0.050	.03	.011	0.015	<0.050
Silicon	0.050	.041	.0084		
Silver	0.030	.0006	.00061	0.00080	<0.030
Sodium	0.40	.013	.014		
Strontium	0.050	.0001	.0003		
Thallium	0.010	.017	.008		
Tin	0.050	.041	.012		
Titanium	0.010	.0005	.0027		
Uranium	0.050	.0039	.0044		
Vanadium	0.010	.0009	.0006		
Zinc	0.030	.009	.0035		

Associated samples MP24226: DA2722-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/20/18

Metal	RL	IDL	MDL	MB raw	final

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 02/20/18

Metal	DA2674-1 Original	MS	Spikelot ICPALL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.0	1.1	1.0	110.0	75-125
Barium	2.6	4.7	2.0	105.0	75-125
Beryllium					
Boron					
Cadmium	0.0	0.52	0.50	104.0	75-125
Calcium					
Chromium	1.4	1.9	0.50	100.0	75-125
Cobalt					
Copper					
Iron					
Lead	8.6	9.5	1.0	90.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium	0.0	1.1	1.0	110.0	75-125
Silicon					
Silver	0.0	0.20	0.20	100.0	75-125
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP24226: DA2722-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/20/18

Metal	DA2674-1 Original MS	Spikelot ICPALL2	% Rec	QC Limits

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/20/18

Metal	DA2674-1 Original	MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.0	1.1	1.0	110.0	0.0	20
Barium	2.6	4.8	2.0	110.0	2.1	20
Beryllium						
Boron						
Cadmium	0.0	0.52	0.50	104.0	0.0	20
Calcium						
Chromium	1.4	1.9	0.50	100.0	0.0	20
Cobalt						
Copper						
Iron						
Lead	8.6	9.7	1.0	110.0	2.1	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium	0.0	1.1	1.0	110.0	0.0	20
Silicon						
Silver	0.0	0.21	0.20	105.0	4.9	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP24226: DA2722-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/20/18

Metal	DA2674-1 Original MSD	Spikelot ICPALL2 % Rec	MSD RPD	QC Limit

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 02/20/18

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	1.1	1.0	110.0	80-120
Barium	2.0	2.0	100.0	80-120
Beryllium				
Boron				
Cadmium	0.53	0.50	106.0	80-120
Calcium				
Chromium	0.49	0.50	98.0	80-120
Cobalt				
Copper				
Iron				
Lead	0.99	1.0	99.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	1.2	1.0	120.0	80-120
Silicon				
Silver	0.22	0.20	110.0	80-120
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP24226: DA2722-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/20/18

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226 Methods: SW846 6010C
Matrix Type: LEACHATE Units: ug/l

Prep Date: 02/20/18

Metal	DA2674-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	2630	2770	5.3	0-10
Beryllium				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	1390	1420	2.1	0-10
Cobalt				
Copper				
Iron				
Lead	8570	8930	4.3	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP24226: DA2722-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24226 Methods: SW846 6010C
Matrix Type: LEACHATE Units: ug/l

Prep Date: 02/20/18

	DA2674-1		QC
Metal	Original SDL 1:5	%DIF	Limits

(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24229 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/21/18

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.00010	.000011	.000024	0.0000093	<0.00010

Associated samples MP24229: DA2722-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24229 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/21/18

Metal	DA2674-1 Original	MS	Spikelot HGWSR1	% Rec	QC Limits
Mercury	0.000083	0.0035	0.0031	109.3	75-125

Associated samples MP24229: DA2722-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24229 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/21/18

Metal	DA2674-1 Original	MSD	Spikelot HGWSR1	% Rec	MSD RPD	QC Limit
Mercury	0.000083	0.0034	0.0031	106.1	2.9	20

Associated samples MP24229: DA2722-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA2722
Account: WESTCOL - Weston Solutions, Inc.
Project: A8U2

QC Batch ID: MP24229
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 02/21/18

Metal	BSP Result	Spikelot HGWSR1	% Rec	QC Limits
Mercury	0.0035	0.0031	112.0	80-120

Associated samples MP24229: DA2722-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested